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EAA Chapter 39
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<http://39.eaachapter.org>

FLYBOY NEWS



"Out Our Backdoor" is a new feature in our newsletter. Obviously, as the title implies, articles are about areas of interest that are within easy flying distance of Rapid City or surrounding airports. Each of you is encouraged to submit an article or pictures with captions for all to enjoy.

Out Our Backdoor

By Darrel Sauder



This September, a friend of mine, Larry Beezely, and I flew my trike from Sturgis to the Slim Buttes. They are located about 80 miles North Northwest of Sturgis and about 14 miles East Southeast of Buffalo. Larry acted as cameraman from the back seat.

We took off on a beautiful September morning with only a slight North breeze and the sun rising over our right shoulders. Plagiarizing from untold flying articles, "The countryside unrolled beneath us in an amazing array of greens, browns, meandering tree-sided streams, and rolling prairie under a brilliant morning blue sky, with the fresh smell of new mown (or is it mowed?) hay filling our nostrils". As always, it was great to be flying; one of those perfect mornings.

The Slim Buttes are a part of the Custer National Forest and have been described as "islands of green in a sea of rolling prairie". Hills or mesas of ponderosa pine as well as cliffs and spires rise above vast stretches of rolling prairie sprinkled with a few cultivated fields and ranches. Antelope, mule and whitetail deer, turkeys, sharp-tail grouse and prairie dogs, as well as cattle inhabit this region. This area is also rich in archeology, paleontology, and of course, ranching and Indian history.

"The Castles" is a National Landmark located in the Slim Buttes just off HWY 20 about 14 miles East Southeast of Buffalo. They are massive limestone eroded uplifts that resemble medieval castles. They are surrounded by smaller cliffs, spires, and canyons similar but on a larger scale

The Battle of the Slim Buttes (Sept., 1876) was the first victory over the Indians since the Battle of the Little Big Horn (Custer's Last Stand) (July 1876). Google it up to read an a very interesting account of part of South Dakota history.



When we arrived in the area of the Slim Buttes we could see a distinct ridge stretching to the Northwest as far as we could see. We flew along this ridge which was a combination of cliffs, canyons, spires and mesas with Ponderosa pines, buffalo grass and sagebrush covering much of the area.

"The Castles" area is what the Slim Buttes are best known for. We spent 20 or so minutes "looking them over" ("or under"). We then headed for Buffalo International Airport for a pit stop and a snack (previously stowed beneath the seat). Sitting in one of the open hangers had to be the most profusely decorated car I have ever seen. Bumper to bumper bird droppings!



On the way back I was tempted to circle over The Cave Hills to the west of Buffalo. However, time, fuel, and impending midday winds and thermals made it prudent to "go direct" back to Sturgis.

Looking for somewhere to fly?...I highly recommend this trip.



THE PREZ SEZ...

by Darrel Sauder

Well, we had some good ice cream, brownies, coffee, good conversations and met some new people at our October meeting. We welcomed and got to know Rob Burton and Shawn Gab from Rapid City, and Olan Rom and his mom, Olga Petapevan, from Black Hawk.

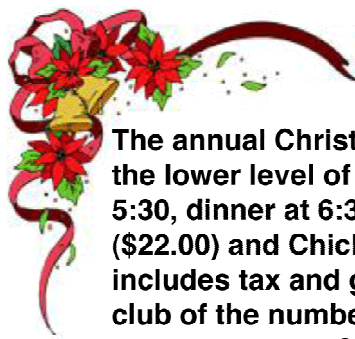
Brad Docken gave a very interesting talk on his adventures of obtaining and restoring his Commander; complete with a "here it is" showing at his hanger at the end of the meeting.

Next meeting will be an interesting one. Paul Harwig, CEO of FUGRO HORIZONS, INC will be showing us around their hanger (Formerly Fightertown USA hanger) at the Rapid City Airport. We will be meeting in their hanger (not at the Rapid City Airport Firehouse as previously announced) at 6:00 PM for social hour, followed by a short business meeting, and then a tour of their aircraft and tools of their trade, ie., cameras, instruments, etc. Their hanger is first class, heated and well appointed so should prove to be an enjoyable evening.

Hope you all gave some serious thought to the EAA Chapter 39 Survey that we emailed/mailed to you. Will post the results when we get all of your great ideas summarized.

Hope to see you all at our upcoming meeting on Dec 13. Bring a couple of people you know that are interested in joining us!

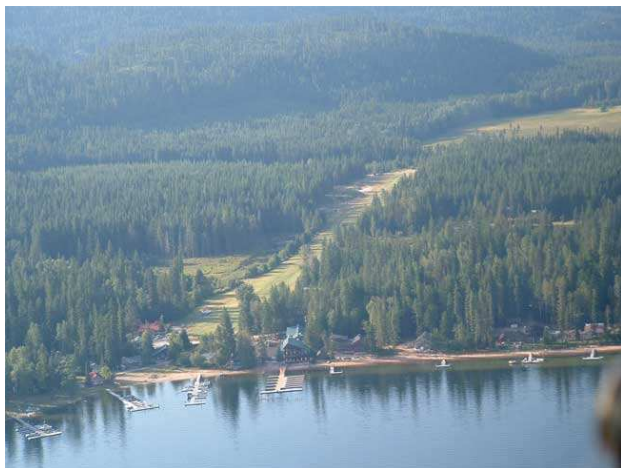
Don't Forget to Floss.



The annual Christmas party will be on January 7th at the lower level of the Elk's Club. Social begins at 5:30, dinner at 6:30. Menu choices will be Prime Rib (\$22.00) and Chicken Cordon Bleu (17.50). The price includes tax and gratuity. I will need to notify the club of the number of each meal a week prior to the event. Please RSVP to Jerry Petersen at 348-1871 or 431-0366 by January 1st. Please state your choice of meals when responding.



Can You Identify This Airport?



Cavanaugh Bay, Priest Lake, Idaho

Next Meeting:

Tuesday, December 13

at **FUGRO HORIZONS, INC** (formerly
Fightertown USA)

Social Hour—6:00 (cookies and hot spiced cider
provided)

Meeting at 7:00, then Paul Harwig will give a
tour of the aircraft and equipment

Instead of following Airport Rd. around to the
clubhouse, continue straight ahead on Fire
Station Rd. to the Horizons gate to the parking
lot (on your right). The gate will be open.



Slice 'n Dice

Upcoming Events

Jan. 7 **Annual Christmas Party**, Elk's Club (*details at
December meeting*)

May 19-20 **Rocky Mountain Light Sport Aircraft
Expo**, Watkins, CO Contact Name: Brian [Garrett](#)
Contact Phone: [303-564-5328](#)

May 31-June 3 **National Biplane Fly-in**, Junction
City, KS Contact Name: Jim [Clark](#) Contact
Phone: [\(785\) 210-7500](#)



Brad Docken's Commander

Don't forget: membership renewal forms and
dues need to be sent to Milo. If you need a
renewal form, e-mail me at
teachmolly@gmail.com.

Picture this: Santa's sleigh is wrecked beside an
outhouse. Toys are scattered everywhere,
reindeer are all tangled up in the reins. Santa
picks himself up out of the snow, slams his hat
down and explains in a harsh, scolding voice;
"Rudolph, you dummy, I said the Schmidt house,
the Schmidt house!"

*Ed. Note: The Cool Links page and the Classifieds are now on our web page (<http://39.eaachapter.org>) I
really need you to contribute to the newsletter and/or website! Thanks.*

SECRETARY'S MINUTES

Forrest Foster

- ◆ President Darrel called the meeting to order at 7:00 PM and welcomed everybody.
 - ◆ Guest Olan and his mom introduced themselves and Olan gave a brief summary of his flying experiences. Also Guest Rob Burton introduced himself and gave us a little speech about him and the aircraft he has.
 - ◆ Minutes from the previous meeting were summarized.
 - ◆ Molly reported that their fly-in and picnic was a great success and they hope to see more people next year.
 - ◆ Milo reported that the chapter has \$2,165.88 in the bank and next year's dues are due between now and the first of the year.
 - ◆ Old business: none to cover.
 - ◆ New business: Christmas party, to be held January 7th; will need to RSVP. Social at 5:30 PM and dinner at 6:30 PM. It was discussed that we will need a different speaker. Darrel is going to ask Chuck Chilles.
 - ◆ Molly asked for more news articles to please be submitted. Darrel is going to start "Out Your Back Door." Molly also noted that she can add as many pictures to the website as we wish, please submit some.
 - ◆ It was also brought up that it would be nice to do at least one event every quarter; any ideas or suggestions?
 - ◆ We're looking for programs for monthly meeting. Any ideas???
 - ◆ Molly brought up the idea of a raffle for a plane ride; proceeds would go to the chapter. It was discussed and **Approved**. Now we need pilots willing to give the rides.
 - ◆ Using the firehouse meeting room for the meetings during the winter was brought up.
- Approved.**
- ◆ Brad Docken gave a very nice presentation about acquiring, and restoration of his Commander. Thank you for the nice information and the time you spent putting this together. I'm sure it was enjoyed by all in attendance.
 - ◆ 8:15 meeting was adjourned.

Chapter 39

Officers

President	Darrel Sauder
Vice President	Dan Benkert
Secretary	Forrest Foster
Treasurer	Milo Schindler

Volunteers

Newsletter	Molly Benkert
Web Manager	Molly Benkert
Young Eagles	Rick Belsaas
	Jerry Petersen
Safety Officer	Jerry Densmore

Tech Advisor Randy Daughenbaugh

TREASURER'S REPORT

Milo Schindler

Balance brought forward..... \$2030.88

Income

dues x 16 (2012).....240.00

Expenses

.....0.00

Balance on hand \$2270.88

A SAFETY NOTE

By Jerry Densmore

Where's the Wind?

There I was, flat on my back at 3 thousand feet. The only problem was that also was the airport elevation. What happened? Remember when your flight instructor told you about flight control position when you were on the ground? Probably the famous climb into, dive away from line. Holding back stick with the wind behind you is just an invitation for a gust to cause you to do a 180 the short way, over the top.

I was reminded of this last June at the Ellsworth open house. I had flown the blackhillssportflying.com Champ over as the base had opened the field to the general aviation public. It was a good time, but the breeze came up around departure time (imagine that happening in western South Dakota) to about 15 knots from 150 degrees. Not a problem you say, but wait, there's more. As I taxied out, the Champ didn't want to turn downwind. If you have a size nine shoe, you either have full rudder travel or brake but not both. I waved the flightline golf cart over and got him to face the aircraft downwind and life was good once again, for me anyway. There was another conventional gear aircraft (tail dragger for you purists) ahead of me. It was stopped and I watched as the tail slowly came up. I thought to myself what a show off doing a wheel stand in front of the crowd. But just a minute, the elevator is in the full climb position, that's not right! I waited to see puffs of concrete but none appeared and shortly the tail came back down and the plane started to taxi. I found out later from some friends in the crowd they heard a ticking sound during the tail high maneuver. Whoops and the aircraft continued out and took off! How could this have been prevented? Neutral to forward stick prior to the tail leaving the ground or releasing the brakes and rolling ahead when the tail started up. But my observations weren't over yet.

I was on the Delta taxiway, fifth in line for take off to the south on runway 13. The checklist was complete so I was checking out the aircraft ahead of me. Something didn't look right and then it dawned on me what was wrong. Remember that 15 knot breeze from 150? The four planes ahead of me had the left aileron down. Maybe it was me, I thought, as I moved the stick over to the right. Nope, the left wing started to rise up a little so back the stick went to the left and the Champ settled down. Anyway Ellsworth tower handed me off to the Regional tower and I was cleared to land before I reached the departure end of the base runway. I told them thanks I'd be there in 15 minutes, a rough but not too inaccurate calculation based on a 65 mph Champ against a 15 knot head wind.

I see a lot of light aircraft (under 5000 pounds) moving around the ramp at the airport without any control input based on the wind. I see it quite frequently during flight reviews also. Proper control input is one of the easiest habits to develop and a lot less costly or embarrassing than a mishap. Next time you listen to the automated weather, note the wind direction and apply the appropriate control input. Your ride will thank you.

PROJECT UPDATE

by Aaron Christensen

EARNING NEW WINGS

Airline pilot discovers the homebuilt process one rivet at a time

By Adrian Miller, freelance writer (Thornton, CO)

When Aaron Christensen first soloed at the age of 16, he never imagined he would one day fly an airplane he built himself. Nearly 25 years later, this career airline pilot is getting ready to fly his first homebuilt bird. “It’s cost more money and took more time than expected,” says Christensen, “but it was still worth it.”

After logging over 10,000 hours in equipment ranging from a 7AC Aeronca Champ to a B-747-400, Christensen began looking into homebuilt aircraft in February, 2007. By April he was at the Vans Aircraft factory in Oregon for a demo flight. A leave of absence from the airline and a bachelor lifestyle afforded him the opportunity to order the tail kit for the Vans RV-7A and begin assembly in his own basement by May. Initially, the process went quickly. He cited, “The holes are pre-punched...it all matches up.”

In his design priorities, Christensen built the plane to be “a comfortable, long-range, high-speed, high-altitude, cross-country airplane” with a desired cruise speed of 200 mph. Specs include an Eagle Engines IO-360 w/dual P mags and fuel injection, and a Sam James cowl/plenum (Christensen attended Eagle Engines builder assist school in September, 2010 in Redding, CA.) The prop is a Whirlwind 200RV constant-speed. Extended range fuel tanks in each wingtip add an extra 4.5 gallons per side to the main tank capacity of 21 gallons per side. Christensen plans to carry a portable Aerox oxygen system he purchased at Oshkosh this past summer.

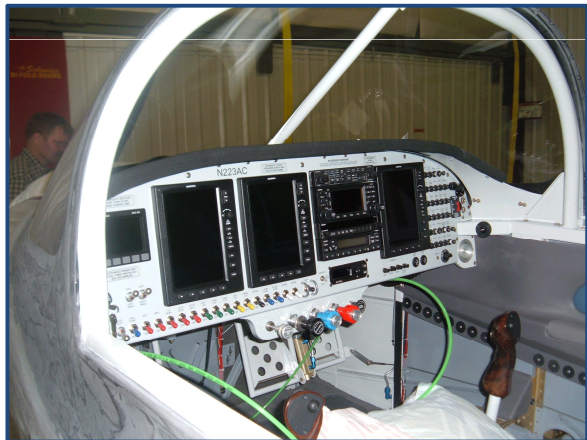
Given his airline flight experience, Christensen would not have been content without a few extra bells and whistles. His most expensive wish list came from a desire for a symmetrical cockpit so it would “feel like an airliner.” Currently flying an A320 at work, Christensen says of light aircraft: “I hate it when they build a plane and the controls and indicators are so far on the left, the person on the right can’t operate the plane”. He spared no expense – equipping the 2-seater RV-7A with a Garmin 430W and 2-axis autopilot integrated with triple-screen Garmin G3X (panel designed and built by Stein Air in MSP).

Christensen, a humble self-critic, says that he “arrogantly” thought he might complete the project in one year. But as most homebuilders have discovered, “once you get the structure completed, you’re only half done with the project. You still have to put in the engine, avionics, wiring...that takes a long time.”

In November, 2011, hiring a tow truck company with a flatbed, Christensen brought the completed fuselage to a local airport hangar and, with his Dad's trailer, the wings – one at a time. Father and son – who had worked together on much of the project – completed final assembly in just one week. Christensen fired up the engine and taxied for brake testing and fuel tank calibration. What remains is finish-up and paperwork.

Christensen cautiously views the test flight process as a continuation of the building process. "I haven't decided yet who should fly it first..." he ponders, "if I'm the first one to fly it, then I'm flying an airplane that's never been flown before, and neither have I flown that kind of airplane ...on the other hand, a test pilot who is experienced in this type of plane may be safer. You've got two risk factors: you've got the pilot, and you've got the airplane." He surmises he may feel more confident after his transition training this winter.

With no prior experience with homebuilts or A&P background, Christensen "absolutely" recommends the Vans homebuilt kit. "From Day One, the process was enjoyable, intuitive, not without its challenges and redo's of certain parts, but overall it's been a very do-able and satisfying project."



some survey comments:

- agree with tours of local aviation interests Ex: RAPCON was great.
- fly-ins I've missed them. A great "something to do" activity.
- at meetings, ask people where they've flown to in the past couple months and to tell about it this is interesting and gives one ideas about doing the same or similar. (*Ed. Note: Out our Backdoor?*)
- a frequent speaker would be educational, interesting, and make the meeting more concrete.