



EAA Chapter 100

November 2013 Newsletter

2013 Chapter Leaders

President

Dwayne Hora

President@eaa100.org

(507) 358-0495

Vice President

Dan Crandal

VP@eaa100.org

(507) 282-9682

Secretary/Treasurer

Tom Hall

Secretary@eaa100.org

Newsletter

Jeff Hanson

NewsLetter@eaa100.org

Programs/Web

Dick Fechter

ProgramDirector@eaa100.org

WebMaster@eaa100.org

Forum Administrator

John Somheil

Forum@eaa100.org

Technical Counselor

Flight Advisor

Dave Nelson

Young Eagles

Greg Edlund

YoungEagles@eaa100.org

Pancake Breakfast

Claire Johnson

Other Email Addresses:

BusTrip@eaa100.org – AirVenture Trip

Dan@eaa100.org – Dan Crandal

Hangar@eaa100.org – Hangar Issues

Help@eaa100.org – Any Chapter Questions

Spectrum@eaa100.org – Flight Training and Pilot Supplies

Chapter Website / Forum:

<http://www.100.eaachapter.org>

<http://groups.yahoo.com/group/eaa100/>

EAA Chapter 100 is a nonprofit association involved in the promotion of aviation through adult and youth education, hands-on training, building and maintenance of experimental aircraft, and through community awareness programs.

This publication by EAA Chapter 100, Inc is for the use, education and occasional enjoyment of its members and others. No claim is made for the accuracy or applicability of information herein. Editorial content is the opinion of the contributor not necessarily the position of either EAA Chapter 100 or the Experimental Aircraft Association.

Reader submissions and comments are strongly encouraged.

November Hangar Flying Event

Come help us celebrate 50 years of flying with Dick Fechter! He will be hosting the meeting and talking about his many adventures in flying including some of the following:

- Stupid things I did in my early GA days (or what I didn't know should've killed me).
- USAF pilot training – Lucky or just in the right spot at the right time.
- Military Flying:
 - Adverse yaw in the F-100
 - Avionics in the A-7
 - Ejection
 - Crash investigations
 - Giving my Son a ride
 - Accidentally flying into Area 51
 - Air refueling
 - Flying supersonic
 - F-16 Gee Wiz

Date: Friday November 8th

Time: 7:00 PM

Where: Dodge Center Airport Terminal Building

You won't want to miss this...

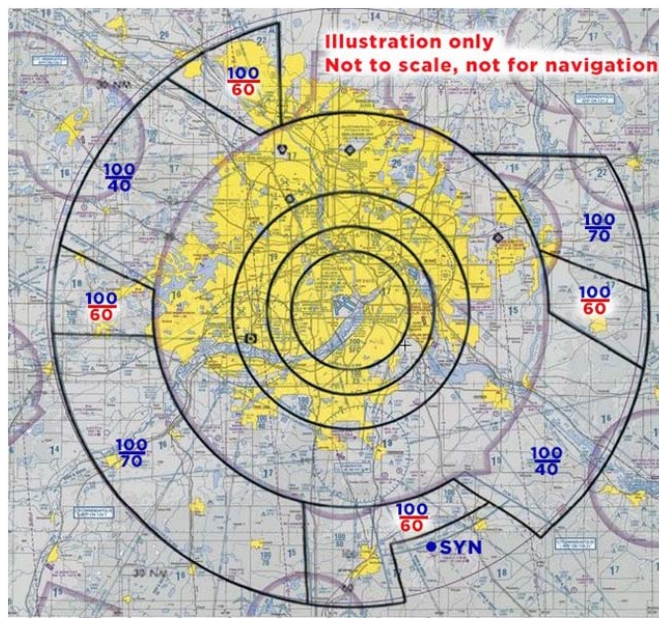
Service Pictures for the Dodge Center AD Building

As you all know we've been working to renovate the AD building at the Dodge Center airport. Gordy is looking for pictures of EAA members that served in any of the armed services. We have room for 8 to 10 pictures to hang on the hallway walls from the West entrance door to the bathroom. Pictures should be 8x10 or 8 ½ x11 so an 11x14 frame size would have them all look the same. They do not need to be in frames but Gordy would like them signed with date of service, unit of service, and if you are not in the picture, please include a small picture of yourself in uniform that could go under the glass in the corner. For example, if you were attached to a unit in Viet Nam and attached to a ground unit, you could include a picture of the base where you served with your picture. Bring them to the meeting on Friday so we can see what we have.

FAA Finalizes Minneapolis-St. Paul Class B

October 29, 2013 – By Jim Moore

Shelf ceilings lower.



Reduced Class B shelf floors are noted in red, along with a slight expansion of the cutout around Stanton Airfield (SYN) on the southern side of the Class B. The new boundaries are shown in black, with existing boundaries in light blue.

The FAA gave Stanton Airfield a little elbow room, though the floor of the Minneapolis-St. Paul Class B airspace will be 1,000 feet lower just to the north when a new airspace configuration takes effect in January.

AOPA expressed concern about some features of the redesign, which reduces the Class B floor from 7,000 to 6,000 feet in four sectors, including the reconfigured sector that is now just north of the airport that is home to the Minnesota Soaring Club, the largest of its kind in the upper Midwest.

AOPA noted during public information sessions on the redesign that the lower Class B floor would constrain soaring, and that the presence of an adjacent sector with a 4,000-foot floor made the airspace needlessly complex.

The FAA shifted the Class B boundaries to give Stanton Airfield, which previously straddled a boundary on the southern edge of the airspace (24 nautical miles from Minneapolis-St. Paul International), a little more room to maneuver: the lower shelf now begins roughly a mile north of the airport's edge.

The current Class B configuration will expire when the Jan. 9, 2014, charting cycle begins. Pilots should take note of the lower Class B floors west, north, and east of Minneapolis-St. Paul as well.

Article on the Adoption of Checklists

Dick Fechter received this from Scott Willey [scottlin.willey@gmail.com] who is a Docent at the Smithsonian Steven F. Udvar-Hazy Center air museum:

I've been in touch with a Dr. Roger Bohn, UC San Diego. He sent me a working paper (attached--NOT FLYING BY THE BOOK: SLOW ADOPTION OF CHECKLISTS AND PROCEDURES IN WW2 AVIATION) that "will be one chapter of a book about the evolution of flying methods. But this will take 1-2 years to reach print. I am eager to get comments on the working paper from experienced pilots. For example for WW2 I claim there were distinct "fighter culture" and "heavy bomber culture." I'm also still trying to figure out what US Navy pilots were doing in the 1950s. So your fellow docents are invited to read it and call/send comments."

I've sent it to all of you because of the diversity of pilot experience and time periods represented. If you'd care to look at it and comment, please do so directly to him. Thanks much.

Scott

Because of the 2MB size of the attachment, Dick has placed it on our website at:

http://eaa100.44rf.com/newsletters/WWII_Checklist_adoption.pdf

Good Links

VFA-102 Diamondbacks 2012 cruise video. Just "plane" awesome.

http://www.youtube.com/watch?feature=player_embedded&v=vltrT3AoJZA

I can't imagine having to ride one of these things to a stop with a full load and worn out brakes.

http://www.boeing.com/Features/2011/05/bca_747-8_RTO_05_04_11.html

**If you have problems with the links, just copy/paste the address into your web browser.

EAA Experimenter Article

In case any of you didn't see it, here is the article by David Gustafson on our Hatz featured in the October issue of EAA Experimenter magazine:

Jeff and John Hanson's Grand Champion Hatz Classic Homebuilt

It was a father/son team from Minnesota who won the Gold Lindy designating their Hatz Classic open-cockpit biplane as the Grand Champion plans-built aircraft at EAA AirVenture Oshkosh 2013.

What an incredible bonding experience it must have been to have a homebuilt aircraft as a central focus in their lives for the 10 years that went into its construction. They finished it in 2009, and Jeff Hanson, the son, flew it to AirVenture in 2013 and entered the aircraft judging on what could almost be called a whim. He called his dad, John, a few days later and said, "Five guys have already signed off on this thing." Another few days went by, and he told his dad there were 17 sets of initials on the "Judge Me" sign hanging on his prop. "Guess what?" he said when he called his dad a day later with a Gold Lindy in his hands. The measure of the builders' surprise may exceed the sense of satisfaction they enjoyed in receiving the award.

Today Jeff is 42; his dad is 74. John grew up in an aviation environment (his father started working at the Rochester airport when John was 3), got his private ticket in 1957 at age 18, and went on to earn a commercial and IFR ratings. John, whose roots with EAA go back to Rockford, Illinois, in 1966—his EAA number is 26876—built a single-seat Rose Parakeet biplane between 1969 and 1978. He still has it and often flies formation with Jeff, who in turn fills the front seat of the Hatz with his son who is now 13. The two aircraft are pretty closely matched in performance, which makes formation flying easy.

The idea for building the Hatz began to take shape in 1997 when John spotted an article on Billy Dawson's Hatz Classic in *EAA Sport Aviation*. For a while, he'd been thinking about building a second airplane and began discussing the possibility of a joint venture with Jeff. Jeff, who picked up his private certificate in 2001, shared his dad's enthusiasm for all things that fly.

There was no doubt that the project was going to be another biplane. Jeff showed some positive interest in the article, and in the spring of 1998 the two men went to the National Biplane Association Fly-In in Bartlesville, Oklahoma, and managed to each get a ride in a Hatz. That experience converted the talk into action.

Later that summer, at AirVenture, they had some discussions with Billy Dawson, who had built several Hatz biplanes, always adding to the basic original CB-1 design until he came up with a version he called the Hatz Classic. It was influenced by Dawson's love of Wacos

and featured a number of significant changes from the original CB-1, such as push tubes in place of cables, aluminum ailerons, and a larger engine. There were no plans for the Classic, just Dawson's prototype, but Dawson's friend, Jeff Shoemake, agreed to reverse engineer the aircraft and develop some plans and eventually kits. Jeff and John signed up for a set. They were 12th in line. (Perhaps ten times that number have been issued since then.)

In July of 1999, wing drawings arrived and the work began. They ordered wood from Wicks and began working on a set of wings. Since Jeff had the room for the four wing panels, the work started in his basement. In one of the few deviations from the plans, Jeff discarded the aluminum ailerons in favor of wood and fabric, but that was after making an attempt to bend and rivet aluminum. Meanwhile,



John (left) and Jeff Hanson.



On the left, the Rose Parakeet John built from 1969 to 1978, and the Hatz Classic. They often fly the airplanes in formation as the biplanes match up well performance-wise.

The 2013 AirVenture Grand Champion Homebuilts



Jeff worked on the wings at his home.



Thirty miles away, John welded the fuselage. They worked on installing the engine together.



The Hatz is flown solo from the back seat, so it's home to a full set of traditional gauges.

John tackled some of the wing fittings that were initially sketched out on some sheets of 8.5 by 11 inch paper. Not long after, drawings appeared for the fuselage. Steel tube was purchased from a source in Pennsylvania that has since gone out of business. Thereafter, all the components were ordered from Aircraft Spruce. "I'd phone in an order on Monday and it would arrive on Thursday," said John. "It was like having Christmas 52 weeks a year." Since Jeff was busy with the wings, John began welding the fuselage at his home, 30 miles away from Jeff. Typically, they'd get together at least one day a week to work on the wings or fuselage, and then they'd spend the rest of the week working in their own shops. There were lots of phone calls between the two workshops.

It took about four years to complete the collection of CAD plans. At times they sat around waiting for the next group of drawings. Since the designer was in no rush, they were under no pressure to produce parts. Consequently they took their time and put quality ahead of quantity, never dreaming they were on the way to a Grand Champion award. "The amazing part is that in the end all the parts fit together perfectly," John said. Of course, in those days, Jeff had a day job, working in the refrigeration business. John had retired from his position with IBM as a printed circuit card designer.

As work progressed on the wings and the fuselage, Jeff trucked the wings over to his dad's place several times to make sure everything fit and the flying wires were the right length. Both were impressed with how easily all of the parts went together. John found the 23-gallon aluminum fuel tank a real challenge given its size and the need for TIG welding skills. It fits into the center section of the upper wing and feeds by gravity straight into the engine. John had experienced gas welding with the Rose Parakeet replica and truly enjoyed welding the steel tube fuselage.

Jeff was intrigued with the woodworking challenges and got his greatest satisfaction out of piecing the wings together. They both found running wires for the electrical system, which took some time and head-scratching and noted that each of the systems—electrical, fuel, control rigging—required a lot of thought and trials. However, the two men seemed to complement each other and often found that a good night's sleep would produce a lot of solutions to the problems they confronted. In the ten years of working together, there was never a serious disagreement or argument. For those truly baffling moments, when two minds couldn't get around the solution, they called in some of the members of EAA Chapter 100 or tech counselor, Walter Mount (who was in his 90s and recently passed away at age 100).

They devoted a year and a half to fabric, having ordered what they needed from Poly-Fiber. They were fastidious about gluing, stitching, and taping over the stitches. Both of them enjoyed the process.

They hung a 150-hp Lycoming O-320-A2B engine on the front end, which is the typical installation for a Hatz Classic. In keeping with the biplane tradition, they forwent anything associated with modern glass cockpits and installed round gauges for flight and engine monitoring. The front panel only has airspeed, altimeter, and turn/bank instruments. The rear panel, used for solo and pilot-in-command, has a full complement of gauges. They were careful, however, to avoid anything not deemed absolutely necessary. Having used that philosophy throughout the construction process, they wound up meeting the empty weight specification.

In June 2009, they ran out of things to tweak and tinker. With a certificate of airworthiness on board, John took the active runway on June 9 for the first flight. Jeff followed him in a chase plane. Aside from a minor engine cooling issue, everything in their Hatz Classic was in harmony. "It's a very well-designed aircraft," John said, who noted that throughout the Phase One flight test program, "It flew just about perfect." Jeff made the third flight and they traded off thereafter. Since they'd both logged considerable time in John's Rose Parakeet, they felt they had enough time in a "similar type" to be able to handle the Hatz without any problems. There were no transition training issues.

John's observations: "It's a great airplane. You lift off at 40 mph and cruise at 105. It's got short-field capability

and handles a lot like a PA-12 Cruiser. Stall is gentle and straightforward. It's not a cross-country airplane, and being in Minnesota, it definitely has a limited season."

Jeff's thoughts: "It's a lot like owning a classic car. It's great to just hop in and go cruising. It turns heads wherever you go because it looks like something out of the 1930s. It's a great plane to give rides in. People really appreciate it." Jeff agrees with his dad that Minnesota winters really put a crimp in the flying schedule.

There's some talk about building a cover for the front cockpit, which might extend the temperature range for a little bit. John admits that the goal was to keep the project as close to the plans as possible and keep an eye on weight. Both admit that they enjoyed the experience of working with a variety of materials such as wood, steel, aluminum, fiberglass, and they actually had fun stringing wires, tubes, and cables.

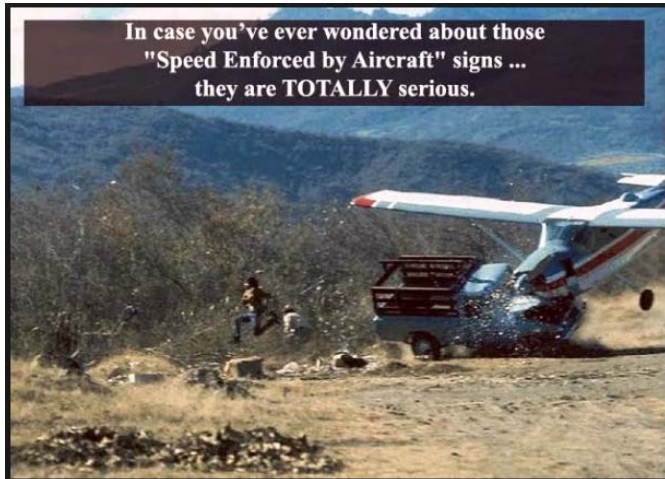
Though the Grand Champion award was a pleasant surprise and though they have enjoyed every minute of the 207 hours they'd logged in the Classic as of September 2013, both would likely admit that the best part of the total experience was the teamwork, the hours of studying and discussing the plans together, and the years of communicating with each other about a thousand problems big and small that eventually led to the finest example of a Hatz Classic on the planet. They built an airplane together. The memories are priceless.

We should all be so lucky. *EAA*



John and Jeff's grand champion plans-built Hatz Classic biplane.

And finally...



I am alive. Up here with the song of the engine and the air whispering on my face as the sunlight and shadows play upon the banking, wheeling wings, I am completely, vibrantly alive. With the stick in my right hand, the throttle in my left, and the rudder beneath my feet, I can savor that essence from which life is made.

-Stephen Coonts, FLY! A Colorado Sunrise, a Stearman, and a Vision.