



Experimental Aircraft Association

Chapter 135

News



Number Nine

September 2007

Next Chapter Meeting

will be held

Saturday - September 8, 2007

Program will be

Corey Butcher will be flying down his Voisin 35 and will do a presentation on the process of designing (reverse engineering?) and building an aircraft from scratch.

How is that for the ultimate EAA accomplishment?

6:00 p.m.

Potluck Picnic 5:00 p.m.

tableware, condiments & pop provided, grill available in Marc & Dave's Hanger (Exec 1)

Presidents Position

by Dave Kalwishky

It's hard to believe it's already September and it's time to start thinking about elections for new board members. During the September meeting we will be electing new board members for some of the spots that will be open for the 2008 – 2009 years. If you want to nominate someone they need to be present at the September meeting to accept the nomination or they can accept via writing and submit it to the board at the September meeting.

If you are interested in a board position please let us know. The board meets on the fourth Monday of the month at 7pm at the Ankeny airport. We'd love to see some new people on the board, the board is responsible for setting the chapter direction and we deal with any issues. Remember, the chapter is for the membership and as

President - Continued on page 2

Upcoming Events:

- **September 8, 2007** - Young Eagles Knoxville Aviation Camp 9 a.m. - Noon
- **September 15, 2007** - Knoxville Flight Breakfast and fly in
- **September 15, 2007** - Young Eagles fly the rained out aviation campers from Ankeny, 9 a.m. to noon
- **September 15, 2007** - Nash field is having an evening get together
- **December 7, 2007** - Christmas Party 6:30 P.M. Chucks



Corey in his Voisin 35

President continued from page 1

board members we can only do what we feel you want, come be a part of the decision making process and make a difference in your chapter.

Elsewhere in the newsletter there is an article that was in the Seattle Times newspaper, it's about a vet and his final flight. I thought it was interesting enough to share with you.

Dying vet planned a final mission

Lt. Col. Rob Lutz loved only his wife more than flying

By CAROL SMITH P-I REPORTER
Seattle Times newspaper

Retired Air Force Lt. Col. Rob Lutz, a former Air Commando pilot, had less than 72 hours to live. A failing heart and kidneys left Lutz, 55, too sick to withstand an operation for a heart pump, let alone a heart transplant.

After nine weeks in intensive care at the University of Washington Medical Center, he was told by doctors that there was nothing left to do.

No, Lutz said. There was something.

A free-fall paratrooper whose steady nerves and fierce intelligence guided him through years of clandestine missions with Special Forces in the military, Lutz had one last special op in mind. That it was nearly impossible didn't faze him. And so he set about

executing a plan from his hospital bed.

At 10 a.m. May 17, he told his doctors that they could take out the balloon pump that eased oxygen into his weakened heart but kept him flat on his back.

Then he told them to remove the dialysis catheter in his groin that was unable to clear the nearly 50 pounds of fluid weighing on his heart.

Next he told them to discontinue all but one medication -- a move that he understood would hasten the inevitable.

Then he asked for a plane.

There was nothing in life -- except his wife -- that Lutz loved more than flying.

Born in St. Louis, Lutz joined the Young Marines in high school and later graduated from the Air Force Academy in Colorado.

He flew a Combat Talon Blackbird as part of an Air Commando group known as "The Quiet Professionals" -- named for members' habit of slipping into the night sky and staying tight-lipped about missions.

Final mission - Continued on page 8



Rob Lutz, center, with his wife, Ida Lutz, and pilot Ed Hrivnak, prepare for Lutz's final flight. Hrivnak flew his longtime friend over the Green River toward Mount Rainier.

Scales Rental Info

Scales going in this week for certification, probably be available again after the weekend.

All scale rentals require check for \$200.deposit (Will be returned, uncashed, upon timely scale return).

Three day rentals. May be extended for thee additional days at no charge, if there are no other conflicting requests for their use, with notification by phone. Otherwise late fee of \$100 per day applies.

All checks to be made out to "J.M. Abrahams / scale rental".

Chapter 135 members (must be member 3 months prior to rental date.)..\$25.00 for 3 days

National EAA member but not Chapter 135 member\$75.00 for 3 days

A&P or FBO rate\$125.00 for 3 days

Copy of rental agreement available by fax or email by calling Mike Abrahams at 515-287-3840 or emal to ppcmike@hotmail.com

Scales are kept at Phil Patterson, Corp. / 4214 Fleur Dr., Suite 11 / Des Moines, IA 50321 (two blocks north of N.E. corner of the Des Moines Int'l Airport.

Young Eagle Event

By Alan Core

Knoxville is looking at having an aviation camp on Sept 8th with 20 kids, I'll be at Brodhead that weekend. Anyone interested in coordinating the YE end of things? We also will need pilots to fly the kids. They will have a setup similar to Ankeny with 4 classes rotating on the hour. Let me know if this fits into your schedule.

also;

Ankeny Sept 15th make up flights

Sept 15th is aviation day in central Iowa. Knoxville is having a flight breakfast and Ercoupe get together. Nash field is having a picnic that afternoon/evening. Something aviation for everyone!



Aviation camp

By Brant Hollensbe

Knoxville Airport will be having a Aviation camp on Sat, 8 Sept. There is 21-24 kids signed up. Dan is still needing several teachers and YE pilots. Dan is going to be contacting Alan Core to see if Chapter 135 can help with the YE rides.

Knoxville is also having a YE event on Aug 25 that Chapter 135 and other local pilots are doing.

On Sept 15, Knoxville is having a Flight Breakfast Event, there will be airplane and helicopter rides, A sales rep from Robinson will be there with a display helicopter. There will be a demonstration/show of RC jet powered model airplanes that can reach speeds of 200mph! Dan is trying to get the military to put some of their aircraft/choppers on display. And some sprint cars will be there too. Dan can always use some additional help here too.

It is going to be a very active 3 weeks at Knoxville! What a Great Way to promote aviations, Kudos to Dan and his crew down there!!!!!!

Contact Dan if you can help out: dan@westbergsinc.com

CRITICAL EAA MEMBER DISPATCH:



The Time is Now! Tell Congress - NO User Fees!



URGENT ACTION NEEDED A NOTIFICATION TO EAA MEMBERS



EAA President Tom Poberezny

The future of general aviation in the United States is at stake. Your voice and the voices of your friends and neighbors are needed now to fight the immediate threat of user fees.

"The first user fee is just the first step. This is serious business, and it's extremely important that members get involved and stay involved."
- Tom Poberezny, EAA President

Your action is required now to protect general aviation. Speak out against user fees. Contact your senators and representatives today. Voice support for House bill H.R. 2881, which would provide funding without user fees, and object to the user fees proposed in Senate bill S. 1300.

Your comments must be received by Congress before it returns to work September 7 after its summer holiday.

The time is NOW!

When your representatives and senators return after Labor Day, the debate on user fees for general aviation will have reached its climax, and lawmakers will develop a final bill to send to President Bush for signature within weeks, or even days.

Aviation's friends in Washington, D.C. urge you to act

At EAA AirVenture Oshkosh 2007, eight members of Congress urged EAA members and other aviation enthusiasts to write their elected representatives and the administration.

"I urge general aviation pilots to stay in touch (with their elected leaders) and to be clear about the problems with general aviation user fees."
- Representative Sam Graves, R-Missouri

"We need to keep Congress from opening the door to a whole new bureaucracy that could hit general aviation hard in the years to come."
- Senator James Inhofe, R-Oklahoma



Act NOW!

Write your senators and representatives. EAA has provided [sample letters](#) to assist you. Don't delay - act to protect your participation in general aviation.

Airlines are ramping up pressure

The airlines are pulling out all the stops, reaching literally millions of their customers via extensive e-mail lists, in-flight publications, and closed-circuit TV advertisements in terminals. The message from their lobbying group, the Air Transport Association (ATA), is that general aviation is to blame for the airlines' financial and operational woes, that general aviation should pay considerably more for use of the nation's airspace and federal services, and that the airlines should pay less.

To confront airline rhetoric and lobbying, every participant in general aviation must rally against user fees.

For sample letters to send to Congress, visit www.EAA.org/govt/sample_letters.html

To follow EAA's proactive advocacy on your behalf, visit www.EAA.org/userfees.

Questions? e-mail govt@EAA.org

Don't delay ... Act TODAY!

Being egg-shaped means being rare

By Randy Dufault

From Air Venture Oshkosh website

If Dave Powell has one complaint about flying his Anderson-Greenwood AG-14, it is that it doesn't have much of a front reference point to line up his landings with.

"When you are landing you have no visual clue of which way you ought to be pointed because you don't see any nose in front," Powell said. "You see a little bit of the pitot tube and that's about it."

The AG-14 is a twin tail boom, pusher configuration single with the cabin—Powell calls it a pod, not a fuselage—placed well in front of the wing. The result is almost unrestricted visibility, up, down, and all around. And with the engine in the back, the cabin is exceptionally quiet.

Powell's 1953 plane is the fifth and last AG-14 produced. Four of them still exist, though only one other is in flying condition.

His interest in finding and restoring the plane came from a very personal connection. Powell's father, Walter, worked for Anderson-Greenwood, though not directly on the AG-14 program. But through that connection Dave Powell met both principals for whom the company and the airplane are named, Ben Anderson and Marvin Greenwood.

"My brother and I started looking around to see what happened to [the AG-14s]," Powell said. "We found this one in a warehouse in Texas in parts and pieces. Actually, it was scattered among many different locations.

"When I first bought this I asked the person selling it how I could find parts. He said, parts?—no problem. In the mid 60s, they tried to build new ones again, not Anderson-Greenwood, but a person out in California. They had geared up to make 25. When I tried to track the guy down and it turned out he was in his 90s and in a nursing home, his son was dead and supposedly his grandson had the parts somewhere in Oregon. I tracked [the grandson] down and he had sold the parts to somebody else,

who sold them to somebody else and to somebody else."

Powell finally found the vagabond cache and came to an agreement to buy the entire lot.

"I flew out [to Oregon] with my 9-year old-son," Powell said. "I rented the largest Ryder truck I could, spent 12 hours loading it up and drove back. That's been very helpful [with the project] and I've been able to help a couple of the other owners as well."

Anderson, Greenwood, and Lomis Slaughter, all engineers for Boeing during WWII, took on the project as an exercise in creating the perfect light plane. In their eyes, "perfect" included making the plane as much like an automobile as possible, an attempt to ease the transition from driver to pilot. So unusual features like nosewheel steering connected to the control yoke, a bench seat, a single brake pedal and a starter pedal are part of the design.

Power comes from a 90-hp Continental engine mounted on the back of the pod. The engine, with its ground-adjustable prop, gets the little plane off the ground in about 700 feet. Typical cruise is 115 mph, so Powell's trip from his home in Rogers, Arkansas, to EAA AirVenture Oshkosh 2007, took about seven hours.

Powell's restoration includes all of the original instruments. The only addition is a cylinder head temperature gauge he added after hearing that the rear-mounted engine installations were known to have some engine cooling problems. To date he has not seen any unusual temperatures.



Dave Powell with his Anderson-Greenwood AG-14. Photo by Phil Weston

One difference from the original Powell did opt for is the paint. AG-14s left the factory in mostly polished aluminum with a painted nose. He chose to paint the entire plane and trim it in a custom design created specially for him by Craig Barnett of Scheme Designers.

One special experience for Powell was a visit he made to Anderson shortly before the restoration was complete.

"I brought some pictures of the plane as it was coming together," Powell said. "He's pretty much confined to a wheel chair now and it was exciting to be able to share this with him. He actually had a model of the plane sitting on his credenza."

Ultimately, Anderson-Greenwood found success as a defense contractor and in manufacturing pressure relief valves for the oil industry. Financing for manufacturing airplanes was difficult to come by and AG-14 production ceased. They did re-enter the airplane business in the 1970s with the development of a model known as the Aries T250. Although it was a good performer, only two of examples of the plane were built.

Even though Powell is a frequent visitor to EAA AirVenture, this was his first time here with a show airplane.

"I normally come up for the weekend and camp in the North 40," he said. "This time I kind of felt like an orphan. I couldn't bring another person with all the camping gear, but as soon as I touched down I felt like I was adopted by the Vintage folks. I've been volunteering with them all week and I've just had a ball."

Big monoplane completes collection

Story and photo by Randy Dufault

From Air Venture Oshkosh website

John Seibold, founder of the modern Scenic Airlines—a Grand Canyon air tour operator—needed one last airplane to complete his collection of planes flown by the very first air tour operator to give the vacationing public views of the great canyon from the air. The missing



airplane was the very first Grand Canyon airplane, the Stinson SM-1 Detroit.

Seibold had the hull of the airplane in storage for some time and finally decided, about four years ago, to get its restoration underway. Chuck Wentworth of Antique Aero Inc. got the job of bringing the big monoplane back to its 1927 glory.

“From day one we knew where we were going [with the restoration],” Wentworth said. “The intent all along was to get it back to being the very first Grand Canyon tour aircraft.”

Parker Van Zandt, founder of Scenic Airways Inc., needed a rugged airplane with big windows and plenty of seats. The Stinson Detroit was particularly suited to the task as it had six seats, two doors, a durable birch wood interior and the reliable Wright J-5 engine. As for the windows, the standard Detroit had great views, but Van Zandt went even further ordering his plane with windowsills three inches lower than the stock openings.

To Wentworth, the biggest challenge of the project was all the research required to bring the plane back to its original configuration. Over the course of the project, a large number of photographs were located to help solidify understanding of details like

The SM-1 (Stinson Monoplane-1) Detroit was Stinson’s first effort at building an airplane with one wing. With no lower wing, six seats and large windows, Scenic Airways found riding in it was a great way to see the Grand Canyon.

the exhaust system, the oversized windows, and the unique round window below the instrument panel.

About 30 of the six-seat Detroiters were made. About half of those 30 were equipped with the main landing gear system this plane sports, before, according to Wentworth, Stinson “fixed” the gear.

“This is, I think, one of the only airplanes where the landing gear pulls on each other, so it can go from side to side,” Wentworth said. “It wasn’t long and they went to an outrigger gear with oleo struts. I think they went with this configuration first because it was lighter.”

The plane only served the Canyon for a couple of years before it was replaced with a newer design. Records Wentworth uncovered during the project show the plane worked very hard during its short tenure. Major maintenance like recovering and control cable replacement, repairs that modern airplanes require only after decades of service, were occurring every two years or less.

During the rebuild, as little as possible was changed from the original design,

though according to Wentworth they just didn’t have to.

“It’s a big, tough airplane,” Wentworth said. “They didn’t skip on the tubing diameter or the thickness. It hurt them on weight—this airplane has a 2,400-pound empty weight—but there is an awful lot of big tubing in here.”

“That just was the era. [Lighter tubing] will work, but let’s play it safe,” he added.

Necessary changes, however, included replacing the J-5 with a similar looking Lycoming radial, and covering the airframe with modern fabric. While Wentworth believed the J-5 is certainly a reliable choice, the rarity of the engine and matching propellers really precluded its use in the project.

The big plane will join a Gullwing Stinson, a Curtiss Robin, a Travel Air, and a Ford Tri-Motor in Seibold’s aircraft collection at the Valle Airport near the Grand Canyon in Williams, Arizona. Its public debut will be at Valle’s Annual Antique Fly-in and Chili Cook-off on September 1, 2007.

Magneto misstep

From AOPA website



Knowingly taking off with a mechanical problem--regardless of the reason--is always a bad idea. On August 22, 2004, the pilot of a Cessna 172 was seriously injured, and his passengers were killed when they crashed shortly after takeoff from Decorah Municipal Airport in Decorah, Iowa.

Another Cessna pilot at the airport saw an "older Cessna 172" back-taxi on Runway 29. He then heard the pilot perform the runup and thought "it sounded like the pilot was cycling through a constant speed propeller" and that the "rpm sounds were not those of a 1700 rpm magneto and carburetor heat run-up check that a typical Cessna 172 should be expected to make." He said the rpm drop seemed very high in comparison to the allowable.

The pilot began his takeoff run, but (as seen by the witness) the Cessna did not accelerate normally. The engine sounded smooth; however, it did not appear to be developing full power. The pilot made no attempt to slow or stop the airplane. The aircraft was observed rotating twice and then lifting about three feet off the runway before coming back down, left wing high, and bouncing into the air at the end of the runway. The Cessna gained little altitude and then disappeared behind some large trees.

The wreckage was found five miles north of Decorah Municipal Airport.

Both magnetos were removed from the wreckage for inspection. The right magneto did not reveal any mechanical defects, producing sparks when rotated. The left magneto, however, did not. Also, the attachment screws for the contact points could be rotated with little effort, proving the magneto was malfunctioning. No record of maintenance on the magneto could be located.

The private pilot had 139.5 total hours, all of which were in Cessna 172s. He



The latest aeronautical creation to come from Van's Aircraft goes by the model name RV-12, a proof-of-concept Richard VanGrunsven designed to LSA standards and incorporating features not found on prior RVs. Photo by Dave Higdon

Van's RV-12 LSA on display

From Air Venture Oshkosh website

With all the excitement surrounding new light-sport aircraft (LSA) from major manufacturers here, almost lost in the commotion is an entry from one of the industry's most popular kit manufacturers, Van's Aircraft.

Last year at EAA AirVenture Oshkosh, Van's showed the partially built fuselage of their experimental-LSA (E-LSA) RV-12 model. This year, the aircraft is flying and is on display here in the North Aircraft Exhibit Area.

At this time, the RV-12 remains a "proof of concept" model. Van's is still conducting tests to complete their de-

sign. They hope to have the aircraft kit ready to sell late this year.

The RV-12 is a two place, side-by-side, tricycle-gear aircraft. A Rotax 912S 100-hp engine powers it; Van's projects a maximum speed of 120 knots.

Van's is planning to offer the kit as a complete package for the entire aircraft. They feel that offering, for example, the empennage as a starter package, would not make sense since it will be so easy to complete quickly that builders will want the rest right away.

Pricing hasn't been officially determined, but Van's staff says it could be in the \$40,000-45,000 range for the complete aircraft with engine and instruments.

had flown 5.6 hours in the last year and 2.3 hours in the last 30 days.

The NTSB determined the cause of this accident to be the pilot's intentional operation of the airplane with a defective magneto, his failure to abort the takeoff due to degraded aircraft performance, and his failure to obtain or maintain airspeed, which resulted in a stall/spin and subsequent impact with the ground.

A primary purpose of the preflight runup is to ensure that the magnetos are functioning properly. By ignoring

the abnormal rpm indications, this pilot endangered himself and his passengers. If you find a discrepancy during your preflight or runup, cancel the flight until maintenance personnel can investigate the problem.

To gain a better understanding of engine and propeller operation and maintenance, take the AOPA Air Safety Foundation's Engine and Propeller Online Course and read its companion Safety Advisors: Engine Operations and Propeller Safety.

CALENDAR OF EVENTS

from the Iowa Department of Transportation Office of Aviation web site

EVENT	DATE	DETAILS
September 2007		
Masonic Lodge Flight Breakfast	9/9	Carroll Municipal Airport 7:00 a.m. - noon Pilots and passenger eat FREE 712-792-4980 (Don Mensen)
Annual Algona Rotary Flight Breakfast	9/9	Algona Municipal Airport 7:00 a.m. - noon 515-295-7492 (Jim Kohlhaas) algonaaero@trvnet.net
EAA Chapter 327 Fly-In / Drive-In Breakfast	9/9	Dubuque Regional Airport 7:00 a.m. – Noon Dubuque Jet Center 815-747-2594 (John Einck) www.eaa327.org
Tommy Martin Memorial Fly-In Breakfast	9/9	South Sioux City, NE Martin Airfield (7K8) 7:00 a.m. – 8:00 a.m. Pilots in command eat FREE ralter@cableone.net
Fly-In Breakfast	9/15	Knoxville Municipal Airport 7:00 a.m. – 11:00 a.m. All fly-ins eat FREE 641-842-4423 (Dan Van Donselaar) dan@westbergsinc.com
Flight Breakfast	9/16	Chan Gurney Municipal Airport Yankton, SD 8:00 a.m. – 1:00 p.m. Pilots in command eat FREE 605-665-8448 (Steve Hamilton) skyhawk@iw.net
The Harvest Boogie Skydiving Event	9/21-9/23	Dubuque Regional Airport Tandem jumps available 563-590-6779 (Tanya Graves) www.tri-stateskydivers.com

Continued on next page

EVENT	DATE	DETAILS
AOPA Safety Seminar	9/25	Cedar Rapids, Iowa Clarion Hotel & Convention Center 525 33rd Ave SW (Pompeii Room) 7:00 p.m. – 9:00 p.m. http://www.aopa.org/asf/seminars/seminar.cfm
<u>October 2007</u> Billy Robinson Fly-In Breakfast	10/6	Grinnell Regional Airport 7a.m. to 11 a.m. (Breakfast) 7a.m. to 4 p.m. (Open House) 641-239-8007 (Bill Owen)

Final mission - Continued from page 2

In 1985, he was picked to be the first squadron commander of an elite para-rescue operation for the Army Special Forces. But during a routine physical for that assignment, doctors discovered a cardiac valve problem and took his wings.

It about broke his heart, said his wife, Ida Lutz, who met him in 1978 when he was stationed in Bad Tölz, Germany. “When he got grounded, it put a big crush on him for a while.”

After that, he became a squadron maintenance officer, overseeing a crew of more than 600 that maintained the fleet at McChord Air Force Base. But he always missed being in the air, she said.

Later, after he retired in 1994 from the military, Lutz, who was also a skilled mountaineer, lent his expertise to Tacoma Mountain Rescue and the Puget Sound Urban Search and Rescue Task Force.

And he sublimated his love of flight into a hobby, carried over from childhood, of building model airplanes, which he did with obsessive attention to detail that aggravated his less-patient friends and earned him multiple awards in model-building competitions.

Deanna Mau, a cardiac critical care nurse, and his doctor, Ryland (Trey) Melford, knew some of this -- the

man liked, maybe even needed, to fly -- and they wanted to help.

But as his clinical care team, they had misgivings about issuing a day pass to a dying man. They doubted that he would survive a car ride, much less a climb in altitude. Hospital liability might be an issue. They worried for his family.

They also knew that Lutz was a calculating man who always asked careful questions and considered all his options. He pursued with them every possible path to survival.

And they knew that when he set his mind on something, they would rather not get in his way. So they started making calls.

Lutz himself got on the phone to a pilot friend. Mau overheard him say something like, “I can’t go Saturday. I’m dying today or tomorrow. I have to go today.”

Someone in the room chided him for being so demanding, which made everyone laugh.

He had a great sense of humor, Mau said. And he made things happen.

Ed Hrivnak was the pilot who got the call. A longtime friend from their days in search and rescue, he scurried to find a helicopter. Glacier Aviation in Olympia helped, producing a fueled-up R-22 two-seater that could be at Boeing Field in a matter of minutes.

Ida Lutz and Skip Davenport, his

original flight instructor who became a lifetime friend, helped load Lutz into the car. They took along a small oxygen tank and a supply of morphine.

Against the odds the doctors had given them, the ad-hoc flight crew made it to Boeing Field with Lutz still breathing.

“ ‘Just another adventure,’ “ Rob Lutz liked to say, his wife said.

And so just after 7 p.m., as the sun was going down, Rob Lutz’ heart lifted into the sky one last time.

“The air was calm, and there were light puffy clouds in the sky,” Hrivnak said. “The sky was lit and the mountains were lit. He just kept looking out the window.”

Hrivnak and Lutz flew into the foothills of the Cascades with Mount Rainier dead ahead. They flew low through the valley of the Green River. They talked about life and letting go.

He didn’t want to go, Hrivnak said. But he knew he had to.

When he landed, he just had a huge grin on his face.

Lutz died a few days later.

SERVICE

Robert Lutz will be buried at Tahoma National Cemetery at 2:45 p.m. Friday. In lieu of flowers, his family suggests remembrances to the American Heart Association.

Oops!





EAA Chapter 135

Marc Broer
6292 N.E. 14th Street
Des Moines, IA 50313
marc@countylineprinting.com

2007 Chapter 135 Officers and Board Members

Board Officers:

President:	Dave Kalwishky	515-266-4001	dave@kalwishky.com
Vice President:	Ralph Briggs	515-277-2961	rbriggs@dmreg.com
Secretary:	Donna Bocox	515-991-6610	chapter135@wildblue.net
Treasurer:	Donna Bocox	10746 NW 103rd Court, Granger, Iowa 50109	
Newsletter Editor:	Marc Broer	515-288-4581	marc@countylineprinting.com
Young Eagles Coordinator:	Alan Core	515-961-4524	indypurr@juno.com

Board Members:

Mike Abrahams	515-981-0381	debra809@mchsi.com
Mary Alice Hill	515-226-3339	mapilot@hotmail.com
Chanler Childs	515-965-5331	cchilds@cchilds.us
Roger Bocox	515-991-6616	rbocox@wildblue.net
John Nelson	515-276-7646	skydog@mchsi.com
Richard Milburn	515-834-2954	rhrdmilburn@aol.com
Matt Smith	515-418-1860	mattst18@mchsi.com
Fred Sangster	515-276-5027	fltmechb25@msn.com
Karen Sangster	515-276-5027	khawk22@msn.com

Area D.A.R (Designated Airworthiness Representative)

DanFolkers..... H (515)981-0502..... Cell (515)480-9490