



EAA 196

NEWSLETTER

December 2019

TABLE OF CONTENTS

Page 1

Events, News, Ratings

Page 2

Young Eagles Rallies

Page 3

Young Eagles News

Page 4

Ray Scholarship

Page 5

Collings Foundation
Private Tour

Page 10

Reopen Grass Runway

Page 12

Myricks Fly-In

Page 15

Aircraft Building— A
Journey

Page 24

Flying Lessons

Page 35

What's on the Web?

Page 36

Photo Finish

Page 44

Chapter Officers &
Contacts

Page 45

6 Month Calendars

Coming Events

- **April 11, 2010:** First Young Eagles Rally (weather permitting)
- **April (date TBD):** Airport Open House & Run the Runway 5K

Like last year we have suggestions for events for 2020 such as:

- Visit the Owl's Head Transportation Museum in Maine
- Visit the New England Air Museum , Windsor Locks, CT
- Visit airplane construction projects
- New England Flying Gourmet Challenge
- Ramp tours during the Wings and Wheel event

We welcome more ideas, and more speakers!

News

- The safety overrun at the end of runway 21 has been paved.
- The crossing runway 12/30 has been graded and seeded and was reopened this past summer (see page 10).
- Sue Benua took position of a Cavalon Auto Gyro (see photo on page 37).

Licenses and Ratings

- Congratulations to Marcy Capps (our Ray Scholarship recipient) on passing her glider check ride. She's now a licensed pilot!

December 2019

Young Eagles Rallies

by Andy Goldstein

As always, we had a mixed bag of weather and some rallies that had to be cancelled. But thanks to all our pilots and ground crew we still flew 277 Young Eagles this year!

And EAA announced at AirVenture 2019 that the pilot requirement of achieving 10 Young Eagles flights before earning any Young Eagles credits has been removed. Starting with flights in 2019, all Young Eagles flights earn Young Eagles credits for the pilot's chapter of record. The standard amount of \$5 per credit will remain. This means that any pilot who, for example, flies eight Young Eagles will earn eight credits (\$40 worth) for his or her local EAA chapter. This works substantially to our benefit, because we have a number of people who make just a few flights this year. For this year it gives us about 50 more credits than we would have had under the old rules.

The tallies for 2019 are as follows:

| Name | 5/11/19 EAA 196 Rally | 5/18/19 Jookender Community | 6/8/19 EAA196 Rally | 6/23/19 Fitchburg Open House | 7/13/19 EAA196 Rally | 8/6/19 Scouts Merit Badge | 8/10/19 EAA196 Rally | 9/14/16 EAA196 Rally | 9/29/19 Fitchburg Rally | 10/5/16 BBBS Event | 10/12/19 EAA196 Rally | 10/20/19 Scouts Merit Badge | 11/9/16 EAA196 Rally | 11/10/19 Fitchburg CAP | Total | Credits |
|--------------------|-----------------------------|-----------------------------------|---------------------------|------------------------------------|----------------------------|---------------------------------|----------------------------|----------------------------|-------------------------------|--------------------------|-----------------------------|-----------------------------------|----------------------------|------------------------------|------------|------------|
| Dominik Airey | | 7 | | | | | | | | | | | | | 7 | 7 |
| Nels Anderson | | | | | 4 | | | | | | 11 | | | | 15 | 15 |
| Hector Constantzos | | | | | | | | 3 | | | | | | | 3 | 3 |
| Lee Coopriider | | | 6 | | | | | | | 2 | | | | | 8 | 8 |
| Doc D'Errico | | | | | | | | | | | | | | 2 | 2 | 2 |
| Jim Ellis | 10 | 8 | 6 | | | | 9 | 2 | | 2 | | 5 | | | 42 | 42 |
| Bob Glorioso | | | | | 9 | | | | | 2 | | 4 | | | 15 | 15 |
| Andy Goldstein | 7 | | | 17 | 13 | 3 | | | 2 | | | | 5 | 2 | 49 | 49 |
| Bill Greenberg | | | | | | | | 14 | | | | 3 | 3 | | 20 | 20 |
| Mark Hubelbank | | 4 | | | 5 | | | 5 | | | 4 | | 3 | | 21 | 0 |
| Geoff Lull | | | | | | | | | | | | 4 | 6 | | 10 | 10 |
| Phillip Mahler | | | 7 | | | | | | | | 4 | | | | 11 | 11 |
| Peter Morse | 23 | | | | | | | | | | | | | | 23 | 23 |
| Fred Moses | | | | | 7 | | | 7 | | | | | | | 14 | 14 |
| James Mwathi | | 6 | | | | | | | | | | | | | 6 | 6 |
| Graeme Smith | | | | | | | | | | | 2 | | 2 | | 4 | 0 |
| Mike Smith | | | | | 5 | | | 4 | | | 4 | | 4 | | 17 | 17 |
| Doug Stone | | | 2 | | | | | | | | 4 | | 3 | | 9 | 9 |
| Cassie Tatro | | | | | | 1 | | | | | | | | | 1 | 1 |
| Total | 40 | 25 | 21 | 17 | 43 | 4 | 9 | 35 | 2 | 6 | 29 | 16 | 26 | 4 | 277 | 252 |



Young Eagles News

by Michael Smith

Each year we select a Young Eagle to send to the EAA Air Academy in Oshkosh, Wisconsin. The camp is for kids ages 12 and 13, and is designed as an introduction to the wonderful world of aviation. This program uses small group activities and close counselor relationships to present the basics of flight in a "science camp" format that is a unique combination of fun and discovery.

Activities at the EAA Young Eagles Camp are designed to interest and challenge kids with activities such as:

- Airplane Wing Construction - Learn the intricacies of a fabricated wing by building a wing rib.
- Aeromodeling - Build and fly a simple balsa glider and a rubber powered model.
- Ground School - Learn the basics of flight through an interactive computer simulator ground school by flying designed missions or flying your own mission.
- Airplanes - Learn about aviation history and flight.
- Tour the EAA AirVenture Museum
- Visit Pioneer Airport
- Watch flight demonstrations
- Experience the thrill of flight in both an airplane and helicopter

This year we were pleased to select **Jayda Acevedo-Dickinson**. If you don't know who she is then you haven't been around the airport the last couple of years! She's flown in more types of aircraft than many of us, and helps at many of the Chapter's events. Congratulations!



Ray Scholarship

By Michael Smith

The Ray Aviation Scholarship Fund is a scholarship program that is supported by the Ray Foundation, managed by EAA, and administered through the EAA Chapter network. Through the generous support of the Ray Foundation, EAA provides up to \$10,000 to deserving youths for their flight training expenses, totaling \$1,200,000 in scholarships annually.

Candidates must meet the following criteria:

- Minimum of age 15 for glider training.
- Age 16-19 for powered flight training.
- Possession of a student pilot certificate.
- Possession of FAA medical certificate. (private pilot students)
- Be able to begin their flight training within 60 days of receiving the award.

Once selected by the chapter, the candidate was also screened by EAA through an application process. Once approved by EAA the scholarship recipient has to comply with the following requirements.

- Partake in two hours of chapter volunteer service per month, such as:
 - Young Eagles rally volunteering.
 - Pancake breakfast/fly-in volunteering.
 - Chapter build project support.
 - Chapter gathering participation.
- Submit regular progress reports, signed off by local chapter and CFI.
- Reach flight training milestones, as outlined by EAA's training timeline.

Due to the large number of EAA chapters and the limited available funds, each interested chapter had to pre-apply to EAA. Through the efforts of Pete Alberti and Mike Smith, EAA 196 was selected as one of the 100 chapters! Bob Glorioso and Andy Goldstein then joined Pete and Mike to review candidates and make a final selection.

In August we were pleased to announce Marcy Capps as the recipient selected by EAA 196, and approved by EAA headquarters! Congratulations, Marcy!



December 2019

Collings Foundation Private Tour

By Michael Smith

In June we were treated to a private tour of the newly opened *American Heritage Museum* (AHM) at the Collings Foundation property in Stow. The tour was arranged by Ryan Keough, a former member of EAA 196, and current Director of Donor Relations and Development for the Collings foundation.

<https://www.americanheritagemuseum.org>

The event started with a pizza dinner for all attendees, and then moved over to the new building housing the museum. The AHM focuses on the armored vehicles of the United States military, as well as that of their opponents. Sprinkled into the displays are also a few notable aircraft, landing craft, uniforms, and even a scud missile launcher... with missile! The beginning of the tour puts you into a sunken WWI trench complex, while displaying a series of sights and sounds from the battlefield, helping you experience a little of what it may have been like to be there yourself.



December 2019



December 2019



December 2019

After touring the museum we had the opportunity to also get a close up look at many of the aircraft in the Collings Foundation collection, including a rare Curtiss Model F Flying Boat. Some of the details were like looking at fine furniture, complete with thousands of brass screws securing the skins!



December 2019



The museum is well worth a visit, and being in Stow it's just a stone's throw away from most of us!

Reopening of Grass Runway 12/30

By Michael Smith

On July 1 Don and Nancy treated everyone to a party to celebrate the reopening of the grass runway 12/30! Some of the ultralights from Crow Island came over to try it out, and we were all treated to a BBQ and desert!



December 2019



Myricks Fly-In

By Michael Smith

On September 15 Chapter 196 again hosted and cooked for the annual fly-in at the Myricks Airport in Berkly, MA.



We had the opportunity to use the chapter's new portable grill and it worked like a charm! We sold about 140 hot dogs and 240 hamburgers in the space of just over 2 hours - an average of about one every 20 seconds! And we ended up with about 1 cookout's worth of food left over, so we got the amount right this time. And we netted around \$1,500. An impressive performance all around!



December 2019



December 2019



Aircraft Building—A Journey

By Craig Maiman

To clip a lyric from the Talking Heads, "...and you may ask yourself, well, how did I get here..." Well, here's my answer and I'm sticking to it.

I went flying for the first time in the early 1970s at an airport (Spring Valley Airport, NY - RIP) that was just a couple of miles from my house. After that I was hooked. I went flying many more times there (sometimes with a CFI who was an F-105 Thunderchief pilot who flew in Vietnam - he let me do most of the flying) before heading off to college.



Strapping in at Spring Valley Airport with my two stepbrothers in the back circa 1975 *And taxiing away...*

But, like many pilot stories, life got in the way and I didn't end up getting my license until 2012 (although I did solo in gliders in the 90's).

After achieving that, I knew I wanted to have my own plane, but I wasn't sure which path to follow to achieve that goal. One option I considered was to buy a mid-70's 172 and upgrade the heck out of it. But I also considered building a plane because I felt I could do it and would end up with a thoroughly modern airplane for much less money than an equivalent new certified one.

December 2019

So, it was off to Oshkosh to start drooling over all the options - and there were many!!

Without getting into each aircraft I considered (pretty much all the well-known models!), I realized I needed to define my mission in order to narrow down the options. I knew that I wanted to travel distances at a reasonable speed, with good economy, in an IFR-capable aircraft. I also decided I wanted a 4-seater since I wanted to be able travel with a passenger, luggage (including 2 folding bikes), and full fuel.

That quickly narrowed down the choices! And it was around that time (2013) that I started reading about the Sling aircraft from The Airplane Factory in South Africa. They had a 2-seat model already and the 4-seat was just coming out. It was getting very positive reviews and it was gorgeous!



The Sling 4

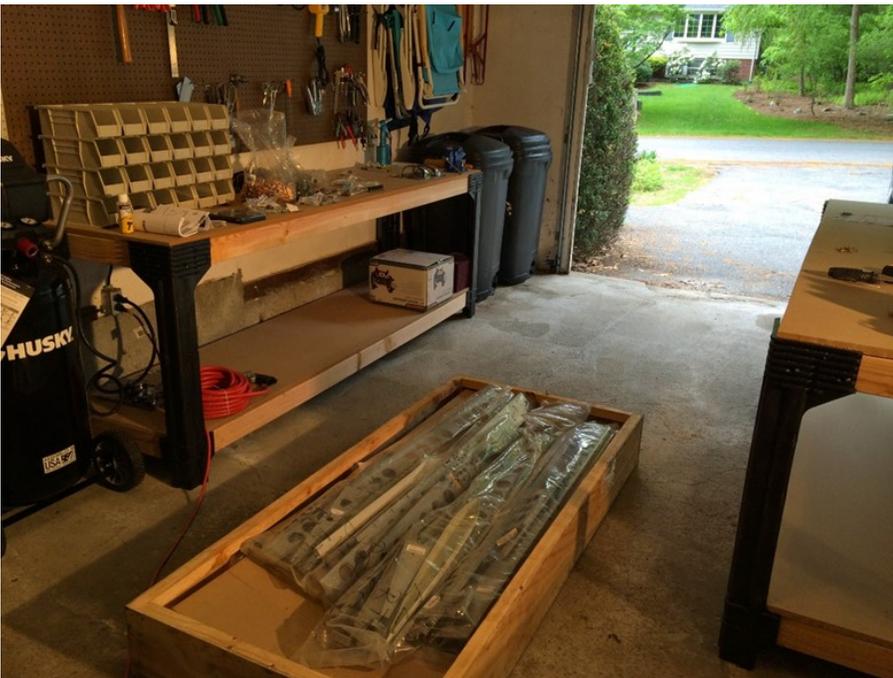
I was on a business trip to San Diego around that time and arranged to go to Torrance, CA after to fly a Sling (that's where the US Rep is located). There were no Sling 4's yet in the US, so I flew a Sling 2 (2-seat version) for an hour with their resident CFI.

I loved how it flew! I loved the stick, the view, the handling – other than the rudder, it's pushrod, so it was a nice and tight control feel. I was sold!

December 2019

I contemplated it for a few more months – mostly deluding myself about the cost and wondering whether I had the chops to do it – and put in my order around December of 2013. The first Sling 4 kit ordered in the US. I know, that's probably nuts. But, I had found out about two neighboring 747 captains in Australia that were already building a Sling 2 and 4, so I figured if it passed their muster (I contacted them and have been in touch ever since), it's probably good to go.

The first sub-kit (the empennage) arrived in May of 2014 and the adventure began...



The empennage sub kit...

When I built that easily, my confidence also started to build, that I could do this.



December 2019

I was planning to work 10 hours per week, and with that I figured it would take me 3 and half years. Well, at least that was the plan...

Diligently updating my blog and logging my time, I was making decent progress. As I was finishing up my empennage, the wing and fuselage kits arrived, and I started working on the wings.

The wings seemed to go reasonably quickly (if you consider a year quick...) but doing the fuel tanks was stressful for me because of the critical nature of them and the huge sticky mess they are to construct.



Powering on the landing lights was the first of many thrills.

It was about the 2-year mark when I finished the wings, so I was starting to wonder about the 3.5-year goal. Though I still thought it was possible. Building an airplane requires constant self-delusion...

Then it was on to the fuselage. I took one look at the huge number of parts in that kit and I knew it wasn't going to be a 3.5-year project. But I soldiered on... Prepping, deburring and priming part after part.



The fuselage taking shape.

Time was ticking by, but I kept making steady progress, so I kept the pace up. Except that the pace was somewhat slow. It seemed I was only averaging about 5 hours per week.



I did find that the manual for the fuselage wasn't as detailed as the prior manuals, so that also slowed things down because I had to check in with my airline pilot friends (in Australia and the US) to confirm what the right next steps were.

Still, I plowed ahead. 3 years. 4 years... But, still, it was looking more and more like an airplane, so I stayed motivated.

Finally, I was able to sit in the fuselage and make airplane sounds!

December 2019



Installing the massive fiberglass landing gear was difficult, but I was able to put it on its wheels, which was a huge milestone.

Soon after that I installed the canopy and that wasn't as bad as I thought it would be. I should note that at this point Kerry Lynn started helping me as my drive after nearly 5 years was getting drained and I knew I needed someone to help motivate me. Thanks to Kerry for being the person to offer their valuable time to keep it moving and help me stay focused.



With the canopy on and the dash positioned, it was nearly an airplane. Lots of work on the interior and then the firewall (charging/starting circuits) was done at that point and then it was time to install the engine. I rented a ridiculously oversized engine lift and it went on without much difficulty.

December 2019

One question you get constantly when building an airplane is "when will it be done?" At 5 years in I stopped answering that question because I discovered that I constantly thought I was 6 to 9 months away. Then the 6 months would come and go, and I was still 6 to 9 months from the finish.

I must admit that after 5 years I was starting to get down that it was never going to be done. My task list seemed to be getting longer, not shorter. The tasks were getting smaller and more numerous - it basically started to feel endless.

Then one day in late August I noticed a large pine tree on my property that seemed to be leaning more than I had ever noticed before. I knew this wasn't good and called a tree removal company immediately since it was leaning somewhat toward the garage. The very next day, the tree guy came over and we made plans to remove it as soon as possible.

That night I was working in my garage until 9 (I was going to work until 9:30, but decided to quit early). At 9:20 I was in my house right next to the garage when I heard (and felt) a really loud boom come from the garage. I knew instantly that the tree had fallen, and it hit the garage. *Panic*. I ran in there with my wife and it looked like a bomb had exploded in there. Debris everywhere. A quick run around the plane and I could see that there wasn't any damage, though lots of wood pieces had fallen on the engine.



20 minutes earlier, I was working right under where it fell.

December 2019

It was incredibly traumatic for me. It took a few weeks for it to sink in how traumatic it was.

After the tree was removed from the garage and the plane was safe, a friendly neighbor offered to keep it in their garage while mine was fixed. It was there for over 6 weeks.

After the trauma of my plane (and possibly me) nearly meeting its demise, and the layoff from working on it, whatever drive I had remaining was totally drained. After 5 and half years and 1500 hours of work, I needed help. People said to me that it seemed I was so close to finishing - but it didn't feel that way and was very down.

I got in touch with a guy that had recently started a new Sling dealership in Oklahoma. We were "friends" on Facebook and he was very active in the Sling Builders group of which I'm the co-administrator. He seemed super knowledgeable (he's an aeronautical engineer) and very friendly, so I was hoping he would offer some good objective advice on how to move forward.

He started by suggesting I find an A&P locally that could help, but I wasn't keen on that approach for several reasons. Basically, I was hoping he'd suggest that he could finish it and I carefully led him to that conclusion. By the end of our phone conversation he offered to finish the plane for me. I asked him to come up with a cost and time estimate and he came back with that a couple of days later. The time estimate was right around what I thought it would take and the cost per week was a great deal.

It was a go! We arranged for him and a partner of his to fly up commercially in a few weeks and rent a big truck to carefully take it back to Oklahoma. The whole plan went off without a single hitch!

So now the plane has been down there for about 3 weeks and he's been working on it 40+



hours per week. Real progress!! I am SO happy with the decision to have them finish it. Such a huge burden lifted off my shoulders.

December 2019

The schedule looks like it'll be done (I'm getting it painted down there too - for far less than it was going to be up here!) sometime in January.

I'll go down for the FAA sign-off and first flight. They're doing the first flight and I'll possibly fly chase in their Sling 2. Once that's done, I return home while they fly off all 40 hours of the Phase 1 flight testing. Then I'll return to fly it home!! I won't fly home alone as my retired American Airlines captain friend in Florida offered to meet me there and fly back with me. He finished his Sling 2 less than 2 years ago and already has over 400 hours on it. He's the perfect person to fly back with me!

I can't wait!!!

Flying Lessons

By Graeme Smith

I took two very special flying lessons in the UK in September 2010. All the fault of my niece who emailed me from Scotland about “.....some BBC Radio 4 program about Spitfires – you can probably find it on the web....” It was about the 70th Anniversary of the Battle of Britain. I looked it up as I had been in London on the 50th and seen Spitfires and Hurricanes flying up the Mall and over Buckingham Palace. I wondered what they would be doing this year for the 70th. The Duxford Airshow was promising “Spitfires Galore”. I booked a ticket for the weekend.

All the way to the UK from America JUST for the weekend? Well I quickly met two Australians, one New Zealander and one Canadian who - like me - just came for the weekend. More airworthy Spitfires and Hurricanes in the one place since the last time it had been attempted was the promise. It certainly proved popular - Saturday was so busy the organizers had to close the gates for safety at lunchtime - even if you had a pre-booked ticket.

Lessons were given before the air display and there were three Tiger Moths and a Harvard (called a Texan in the USA) being operated by Classic Wings at the end of the field. There were also two classic Dragon Rapides taking people up eight at a time over the field for joyrides.

My Saturday lesson was in the Royal Air Force primary trainer from the war years. 1942 Tiger Moth G-ANPE (camera allowed - keep it out of the controls!) with a leather flying jacket and a running changeover from the previous student while the instructor sat in the back writing up his logbook. "Stay on the black strip on the wing" - from the ground crew – climb in like a kayak - holding the struts in front - a helmet that was rather small for me and a four point harness with a pin. "All set? Good Luck". The side door was slapped shut and the catch checked. The ground crew jumped off the wing. Takeoff from instructor John Thurlow as I clicked away with the camera like crazy - up to 1500ft north of the field and then a "Do you have an idea?" from

the man in the back. On saying I believed so I was told I was to use the rudder pedals too and see if I could keep her straight and level - "You have her" - "I have her". With a light touch I seemed to be doing OK. "Try a turn to the left and right and hold altitude - I'll keep a lookout". I rolled into a left turn and was slightly surprised to see the Turn and Slip telling me I had managed to co-ordinate it. Level and around to the right - the



same. As we headed downwind the wind got under the left wing but I seemed to manage to get it back down again. All in all it was like a small sailing dinghy but with the added vertical dimension. I was yawing around a bit and didn't think I was doing much on the rudder to be causing it. I asked and was I was told not to worry - the Moth rudder was very powerful - I would get used to it - almost don't use it. Keep going.



We orbited around and I had some time to look around. "OK - any idea where the airfield is?" from the man in the back. "Below the nose on the right" was my positive identification. "OK - throttle back to 1,400 - put the nose down and keep her at 60 going down". Down we went as John got on the radio. "OK we are straight in - I have her" - "You have her" and I handed her back. A slight cross wind was pushing us off the grass runway. "OK - we fly this one wing low and maybe even touch down on one wheel to deal with this" was the comment from the back. I clicked away while we side slipped down onto the runway. "OK - time for petrol and I need a cup of tea - so we will stop this time. Checking the mags..." and we pulled up on the flight line and the petrol bowser trundled over.



Sunday started rather cool and grey and the forecast did not offer much good photographic shooting light. I arrived early and signed up for a 30 min aerobatic lesson in the North American AT6-J Harvard (USA-Texan) G-BJST. RAF pilots trained on Harvards as their advanced trainer just before they converted to Spitfires. This was about as good as I was likely to get. If I wanted the camera along - there would be no aerobatics as it would fly around. I left the camera behind. Taxiing out with Neil Oakman the instructor - the day was warming up. We kept the canopy open till the last moment - shirtsleeves flying - cinched down in the straps. Much more robust and powerful beast and the cockpit layout was close to the Spitfire I have memorized in my dreams - so I found everything within a few moments. Off we went - zipping up into the sky to 3,000ft up to the north of Duxford. Neil was feeling playful and we "bounced" a Tiger Moth at 1,000ft on the way up. We got to a clear piece of sky and I followed through on the controls as I was taken through roll left, roll right level, roll right, roll left level, pitch down, level off, pitch up, level off. "Much more powerful than the Moth you were in yesterday" was Neil's comment - then - "Repeat the drill - You have her" - "I have her" and I flew the drill - not quite as positive - but got a "not bad".



Then - "I have her" from Neil "follow me on the controls - but very lightly" he said - "Ready to loop?" - A steep bank left and right so we could check our six and make sure there was nothing behind us - then nose down for some speed and then up into the loop.



As we went over the top - a Mk IX Spitfire zoom climbed up from down below to meet us and as we started down he started tumbling around with. I thought I had died and gone to heaven! Neil couldn't quite keep total professionalism in his voice as he asked - "How was that loop - are you OK?" "No problem" I replied - "OK - rolling left". Nose down for some speed and round we went. Then a Roll right and then a half loop and roll off the top to get back up in the sky. The Spitfire continued to loop and roll around us. Neil rued that he still hadn't managed to fly one yet.

"OK - Any idea where Duxford is?"

My reply was "just to the right of the sun and 4,000ft below us". "Maintain this altitude - head for the west end of the runway - you have her". As I flew home the Spitfire that had been tumbling with us - broke to the west and disappeared. Neil pointed out stately homes, quarries, Cambridge University's radio telescope which is a captured German Wurzburg Radar from WWII. As we got close to home Neil took her back - called in to join the pattern and then flipped us into a Steep Spiral to lose a lot of height fast and sneak in behind one Tiger Moth headed for the grass strip and ahead of another. The Spitfire reappeared behind the second Moth and was hauling the mail as he roared in. Some fast chatter with the tower at Duxford and Neil's comment was "I think we can beat him" and down we went. He lined up on the grass runway just behind the flight line and the row of 19 Spitfires and gave me a very slow pass at 100ft to get a good look. The sun had come out and it all looked absolutely freaking gorgeous. Oh, for the camera at this point. Our friend the Spitfire then flew through level with us on our left wingtip about 50ft off. Neil and I both "Wowed!" The Spitfire broke right and disappeared and we joined the pattern and landed on the concrete strip - full flaps at the last moment after the gear I noticed. I asked why not a three point landing. "Only on the grass strip" was the reply. Neil then taxied slowly back down the flight line right behind the parked Spitfires so I could get another close look.



The 30 mins I had paid for turned out to be 40. "Had to hang around with the Spitfire up there" was Neil's dry comment.

I worked my way back to the hospitality tent - running into a Yorkshireman in the "Flying Aircraft" hanger. He is building an 80% scale Mk 26 Spitfire from a kit (made in Australia) in his barn. We talked a long time and it was time for lunch. I had skipped breakfast so as not to disgrace myself during the aerobatics - but in fact I never felt queasy - so now I was starving! Lunch over it was time for the Red Arrows to open the show. The weather then decided to better the forecast and the day before. Though the sun was at an awkward oblique angle in front of us - it was softened slightly by some stratus and was workable.



To open the show the Red Arrows roared in from behind the crowd and did a near flawless display. The spare pilot on the ground giving the commentary and he patched in the radio at times so you could hear the calls the lead pilots were making "Roll left - NOW", "Smoke on - NOW!"; "Formation Spitfire - NOW!" (A special formation for the day to represent the planform of a Spitfire), "BREAK!" Only the "Now's" and "Break's" were very short staccato squawks to get everybody moving at the same moment.

A Hawker Sea Fury and Grumman Bearcat represented the last of the propeller age. Two P51-D Mustangs flew a tight formation all over the sky - Then the B-17G bomber painted as "Sally B" on her port side and "Memphis Belle" on her starboard side (she is really the first but played the role of the second in the movie) flew a display and at one point the Mustangs joined to offer protection against marauding Germans - if there were any about. As the Mustangs stayed to finish the element the B-17 disappeared over the horizon.



Just as the Mustangs were landing he reappeared - left wing low and both port engines trailing smoke - "Coming in on a wing and a prayer". He made a slow pass across the crowd - "In memory of the Eighth Air Force" from the commentator. The 8th was based at Duxford from 1943 and their Memorial is also at Duxford. The B17 lifted his wing - turned off the smoke generators and landed.



From behind the crowd the Battle of Britain Memorial flight roared in low over the control tower - The Lancaster, Hurricane and Spitfire racing cross field in a tight formation before displaying the Lancaster and fighters separately - The Spitfire landed to join in later and the other two left.

Then from out of nowhere the flight line of Spitfires was attacked by a lone "Messerschmitt 109" (A post-war Spanish Hispano Buchon) which made three strafing runs before a section of four Hurricanes scrambled off the flight line to go after him. I have to say that at the end of the wheeling dogfight over the airfield I have an enhanced and enormous respect for the Hurricane pilots who in 1940 were told to "leave the fighters and attack the bombers" and who hoped that someone had remembered to send some Spitfires along to cover them from the German fighters. As they wheeled in a mock dogfight over the field they had to break to get the Me109 off their tails as he could zoom climb away out of trouble compared to them. It was a stunning display and when you counted them up - we had seen 5 of the 6 remaining airworthy Hurricanes in the UK in the past few minutes. The "Me109" disappeared and as three of the Hurricanes landed the fourth flew a series of victory rolls over the field. The number of movie buffs in the crowd who could be heard quietly chanting "Never fly a Victory Roll over my airfield again! Do you hear me?" was an amusing testament to one of Christopher Plummer's lines in the Battle of Britain movie.



Some lovely classic "filler aircraft", the "Scottish Airways" Dragon Rapide, more Harvards, A desperately slow but agile Gloucester Gladiator which was Britain's front line defense till 1938 gracefully tumbled around showing how inadequate a defense it would have been if still in the front line in 1940. A DeHaviland Wasp, the "Aerostars" civilian display team of YAK-6's bought from the Soviets, painted up and flown by airline pilots for fun; a PBY/Catalina amphibian. A Belgian F-16 pulling stall turns on reheat to represent the 32 Belgians who fought in the Battle of Britain - then the line of Spitfires all started firing up and the crowd was on its feet.



They all taxied off down to the end of the field. The Mk1a starting up last and cutting the corner on the others - its small oil cooler not being up to an extended period of ground running. Then "Squadron Scramble" - and all 16 roared off down the field till they flew off to the east - filling the sky with roaring Merlin and Griffon engines - and off over the horizon out of sight.

Then like the support act to a more popular band - an aerobatic tumble from a small Bucker Jungmeister and Jungmann for a few minutes while the commentator rambled on about it being built by the Germans for the Swiss Airforce in 1938 and blah blah blah..... It was a nice routine – but I don't think anyone was really watching it. Everyone waited in anticipation. Churchill's "Never in the field of human conflict was so much owed by so many to so few" speech was rebroadcast across the field. As it finished we were asked to rise for a minute's silence for the fallen and as we did and with impeccable timing - four modern Hawk trainers from RAF 19 squadron - the first to be equipped with Spitfires in 1938 - flew slowly down the line in diamond formation - the lead broke for the heavens to represent the "missing man".





Then the 16 Spitfires gently came in - split into four sections of four. As they flew off the end of the field the minutes was up and they pushed their throttles forward and hauled around to do it again - only this time roaring low and close and positively thrilling the crowd with their supercharger whines and growls and a serious beat up of the airfield.



Splitting into two teams of eight they then started wheeling around the field from opposite ends passing just in front of the crowd at 50ft and then wheeling around to do it again.



A pair split off and started to fly Cuban Eights on the line while the rest kept wheeling through - for over 10 minutes. Then as oil temperatures started to rise one by one they would break for the ground and fly the curved approach back down to the field. Finally there was one left - my Mk IX friend from the morning lesson - who flew a positively awesome aerobatic display over the crowd while those who had landed lined up on the taxiway on the flight line.



As the aerobatic came into land - the Spitfires taxied along the taxiway in line ahead - snaking along as the pilots kicked their rudders back and forth to see around their noses and not run into the guy ahead. The crowd was on its feet - clapping loudly in a typically British way (no whoops and cheers - but very enthusiastic). Good Weekend - aerobatics with the Spitfire being the completely unexpected, unplanned bonus.

Before I went to Duxford – I had already decided to make a serious attempt at a Private Pilot's License and had my lessons booked. Not quite Duxford but it is pretty exciting enough! I deliberately chose to

learn at TF Green which is a mid-sized regional airport. In fact the first airport in the USA I landed at a lot of years ago. You have to deal with the commuter 737's and the Fed-Ex cargo aircraft and complex taxi-ways or get shouted at by Ground Control! The school is actually a commercial school – so there are a load of kids who all want to be airline pilots and it has a good atmosphere and is well equipped with plenty of aircraft, classrooms and good procedure.

The 10" thick pile of books to be learned is a little less exciting!

What's on the WEB?

PLEASE SEND US YOUR FAVORITE LINKS FOR INCLUSION IN FUTURE ISSUES!

From the PDF file you should be able to click on the links. You may have to give your PDF viewer permission to open links.

Omega Tau Science & Engineering Podcast

<https://omegataupodcast.net/>

The podcasts cover a huge variety of science, technology and aviation topics. It's host, Markus Voelter is German but speaks very fluent English. He's a pilot himself, with a special affinity for gliders. Some podcasts are in German and others in English. He purposely goes back and forth between the two. The topics always feature interviews with the people who know the topics best, and are highly detailed.

Catch Me If You Can

<https://www.youtube.com/watch?v=vsMydMDi3rI>

You may know the name of Frank Abagnale from the movie, Catch Me If You Can, starring Leonardo DiCaprio (as Frank) and Tom Hanks as the FBI agent out to catch him for, among other things, impersonating a Pan Am pilot. This YouTube video is a fascinating account of his story, but also of modern day lessons in personal and cyber security.

The Battle of Midway 1942: Told from the Japanese Perspective

https://www.youtube.com/watch?v=Bd8_vO5zrjo

This is hands down the best and most detailed account of the Battle of Midway in WWII, from the Japanese perspective. If you have any interest in this subject it is a must-see YouTube video.

Books

PLEASE SEND US YOUR FAVORITE BOOKS FOR INCLUSION IN FUTURE ISSUES!

"NASA Apollo Series: Stages to Saturn, A Technological History or the Apollo/Saturn Launch Vehicles"

By Roger Bilstein. This is an incredibly in depth description of the Saturn series rockets. If you are an engineering geek or enthusiast you will enjoy the deep-dive details of the mechanical, electrical, propulsion, guidance and, not insignificantly, the management of this incredible feat of human engineering.

December 2019

PHOTO FINISH



PHOTO FINISH



December 2019

PHOTO FINISH



PHOTO FINISH



PHOTO FINISH



PHOTO FINISH (Holiday Party)



PHOTO FINISH (Holiday Party)



December 2019

PHOTO FINISH (Holiday Party)



Mark Saklad has been our Chapter's Vice President for... well... longer than anyone (including Mark!) can remember! Since choosing to step down this past October it was only fitting that we recognize Mark's many years (over 20 we're pretty sure) of service, wisdom and humor. Thank you, Mark!!

CHAPTER OFFICERS & CONTACTS FOR 2019/2020

President & Newsletter editor: Michael Smith

- president@eaa196.org
- mike.smith208@comcast.net

Vice President: Peter Alberti

- vicepresident@eaa196.org
- peter@albertifamily.com

Treasurer: Chris Brandon

- treasurer@eaa196.org
- cdbrandon@msn.com

Secretary: Hector Constantzos

- hconstantzos@gmail.com

Young Eagles Coordinator: Andy Goldstein

- youngeagles@eaa196.org
- Andy.Goldstein@earthlink.net

IMC Club Coordinator: Chris Brandon

- cdbrandon@msn.com

Webmaster & Director at Large: Nels Anderson

- webmaster@eaa196.org

Directors at Large:

- **Beth Cook:** bwightman@gmail.com
- **Bill Greenberg:** bill@goodcomputerguy.com

Calendar

December 2019

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|--------------------|------------------|-----|--------------|-----|-------------------------|------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 Chapter Holiday Party | 7 8:30 Hangar Talk Breakfast |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 HANUKKAH begins | 23 | 24 | 25 CHRISTMAS | 26 | 27 | 28 |
| 29 | 30 HANUKKAH ends | 31 | | | | |

January 2020

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-------------------------|--------------------------|------------------|-----|-----|------------------------------|
| | | | 1 NEW YEAR'S DAY | 2 | 3 | 4 8:30 Hangar Talk Breakfast |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 MLK Jr. Birthday | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 7:00 EAA 196 Meeting | 28 7:00 IMC Club Meeting | 29 | 30 | 31 | |

Calendar

February 2020

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-------------------------------|-----------------------------|-----|-----|-----|---------------------------------|
| | | | | | | 1 8:30 Hangar Talk Breakfast |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 President's Day Holiday | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 7:00 EAA 196 Meeting | 25 7:00 IMC Club Meeting | 26 | 27 | 28 | 29 |

March 2020

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|----------------------------|-----------------------------|-----|-----|-----|---------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 8:30 Hangar Talk Breakfast |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 7:00 IMC Club Meeting | 25 | 26 | 27 | 28 |
| 29 | 30 7:00 EAA 196 Meeting | 31 | | | | |

Calendar

April 2020

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-------------------------------------|-----------------------------|-----|-----|-----|--|
| | | | 1 | 2 | 3 | 4 8:30 Hangar Talk Breakfast |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 9.00-12:00 EAA 196 Young Eagles |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 Patriots' Day Holiday | 21 | 22 | 23 | 24 | 25 6B6 OPEN HOUSE & 5K |
| 26 | 27 6:00 EAA 196 BBQ & Meeting | 28 7:00 IMC Club Meeting | 29 | 30 | | |

May 2020

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|---|-----------------------------|-----|-----|-----|---------------------------------|
| | | | | | 1 | 2 8:30 Hangar Talk Breakfast |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 9.00-12:00 EAA 196 Young |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 Memorial Day 6:00 EAA 196 BBQ & Meeting | 26 7:00 IMC Club Meeting | 27 | 28 | 29 | 30 |
| 31 | | | | | | |