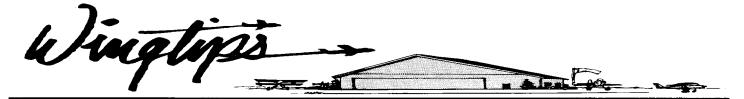
CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION

MAY 2004



Meetings are the 2nd Saturday of each Month Chapter 55 Hangar - Mason Jewett Field

Pres: Mike Arntz 694-4601 Vice Pres: Tom Botsford 663-1318 Treas: Gregg Cornell 351-1338 Sec: Drew Seguin 332-2601 Editor: Warren Miller 393-9385

Climb and Maintain Flight Level 55

We have had another first flight among chapter members. I received an e-mail from Gregg Cornell with some PICS of the Glasair Super II-S. taking flight, it looked good, but I will let Gregg tell you about it.

Congratulations, Gregg! The culmination of ten years of work sometimes frustrating, (only time I ever heard him swear), some times funny, but a real accomplishment any way you look at it.

When you come to the next meeting the hangar door will be in place and ready to go. Renee and I stopped by on Saturday around 5:00 PM expecting to find nobody there but low and behold there were several chapter members working in the wind, cold and rain all soaked to the bone installing the door. They had it up and were putting the sheet metal panels on. The door was wired and operational and looking good.

At this time I would like to give a big thanks to the following people: Doug Koons who prepped and spent many hours of his vacation putting in the header and bracing prior to delivery of the door, Ralph Taggart, Don Chubb, Dave Groh, Gilbert McKessy, Ken Vandenbelt, Drew Seguin, Elliott Seguin, Joe Pirch, Tom Botsford, Ernie Lutz, for their part in erecting and installation of the door. Also a very special THANK YOU to Vicki Vandenbelt and Renee Arntz for taking care of the guys by making coffee and being gophers.

The dedication shown to the chapter by these fine folks is outstanding and should be an inspiration to all members. Thanks to Stan Chubb for the loan of tools, equipment, and the fork lift. Without this equipment the job would have been much more difficult.

Remember the next time you go flying take a chapter member with you.

Mike Arntz, President

APRIL SCHEDULE

Board of Directors' Meeting
Wednesday, May 5, 2004
Chapter 55 Meeting
Saturday, May 8, 2004
- 9 Breakfast / 9:30 Chapter Meeting

May Team

Larry Benjamin
Don Chubb
Lou Farhood
Max Hall
David James
Gary Long
John Mereley
Steve Ramey
George Spencer
Ken Vandenbelt
Vickie Vandenbelt

June Team

George Benson Larry Coryell Richard Farrell Gregory Harris Dell Johnson Terry Lutz George Moore Dan Schiffer Jim Spry Joe Whitesides

EAA Board of Directors Meeting April, 2004

EAA Chapter 55 Business Meeting

April , 2004

Notes from Cape Juby By Terry L. Lutz, Chapter 55 Flight Advisor

I received word a few weeks ago that Gregg Cornell had safely completed the first flight on his Glasair. Congratulations, Gregg!! He sent me a quick update, and a nice picture. Gregg can best describe the flight and his feelings about it in person, which I hope he can do at the May chapter meeting. The important thing is that the airplane was properly prepared for flight, the flight was carefully planned, and because of good preparation, the flight was safely completed. That's the goal of the EAA Technical Counselor/Flight Advisor programs.

Gregg's airplane is exquisitely beautiful. No insect will dare get in the way of this gorgeous creature as it slices through the air to its award winner destiny at exotic venues like Oshkosh. But, there is a silent story that can never be told about the twin sister of Gregg's airplane. You know, the one he sanded down completely to nothing but dust. At least it seemed like he did! We wish Gregg tremendous success with his new airplane.

Another airplane recently made its first flight, and that was RV-8 N9901O, built by 79 years young Bob Bradbury of Pontiac. Even though it was a quick-build kit, Bob did most of the work himself, without the experienced help of other builders. Even though the official inspection was complete, there was still work to do. I had the opportunity to look it over, and we found things that needed to be tied up here, and tightened there. One thing that Bob worked on was the tail wheel attachment to the rudder horn. Two things are happening there. First, there's wear between the aluminum horn and the steel clip that holds the steering chain. Second, if you make the chain too tight, it rubs the bottom of the rudder when the rudder is more than about half deflected. Bob put eyebolts on the rudder horn, so there is steel to steel contact, and he put plastic tubing over the chain so it won't wear on the rudder.

When Bob and I taxied the airplane to get it ready for first flight, we found that maximum static rpm was about 1900 rpm. That's too low for an O-360 with the prop that Van recommends. So off came the cowl to investigate. Bob found that the throttle linkage had to be adjusted, both at the throttle quadrant and at the carburetor. Carl Franz is a newly appointed EAA Technical Advisor, and I brought him over to the give the engine a good look. After inspecting the throttle linkage, we ran it up and got another 125 rpm at on the static check, but the right mag began to run rough. We also smelled fuel in the cockpit, and found a leak in the line between the fuel valve and the fuel pump. While these are things were unexpected, they are not unusual.

It takes an accurate, measured approach to problem solving to make a successful first flight. So Carl and Ron Cooper and I went back to Pontiac with a bunch of tools that would cover the range of problems we expected to encounter with the rough right mag, and the leaking fuel line. After 3 or 4 hours of work, the engine ran great, and a new line was in place with no more leaks. We thoroughly checked the ignition system and timing, cleaned all the plugs, and checked for induction leaks. Ron set the idle mixture, and I did some quick accels with the throttle to make sure the engine would accept power. It was a great example of the spirit of EAA at work with the Technical Counselors and the Flight Advisor working together with the builder to insure a safe and successful first flight.

Carl and I went back to Pontiac the next day, and with Carl flying chase in his RV-6, I completed the first flight in Bob Bradbury's RV-8. The need for a chase is a judgment call, and the reason I elected to have a chase is that on previous first flights that I have conducted, there have been a few radio problems. Since Pontiac is a controlled airport, Carl's role as chase pilot was to provide back-up communications in the event that my radio failed. We briefed communication failure and emergency procedures both in the traffic pattern and outside the airport traffic area. Carl recently attended a formation flying clinic in Charleston, WV and the training really paid off. He was always in a good position, and his radio work was perfect. As for the airplane, the engine exactly the way it should be, and although we have a few trim problems to deal with, Bob will soon have a safe and outstanding airplane to fly anywhere he wants to!



I have been doing a little research on the Polikarpov I-16 fighter that showed up at Oshkosh last summer. The pilot that did the original flighttesting on that airplane was a man named Valery Chkalov. He was born in Vasilevo on the Volga River and knew that he wanted to fly when he saw a Russian hydroplane fly off the river. At age 15, Chkalov enlisted in the Red Army and began assembling airplanes being shipped from Germany. Two years later, he entered the only pilot training school in Russia, and

eventually became a fighter pilot. He was a gifted aerobatic pilot, and by today's standards, he would have matched Sean D. Tucker in shear enthusiasm and artistry in the air. So good was Chkalov, that he caught the eye of Josef Stalin, and they became close friends.

In 1937, Valery Chkalov, Georgiy Baidukov, and Alexander Belyakov flew a single engine airplane from Moscow to Vancouver, Washington. The flight took 63 hours and 23 minutes and covered more than 10,000 kilometers. Already named a Hero of the Soviet Union by Stalin for a flight across the Arctic from Moscow to Udd Island in the Sakhalin chain, Chkalov was elevated to high political status and was elected as a Deputy to the newly formed Supreme Soviet of the USSR. He carried out these political duties, to which he was as uniquely qualified, and continued his test flying work for Polikarpov.



The winds of war were beginning to blow in Europe, and by 1938 the Russians needed a replacement fighter for the I-16, one that would challenge the Me-109. Polikarpov worked feverishly on a new design, the I-180. It was finally ready for testing in December 1938, but neither the airplane nor Chkalov were ready for a successful first flight. Unlike earlier test programs, he did not spend a lot of time going over the airplane to know all its unique details. The design team decided not to install the system that protects the engine in cold weather, or the carburetor heating system. On December 15th, Chkalov took off in the I-180, and instead of remaining over the airfield, flew a pattern that did not allow him to glide to landing. The engine failed, and at age 34, the most gifted of Russian pilots was killed in the forced landing.

While researching this story, I came across several first flights that Chkalov had conducted, most of which were in December. I first thought that this was because of funding, or some part of the Soviet "5-year" plans, but found out that Josef Stalin's birthday was December 21st. Valery Chkalov was cremated and buried in the Kremlin Wall in Red Square. One of the pallbearers at Chkalov's funeral was Josef Stalin. The next two prototypes of the I-180 also crashed, effectively ending the career of Nicholai Polikarpov.

Soooo, on that note, as summer approaches, there is a lot of flying to be done. But do it when you are ready and when the airplane is just right. Savor the moment and go fly. And as always, don't forget to help your fellow pilot when they need it.

FROM EAA HEADQUARTERS

Protect Our Planes (POP) Gears Up for Flight Line Safety Volunteer Opportunities EAA AirVenture Oshkosh 2004

People from around the world come to EAA AirVenture Oshkosh for primarily one purpose: to look at thousands of aircraft that converge on Wittman Regional Airport. To protect these airplanes - and spectators - the POP (Protect Our Planes) Team monitors flight line activities to make sure visitors abide by the time-tested Oshkosh rules: no smoking except in designated areas, and no food or drink within 10 feet of any airplane.

POP now seeks volunteers to join its team from Monday, July 26th (the day before the convention) through Sunday, August 1st. POP patrollers must be at least 14 (ages 14-17 need a parent/guardian with them) and enthusiastic. No experience is necessary - all you need is a smile - and there's a place for people of all fitness levels. It's a great way for families and/or groups to enjoy EAA AirVenture "from the inside." If you're interested in volunteering, e-mail ProtectOurPlanes@yahoo.com or visit http://groups.yahoo.com/group/ProtectOurPlanes.

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