



# Runway 15



*The Monthly Newsletter for EAA Chapter 1541, Lincoln, California*

**July 2018**

## *Briefing Strip*

- Our monthly member meeting will be held on Wednesday evening, July 18, at the hangar. BBQ dinner will be available at 6:00 pm with a brief business meeting at 6:45. Program for the evening will be by Lt. Col Chris Reeder from Beale AFB speak on the Global Hawk mission.
- Chapter 1541 is holding a concurrent pancake breakfast on the third Saturday of each month with the LRAA Aircraft Display Day. The next one is coming up on Saturday, July 21. We have also invited a car club to display their cars at the Display Day. Volunteers are needed. The event will be held at the Gazebo area on the airport.
- EAA AirVenture is being held at Oshkosh, Wisconsin, from Monday, July 23, through Sunday, July 29. There are numerous members from the chapter making the trek to the huge airshow and convention. The show attracts about 10,000 aircraft and 500,000 visitors on the grounds during the week.
- Work continues on the chapter hangar with insulation added to the south wall for now, and on the west facing hangar doors in the near future. Another coat of sealer was applied to part of the floor and we have a new resident on hand, a Piper Archer that now calls the hangar home. The rent from our two hangar tenants helps us keep the lights on.

## *Calendar*

- Saturday, July 14:** BBQ Lunch and a Program.  
Lunch begins at 11:00; program with Brook Drumm and 3D printers begins at 12:00.
- Wednesday, July 18 :** Chapter 1541 Member Meeting, EAA Hangar, 6 pm to 8:30 pm.  
Details inside.
- Saturday, July 21:** EAA Chapter 1541 Pancake Breakfast in conjunction with the Lincoln Airport Aircraft Display Day; breakfast 8 am to 10 am, display day until 12 pm. Details inside.
- Wednesday, August 1:** Chapter board of directors meeting at House of Pizza, 6:00 pm-8:30 pm.
- Saturday, August 4:** "Pancakes and a Movie," EAA hangar 8 am to 10 am.
- Saturday, August 12: BBQ Lunch and a Program.  
Lunch begins at 11:00 am, program at 12:00 pm.
- Wednesday, December 12:** Holiday Party at Cattlemens in Roseville. Yeah, it's early but don't say we didn't give early notice.

In addition to the events listed above, there are pancake breakfasts, fly-ins and other aviation activities scheduled for almost every weekend throughout the area. Check the chapter website calendar for the most current information: <http://eaal541.org/events/>

*For the most up-to-date information, go to the chapter website*

<http://eaal541.org>

## ***Newsletter Contributions***

Please help by contributing stories and photos that might be of interest to other chapter members. Perhaps where you flew, what you are building, or what you know about something. A few short paragraphs and a photo or two of your project or travels would be a great contribution. I'll take care of the rest. Please email me (Scott Thompson) at [sthompson@aerovintage.com](mailto:sthompson@aerovintage.com) or call me at 916-716-3442.



## ***Help Still Wanted Bannermaster***

So, the chapter has some new informational banners that we place about the airport to announce our delicious pancake breakfasts, our scrumptious BBQ lunches, and our enviable dinner member meetings. These banners need to go up a few days before the events and come down after the event is over. If you have always wanted to carry a bunch of banners around in the trunk of your car and help promote our Chapter's events, this job is for you. It is ideal for someone who hangs around the airport a lot, but it turns out that is pretty much all the people in the Chapter. But if you hang around the airport during weekdays and have some trunk space available, and if it sounds like something you might want to do, then please drop me an email: [sthompson@aerovintage.com](mailto:sthompson@aerovintage.com).

## ***Chapter Information***

### ***Meetings:***

Usually the third Wednesday of each month held at KLHM Hangar S-12. Details available at the website.

### ***E-mail:***

[lincolneaa@hotmail.com](mailto:lincolneaa@hotmail.com)

### ***Website:***

<http://eaa1541.org>

### ***Mailing address:***

EAA Chapter 1541, PO Box 1126, Lincoln, CA 95648

### ***Chapter Hangar:***

Hangar S-12, Lincoln Airport

### ***Chapter Officers***

President:

Scott Thompson

Vice President:

Tom Lieb

Secretary/Treasurer:

Jim Hughes

### ***Chapter Board of Directors:***

Cheryl Andrade

Cherish Bruce

John House

Bruce Robinson

Randy Sharp

Erika Wallin

Ruben Wallin

Bill Wootton

### ***Webmaster:***

Dug Smith

### ***Newsletter:***

Scott Thompson (916-716-3442)  
([sthompson@aerovintage.com](mailto:sthompson@aerovintage.com))

### ***Membership:***

Open to all. Chapter dues: \$20 per year for individuals; \$30 for families; \$300 for gold membership.

## *President's Corner*



*by Scott Thompson  
Chapter President*

As I write this I am ten days out from departing Lincoln in my RV-8 and making my way to Oshkosh for AirVenture 2018. This will be the second time I've flown in with the RV-8, and my fifth visit overall. As anyone who has ever been to the EAA show at Oshkosh, it is an aviation wonderland for pilots and enthusiasts.

I know of numerous guys and gals from our chapter who are going to make the journey this year, some by flying themselves and others by the more mundane but practical air carriers.

But for me, there is the challenge of flying into Wittman Field along with 10,000 others with the same intentions, and parking on the field with a thousand of other homebuilts. I am planning on making the trip each way in a day of flying, with two fuel stops and about 10 hours of flying. That's my plan, but I'm well prepared for that not working due to weather or any other number of issues but you have to have a plan to deviate from.

It is a fun flight because the closer you get, more planes around you are doing the same thing. It's like concentric rings of airplanes centered on eastern Wisconsin, all the circles getting smaller the closer you get to Oshkosh. Even before you get there, a sense of aviation kinship is in the air and on the frequency.

Also for me, the fun of Oshkosh is behind the (admittedly great) airshows in the forums and presentations and opportunities to interact with other like-minded aviators. Some of those forums are presented to chapter leaders on how to run things better, how to help a chapter grow, and how to celebrate sport aviation on a local level. I plan to take in some of those, and also some special EAA social events for chapter leaders. I would expect to pick up some useful stuff at those gatherings but, if nothing else, get to meet some other people doing the same things we are.

It should be a good year...Oshkosh has become big industry and it attracts every element from across the wide gamut of aviation. My taste is in warbirds, and there is more than enough there to satisfy. But I'll also look at the vintage and classics with some astoundingly rare machines available for close inspection with its pilot owner usually right next to it like a proud mama or papa.

I'm hoping that those chapter members who make the trip will be available to share a bit at our August member meeting. Even if you can't get there, we should be able to bring a bit back with us.

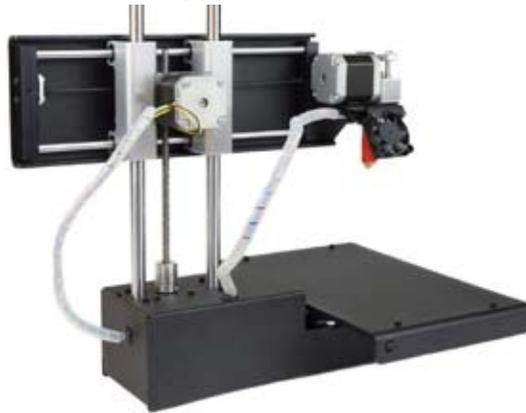
## *Board of Directors Update*

Due to health issues of his wife requiring his full attention, long time board member Bob Miller has chosen to resign from our chapter's Board of Directors. Bob has been a steady influence on our board through the years and we regret his resignation but we certainly understand it. We wish the best for Bob and his wife, Patti, and hope to see them back at our meetings and events in the near future. Many thanks to him for his years of service to our board and chapter.

In his place, the board has asked Cheryl Andrade to complete Bob's term and Cheryl has agreed. Cheryl is a relatively new member of our chapter, having joined earlier this year, but she brings a wealth of EAA experience with her from her prior involvement in other chapters. She volunteered to become our chapter's Young Eagles Coordinator and did much to make our May 12 Rally the success that it was. Welcome to Cheryl.

## ***BBQ Lunch and a Program Saturday, July 14 11:00 am-1:00 pm***

On Saturday, July 14, we will have a BBQ lunch available beginning at 11 am. At 12:00 we will have a program presented by Brook Drumm. Brook is the owner of Printrbot right across from Lincoln Air. His company makes 3D printers. Brook will do a demo of 3D printers, technology which can be useful in producing parts that can be used in building or working on aircraft. He'll bring a printer and some samples of what can be produced.



## ***LRAA Aircraft Display Day (08:00 am -Noon) & EAA Pancake Breakfast (08:00 am-10:00 am) Saturday, July 21***

Come on out on Saturday to the Gazebo area at the airport between 08:00 am and 10:00 am for a pancake breakfast and to help support the LRAA monthly display day. Invite your friends and family to come see the airplanes on display and have breakfast to boot. We might have some classic cars on display too, so check it out....



## *Member Meeting Wednesday, July 18 at 6 pm.*

Come out for our chapter's regular monthly member meeting at the EAA hangar on Wednesday night, July 18. We will offer a BBQ dinner beginning at 6 pm so you don't have to cook that night. Meeting will start at about 6:45 pm or so with some short business items to cover.

At about 7:00 pm, we will have a presentation by Lt Col Chris Reeder on the Global Hawk mission. Col. Reeder is an instructor and evaluator, former tanker pilot and fighter pilot. He is the Director of Operations for the 13th Reconnaissance Squadron at Beale AFB which operates the RQ-4 Global Hawk Remotely Piloted Aircraft (RPA). Col. Reeder is an Air Force Academy graduate (class of 1997) and has flown KC-135s, KC-10s, F-15s, and A-10s in his Air Force career. His broad background and detailed knowledge of the RQ-4 program at Beale will, no doubt, provide an interesting evening for our chapter. We also understand he flies a Pitts Special for fun, so that experience will be a little icing on the cake.



# *Jimmy Doolittle - Scholar, Aviator, Daredevil, Military Leader, American*

*By Marty Maisel*

## *Part 2*

### *Race, Demonstration, and Test Pilot*

With his flying and academic credentials, Jimmy Doolittle was appointed Chief of the Flight Test Section at McCook Field, the Army Air Service research, development and flight test center.

In late summer of 1925 Doolittle was sent to the Anacostia Naval Air Station in Washington, D.C. to receive training in a Navy high-speed seaplane. The Navy had entered the purpose-built Curtiss R3C-2 seaplane in the international Schneider Trophy Race, which was to be held in October 1925 over the waters of the Chesapeake Bay near Baltimore, Maryland. Jimmy Doolittle, an Army pilot flying a Navy seaplane, won the trophy with a speed of 232.57 mph. The next day on a straight course he set a new world seaplane speed record of 245.7 mph.



*Lt. Jimmy Doolittle and the Curtiss R3C-2, Winner of the 1925 Schneider Trophy. (Image is in the public domain)*

In early 1926 the President of the Curtiss Aeroplane Exporting Company asked Doolittle's Army superiors to put him on extended leave and allow him to go to South America to demonstrate the Curtiss P-1

Hawk fighter to potential military customers. The Army approved of his leave without pay and in April, Doolittle, a Curtiss mechanic, and a crated-up P-1 Hawk sailed for South America.

In May 1926 when Doolittle was a guest at a cocktail party hosted by Chilean pilots, he was introduced to a powerful drink called a pisco sour. After a few drinks Doolittle was encouraged to show off his ability to do a hand-stand.

When one of the Chilean pilots said that he had seen Douglas Fairbanks, the American movie actor, do a hand-stand on a window ledge, Doolittle complied and did a hand-stand on the ledge of an open window. However, after a few seconds the sandstone ledge crumbled and he fell to the courtyard about 15 feet below, breaking both ankles.

With both ankles in casts, Doolittle, in his autobiography, he claimed that "embarrassment overcame pain" and within a few days he managed to perform the aerobatic flight demonstration to promote the sale of the Curtiss Hawk fighter. Curtiss subsequently received orders for several Hawk airplanes from Chile and later from Argentina.

When Doolittle returned to the states he was transferred to Walter Reed Hospital in Washington, D.C. where he spent a few months healing from the improper casts that were set in South America. He was finally discharged from the hospital in April 1927.

Back at McCook Field Doolittle began to consider what human, aerodynamic or structural factors would prevent the successful completion of an "outside" loop. During an inside loop centrifugal-forces kept the pilot in his seat but the outside loop would do the opposite. The high g-forces experienced by the pilot during an outside loop may cause high pressure on the brain – would the pilot "red-out" and lose consciousness due to the excessive pressure?

Using a P-1 Hawk, one of the latest Army fighters available at McCook Field, Doolittle gradually began to develop the techniques required to perform that difficult maneuver. By the end of May 1927 he demonstrated the outside loop to a half-dozen of his fellow pilots, proving that advanced aircraft of the day were capable of withstanding the forces and that the pilot would suffer no ill effects from that extreme flight condition.

Before long Army headquarters in Washington prohibited Army pilots from performing an outside loop because most of the Army aircraft in service were not stressed for that maneuver. In any event, Jimmy Doolittle is credited with being the first pilot to successfully perform the outside loop.

*Jimmy Doolittle.  
(image is in the  
public domain)*



### ***Instrument Flight***

In the late 1920s Elmer Sperry Jr. of the Sperry Gyroscope Co. developed flight instruments aimed at enabling “blind flying.” Funding was provided by the Daniel Guggenheim Fund for the Promotion of Aeronautics. Two of Sperry’s instruments consisted of little gyroscopes in instrument cases: one to determine the direction (called a directional gyro) and the other determined the attitude of the airplane (known as an artificial horizon).

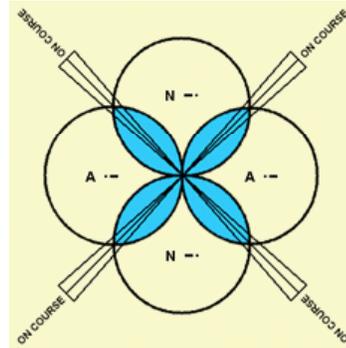
At the same time, Guggenheim was also sponsoring Jimmy Doolittle to conduct “all weather flying” experiments at Mitchel Field on Long Island, New York. With shared goals and common funding, Doolittle teamed with Sperry. Eventually others joined the team including Professor Bill Brown from M.I.T., specialists at the Federal Bureau of Standards, the Army, the Navy, and the Department of Commerce, and engineers from the Pioneer, Taylor and Kollsman Instrument Companies, the Bell and Radio Frequency Laboratories, and the Radio Corporation of America.

To perform the flight evaluations a two-place Consolidated NY-2 was purchased and modified with an enclosed “hood” for the aft cockpit.

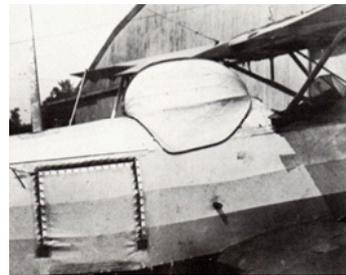


*Jimmy Doolittle and the Consolidated NY-2 “Blind Flying” test plane. (Image is in the public domain)*

A recently developed sensitive altimeter was acquired from Paul Kollsman, a German immigrant. To align the aircraft with the runway, radio signals emitting Morse code “N” (dash-dot) and “A” (dot-dash) signals in orthogonal lobes were transmitted. The intersection of the “N” and “A” lobes would be received as a steady, continuous sound. That navigational system got to be known as “flying the beam”.



*“Flying The Beam” radio signals.*



*Consolidated NY-2 “Hood” Modification for “Blind Flying” Experiments. (Image is in the public domain)*



*Doolittle viewing the “blind flying” instrument panel. (Image is in the public domain)*

On Sept. 24, 1929, with an Army safety pilot in the front cockpit, Jimmy Doolittle completed a fifteen-minute flight, from takeoff to landing, while “under the hood” - the first successful demonstration of instrument flying. For his role in the development and demonstration of “Blind Flying” technology, Doolittle was awarded the Harmon Trophy (presented for the most outstanding achievement in the art of flying) in 1929.

## *At The Airport...*

*We had a small crew of guys working on the hangar on Wednesday, July 4th, putting up insulation on the south wall of the hangar. Under the planning and direction of chapter member Darren Coomier, we had Bruce Estes, John House, Jim Hughes, and Tim Cooper spend a couple of hours to help moderate the summer temperatures in the hangar. Insulation installed on the south wall; insulation is also to be installed on the hangar doors, plus some other environmental improvements in the works. Also, last week a second coat of floor paint/sealer was applied, so work does continue.*



*Some more updates on our chapter hangar stuff: we have a Piper Archer now calling the hangar home. Our chapter has rented hangar space to Darren Coomier and Tim Cooper, both chapter members, for their Piper Archer. We now are back to two airplanes renting space in the hangar. The rent from these tenants offsets our own rental costs for the chapter home, so we are happy to have them in our hangar. The Archer is mobile so it will be pulled out from the hangar for chapter events. Our other tenant is an RV-6 under construction by John Tate that is coming along quite nicely.*

