

# WINTERFALL

EAA CHAPTER 25

MINNEAPOLIS / ST PAUL, MN

OCTOBER 2002

## Young Eagles Update

by Mike Dolan



Saturday, October 5th EAA Chapter 25 pilots flew eleven students from the Kingdom Builders Home School Co-op as part of our ongoing

Young Eagle Program. Pat Halligan (left), Dan Carroll (right), and Jon Cumpton had the honor of flying the young aviators. Mike Dolan, Tyler Sibley and Ron Oehler handled the ground duties. Several other Chapter 25 members also showed up to make sure we had



(Continued on page 4)

## The Gusty Restoration (the continued adventure)

by the Public Relations Group, Washburn H.S. Aircraft Restoration Class



There is a plane inside our school! A stripped down Gusty MK-1 residing in an old windowless classroom where we meet every morning for our unique first hour—Aircraft Restoration. Peter Denny is our energetic and well qualified teacher. He has built his own plane back in Australia. The Gusty is the last of its kind, created by Gus Limbach.

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# Cleared for the Approach

by Frank Hanish

# ON FINAL



Minneapolis/St. Paul

Visit our website at [eaa25.com](http://eaa25.com)

#### President

Frank Hanish 952-974-0561  
[frankhanish@cs.com](mailto:frankhanish@cs.com)

#### Vice President

Ed Hansen 952-892-7266  
[DnEHansen@aol.com](mailto:DnEHansen@aol.com)

#### Secretary

Greg Cardinal 612-721-6235  
[cardigi@gw.startribune.com](mailto:cardigi@gw.startribune.com)

#### Treasurer

Chris Bobka 952-432-7969  
[bobka@charter.net](mailto:bobka@charter.net)

#### Membership

Ron Oehler 952-894-2332  
[ron.oehler@worldnet.att.net](mailto:ron.oehler@worldnet.att.net)

#### Newsletter Editor

Pete Gavin 612-866-6676  
[petegavin@mn.rr.com](mailto:petegavin@mn.rr.com)

#### Young Eagle Coordinator

Mike Dolan 952-652-2436  
[iamtopgun@voyager.net](mailto:iamtopgun@voyager.net)

#### Technical Counselors

Earl Adams 651-423-2973  
Chris Bobka 952-432-7969  
Dick Burns 952-473-1887  
William Faulstich 612-722-6597  
Bill Witt 651-633-8849

This month we will draw the winner for our fundraising raffle. Somebody is going to be driving a brand new pickup. It may not be too late to buy that ticket. As you read this, remember that if you have not yet returned all ticket stubs, please do so immediately. The fundraising committee members have done a thorough job to date, and it is imperative that we make a complete accounting of tickets prior to this drawing.

In addition, we will be treated this month to a presentation given by Darrell Bolduc of Bolduc Aviation. Most of us flying either a factory and/or a homebuilt aircraft with a certified engine have had at least some selective component parts, if not the complete engine, repaired by Bolduc Aviation. Darrell is a Chapter 25 newsletter sponsor, he speaks at many of the regional aviation venues, and graciously supports educational programs such as engine operations and maintenance.

Ample seating is now available at the chapter hangar. Its been reported by a collective group of volunteers that we now have over fifty stackable plastic chairs. This group did some timely shopping. We found a margin price just before the lawn and garden supplies were to be stored for the winter months.

This might be the chapter's last meeting for this year at the hangar. We are currently solidifying arrangements with Washburn High School to meet there in the aviation classrooms. It worked out pretty well last winter. This year the Gusty restoration is in full operation, and available for inspection. Peter Denny recently called stating that the fuselage has been stripped, inspected, and is completely repainted.

As mentioned last month, the annual chapter banquet is going to be Thursday evening, November 7<sup>th</sup>. Chairman Ron Oehler will be generating the brochures to include further details. Information should be available at this month's chapter gathering. We are excited to have Chuck Doyle help with the entertainment. Chuck asked that we construct a question and answer format. You can expect the final announcement and details via the U.S. mail.

It's been a couple of months, but I do expect to see you this Wednesday evening, Oct 16<sup>th</sup>.

—Frank



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# Biennial Flight Review

by Mike Dolan

So you need a biennial flight review, it has been almost two years. You're ready to take that review you say! You have just completed practicing for it by doing stalls, ground maneuvers, soft and short field landings and you are really sharp. Speed control on base and final are steady as a rock. You are really proficient! You find a CFI and go do the review. After the flight, your CFI says you need to work on your ground proficiency and that paying attention to few additional things will make you a safer pilot. Engine starting and taxiing are two things that are potentially dangerous if not done with the vigilance deserved them and are overlooked by many pilots.

Engine starting procedures are not only preparing the engine for starting, yelling "clear", and then immediately engaging the starter. Too few pilots allow enough time after yelling "clear" to scan the area well and allow any ground personnel to warn you of anything that may be in the propeller arc that could cause damage or be damaged. If someone was in the propeller arc, would they have time enough to react before you start engaging the starter?

Now that the engine is started, oil pressure is correct and the oil temperature has started to rise, the pilot is ready to get to the run-up area by taxiing the airplane. How fast should we taxi? After all, an airplane is designed to fly so the sooner the better. Taxi speed is dependent on several factors; the surface, parked aircraft, other aircraft taxiing, buildings, and other obstructions. A good "rule of thumb" is to taxi no faster than a fast walk. Under any circumstances the aircraft should be able to be stopped in a rather short distance by simply closing the throttle. Brakes fail, don't count on them to always work, especially in an emergency!

So remember, a biennial flight review starts before you start the airplane. The CFI can not, by regulation, fail you on a biennial flight review, but the CFI is not required to sign your logbook as having successfully completed the BFR. Use your checklist, you will then be starting out correctly!

# Taildragger Props

By Dan Carroll

*Tired of your tail draggin' at chapter meetings?  
Here's something to prop your spirits!*

At the last chapter meeting I asked for individual donations of \$5 so that we could purchase chairs. The response was terrific! A total of \$220 dollars was collected, most of which was during the night of the meeting. Thanks to all of the contributors listed below and to those whose name I didn't get, the chapter now has 50 new stackable chairs. The total cost was \$150. We will purchase more chairs with the remaining \$70 dollars to increase our seating capacity. A special thanks also goes to Chris Bobka for helping me purchase and transport the chairs to the chapter's hangar. Thanks everyone, for helping make this little project a success.

Contributors were: (my apologies if I missed someone)

Chris Bobka	Ed Hansen
Dick Burns	Ron Hoyt
Greg Cardinal	Lee Hurry
Dan Carroll	Dale Johnson
Jeff Coffey	Sig Larsen
Peter Denny	Gerald Mercier
Mike Dolan	Ron Ohler
Ed Fischer	Ty Sibley
Pete Gavin	Eric Strandjord
Bill Hackett	Mark Wilson

## SportAir Workshops Nov 2-3

Four 2-day SportAir workshops will be offered at MCTC Nov 2-3: Intro to Aircraft Building, Sheet Metal, Fabric Covering, and Composite Construction.

Call 1-800-967-5746 or register online at  
[www.sportair.com](http://www.sportair.com)

## This Month—Oct 16th Grill on at 6:00 pm

### Bring Food !!!!

We are down to the last half dozen brats and cans of soda from our summer picnic, so remember to bring your own beverage and meat to grill. We will also need buns and chips, cookies, etc., so bring a little something extra.

### Meeting at 7:00 pm

We will be holding elections in November, so NOW IS THE TIME to step forward and express your interest in the open officer positions of  
**PRESIDENT &  
VICE PRESIDENT**

### Raffle Drawing!

This is the night someone wins the 4x4 lease! Send your ticket sales to Ed early, so he doesn't have to count them Wed. night!

Chapter hangar 34A, India Ln, Air Lake

South on I-35 to Hwy 70, then East to Hamburg Ave (3rd stop sign.) Right turn and South to airport perimeter road. Left on airport perimeter road then right on India Lane. Please park in open grass between hangars. See you there!

# Young Eagles Update



*Ron Oehler prepares Young Eagle certificates as YE Coordinator Mike Dolan looks on with pilot Pat Halligan*

*(Continued from page 1)*

enough help. Each of the new Young Eagles was given a NASA bag which contained a poster of a Cessna 172 instrument panel, a package of aircraft cards and an educational booklet on the science of flight.

While Pat, Dan, and Jon flew young eagles, we had something of a Sonex happening at the Chapter hangar Saturday morning. We have three Chapter 25 members currently building Sonexes, and two of those are about to undergo their final FAA inspection. Through their national web site, they learned that a fellow Sonex builder, David Koelzer of Marion, Iowa was just finishing up his first forty flight hours and about to embark on his first cross-country. They convinced David to make our hangar at Airlake his destination, and David landed while five fellow Sonex builders waited.

Also, back in mid July, we had several Chapter 25 members fly up to Grantsburg, Wisconsin to help out with young eagles there. With all of the focus on Oshkosh, this is the first chance we have had to recognize this effort in our newsletter. Phil Schaffer organized Chapter 25 participation in this event, and participating pilots included Frank Hanish, Norm Tesmar, Dick Reinke, and Pete Gavin.

We are organizing our next Young Eagle event with several dozen Scouts in the Shakopee area, and we hope to schedule this event sometime in November or perhaps early December. We have flown around 245 now, and this could put us over 300 for 2002! See more pics from Grantsburg on the next page.



*Sonex Builders from left: Michael Carland, Del Magsan (New Richmond), Wayne Flurry, Jeff Coffey, David Koelzer, and John Koser, at Airlake in front of David's new Sonex*



*Jon Cumpton with Young Eagle*



*David Koelzer in his new Sonex, landing at Airlake on its first cross-country*



*Frank Hanish with a couple of happy eagles after a flight in his Debonair at Grantsburg*



*Norm Tesmar, Phil Schaffer, and Dick Reinke*

# The Gusty Restoration (the continued adventure)

Continued from page 1

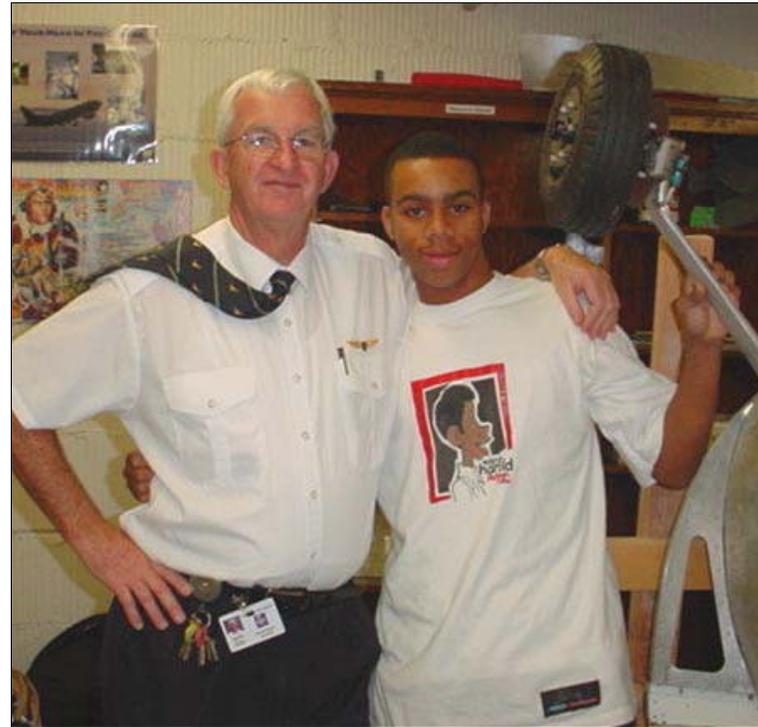
EAA Chapter 25 formed a partnership with the Washburn Aviation and Aerospace Small Learning Community to both restore the Gusty and to teach high school students aircraft building skills. The students have worked with a steady fervor.

So far, a workshop has been designed and setup in an old classroom and they have begun to strip the airplane to its barest elements. Chapter 25 members have been assigned as mentors to the students, with some mentors willing to take students flying. Some of us students are still waiting for a mentor. The class has been divided into five groups; the **Components Group**, the **Historical Research Group**, the **Logistics Group**, the **Photography Group**, and the **Public Relations Group**. Each group has four to five students with one student chosen as Group Leader.

The Gusty will be restored to flying condition (airframe only). However, the Gusty will never fly again because it is the only one; an old, broken engine will be installed as well as defective instruments. This is done to restore the Gusty to its original look while cutting unnecessary costs. A brand new engine would cost well over \$17,000 and instrument manufacturers will be asked to assist with unusable instruments by donating instruments to the project.

Money at this stage for the restoration is coming from lab fees and hopefully a corporate sponsor. Mr. Denny hopes to locate a corporate sponsor willing to donate the \$3,000 needed for tools and supplies. If you know someone, please ask them to contact Mr. Denny on 612-668-3512 He has been traveling about the Twin Cities speaking at engagements hoping to secure a sponsor for our project, but has been unable to attract a suitable sponsor so far. He would be delighted to speak to organizations and if you happen to know anyone who would be interested, please contact him.

The restoration of the Gusty is projected to be completed by June, 2003. Much more remains than just the restoration itself. A location for the restored Gusty has yet to be determined, money needs to be found and secured, and such important deci-



Aviation Instructor Peter Denny with student John Buckner

sions as the final color of the Gusty are still being researched. Aircraft Restoration and Construction has so far been an interesting and enlightening class. It is challenging and takes a lot of focus, but we as students are ready for the call of duty. Aircraft Restoration and the Gusty are still in their beginning stages, but Mr. Denny and company are making tremendous strides of progress.

Pop in and see us sometime!

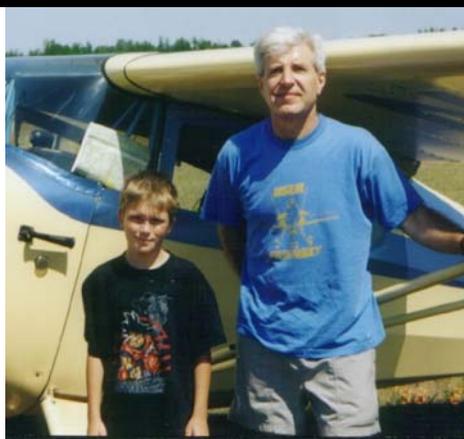
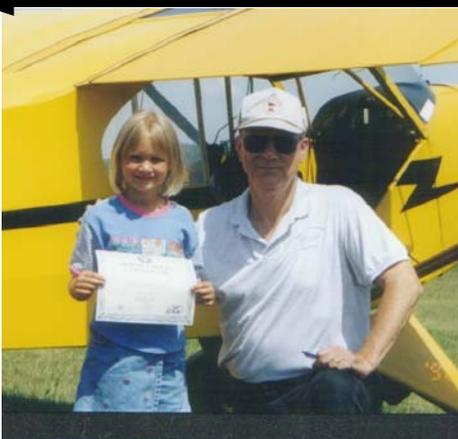
## Call for E-Mentors

I wish to extend to you an opportunity to get involved with 17 students in the restoration of the Gusty. If you would like to be a part of this exciting venture, maybe learn about fabric covering and aircraft restoration hints, here is your big chance. You will need access to e-mail in order to review your students homework online.

Please get back to me via email as soon as possible if you are interested in this program. Please use my work email which is... [peter.denny@mpls.k12.mn.us](mailto:peter.denny@mpls.k12.mn.us)

I can also be contacted at home on 763-529-5325

—Peter Denny



Dick Reinke & young eagle at Grantsburg

Pete Gavin & young eagle at Grantsburg

# Taming the Taildragger

Report on Budd Davisson's Oshkosh Forum

by Pete Gavin



*AirVenture forums give us an opportunity to hear aviation's top experts. This year, my favorite forum was Budd Davisson's Taming the Taildragger. I learned to fly in C172's, and rented various nosewheels from Lysdale Aircraft at South St. Paul. But I was always curious about the old Supercub out on the ramp. It was the only tailwheel for rent at Fleming Field, and it seemed that it was always fully booked. I had just earned my instrument rating, and after flying with all of that electronic gear, the old fashioned simplicity of the Cub was very appealing. My curiosity finally got the better of me, and I started taking lessons. The challenge was unbelievable. I had to learn to fly all over again. Yet I loved everything about flying that Supercub. I logged nearly 50 hours in it before a student ground-looped it, and I lost my access to a tailwheel airplane. As time passed, I missed flying the Supercub more and more.*

*So when I learned in the summer of 2001 that Noel Allard was selling his '46 Aeronca Chief, I was ready. However, it didn't take long for me to learn that a Chief is not a Supercub. I thought I knew how to fly a tailwheel, and that "starting all over again" feeling just didn't seem fair. But thanks to Noel's patience and the sturdy construction of the Chief, I soon found myself the proud pilot of my own taildragger.*

*By July of this year with 50 hours logged in the Chief, I was ready to fly to Oshkosh. But I still feel like I'm just learning to land that airplane, and I was delighted to see Budd's forum on the schedule. I was all ears.*

As I approached the forum tent, I could see that the crowd was overflowing as people opened up the canvas and brought over additional chairs. Budd says that we are seeing a resurging interest in tailwheel airplanes after a lull of several decades. He attributes this to homebuilders, who find they can build sturdier planes for less with tailwheels, and to a growing interest in vintage airplanes, especially those falling under the new sport category. Budd has been instructing in tailwheels exclusively for about 35 years, with a special focus on the Pitts Special.

Budd says the number one cause of tailwheel accidents is that pilots insist on making landings that should not be made. I thought, *Well, that may be fine for some people, but I can only do so many go-rounds on one tank of fuel.* But Budd made a very good point. Because we are nervous about making a successful landing, we develop a very strong urge to get that plane on the ground. But as Budd said, if you are just about to touch down, and the plane is not aligned with the runway, or the plane is drifting across the runway, you have a landing that should not be made.

Budd's next point was that most tailwheel designs behave well by themselves, and will generally do the right thing until the pilot tells them to do something different. If the plane is aligned with the runway and is not drifting to one side, it will keep going straight down the runway until something disturbs

its path. Budd feels that most pilots are too anxious to control the airplane. He particularly disagrees with instructors who teach tailwheel students to wiggle the rudder left and right as the plane touches down. Budd's preference is to leave the plane alone when it is well behaved, but be alert to make quick, small corrections when needed.

Budd talked about the special problems with landings encountered by pilots transitioning from nosewheel airplanes. Nosewheel designs, with their center of gravity forward of the mains, automatically correct many of the small errors pilots make. For example, if the airplane is not quite aligned with the runway but is moving in the right direction at touchdown, the weight forward of the mains will tend to pull the nose into alignment. Or even if the plane is drifting to one side, the weight forward of the nose will pull the nose toward alignment with that drift when the mains touch down. If the plane is descending too fast at touchdown, the nose drops, decreasing the angle of attack, which keeps the plane down on the runway. So nosewheel pilots are never sensitized to notice the precise attitude and motion of the airplane as it touches down, since a wide range of behavior produces acceptable landings.

In the tailwheel airplane, because the center of gravity is behind the mains, these errors produce opposite results in all cases. When misaligned, as the mains touch down, they lead the nose to one side while the weight rear of the mains pushes the tail in the opposite direction. When drifting sideways, as the mains touch down and check sideways motion at the front, the rear of the plane continues to move sideways, pushing the nose in the opposite direction. And when descending too fast, the touchdown forces the tail down, sharply increasing the angle of attack, resulting in a very impressive bounce.

In correcting for these tendencies, Budd reminded us of an important law of motion. Once an object is induced to move in a given direction, it will keep moving in that direction until a counter force occurs. So when we are not quite aligned with the runway, and we push a rudder pedal to start a turning motion, our job is only half done. We need to take the pressure off that rudder immediately when it begins to take effect, and be prepared to tap the other rudder to stop the motion we have induced. If we fail to do that, an instant later we will be pushing that rudder even harder, beginning a cycle of pilot induced oscillation.



# Think a Gallon of Gas is Expensive? from Chris Bobka

Makes one think and puts things in perspective:

Diet Snapple 16 oz \$1.29	-- \$10.32 per gallon
Lipton Ice Tea 16 oz \$1.19	-- \$9.52 per gallon
Gatorade 20 oz \$1.59	-- \$10.17 per gallon
Ocean Spray 16 oz \$1.25	-- \$10.00 per gallon
Brake Fluid 12 oz \$3.15	-- \$33.60 per gallon
Vick's Nyquil 6 oz \$8.35	-- \$178.13 per gallon
Pepto Bismol 4 oz \$3.85	-- \$123.20 per gallon
Whiteout 7 oz \$1.39	-- \$25.42 per gallon
Scope 1.5 oz \$0.99	-- \$84.48 per gallon

... and this is the REAL KICKER.....

Evian water 9 oz for \$1.49 -- \$21.19 per gallon.

**\$21.19 FOR WATER!**

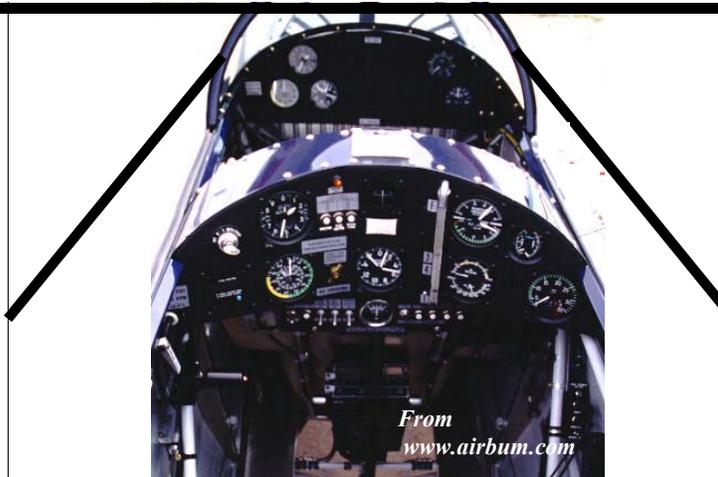
So, the next time you're at the pump, be glad your car doesn't run on water, Scope, Whiteout, or God forbid, PEPTO BISMOL or NYQUIL!!!!

Just a little humor to help ease the pain of your next trip or 'Excursion' to the gas pumps.



Therefore, much of the attention of the tailwheel pilot is devoted to catching unwanted motion early and correcting it before it becomes a problem. Budd passed on some great tips to help with this. Give these a try—I feel they have already improved my landings in the Chief. Now if my wife would just stop covering her eyes when we land ...

- Keep your eyes moving. Look far, look near, look left, look right, and repeat. Never leave your focus on one spot.
- Form a broad picture in your mind, and search for the details that forecast change.
- Constantly check that the picture you see is correct, ready to check any motion in the wrong direction.
- For descent rate and height over the runway, monitor the angle between your line of sight to the horizon and the runway. Compare that to the picture of the runway near you. Watch how things change as you descend.
- For alignment and sideways drift, monitor the runway edges where they touch the sides of your cockpit (see upper right). In a tandem design, the patches of runway on either side should be the same size and shape. In a side-by-side design, the patch on your side will be much larger, but the relative size should stay constant. Watch for changes.
- When you touch down, if you are not straight or if you are drifting you will feel it in your butt as a sideways motion. Train your butt to tell you when something is wrong.
- Stop any turning motion first, then worry about alignment.
- To straighten your alignment, use just a little rudder to get a little bit straighter. Don't start a turn you can't stop.
- Stay off the brakes. If you have heel brakes, ignore them while landing.
- Installing Cleveland brakes is a mistake. That's way more braking action than you want.
- On takeoff, let the tail rise naturally, then maintain a slight tail down attitude. Let the plane gain speed and fly itself off. Don't put the plane in the air before it's ready to fly.
- For crosswinds, don't crab it in, expecting to kick it



straight at the last moment. Use the wing-low straight-in method for the last 20% of the landing. Otherwise you won't have time to stabilize for touchdown.

- For gusty winds, use a wheel landing, adding half the gust spread to your approach speed.
- Keep the tail behind the nose.
- **Keep the tail behind the nose!**

Budd also commented on the flying characteristics of various tailwheel airplanes. You can see his write-ups on many more at his website, [www.airbum.com](http://www.airbum.com). It's a great website.

**Taylorcrafts** are the most sensitive to wind and aerodynamic affects. In a Taylorcraft, a crosswind is a **crosswind**. If you come in too hot, you will float all the way down the runway.

**Chiefs** are the closest to having the flying characteristics of the 1920's style airplanes, especially in adverse yaw. Aileron changes during takeoff or touchdown can prove to be interesting.

**Cubs** are well mannered, and do exactly what you tell them to do. Of course you have to learn what to tell them!

**Luscombes** are also very well mannered, but get a bad rep because they do exactly what you tell them **right away**, without the lagged response you expect from most of the others.



# Chapter Events and Fly-Ins

# Stuff for Sale/Wanted

## Oct 16 Chapter 25 Meeting, Grill on 6pm

Chapter hangar on India lane, LVN

**RAFFLE DRAWING!!!**

**BRING FOOD (see p3)**

Future meetings **Nov 20, Dec 19**

## Nov 7 Ch 25 Annual Awards Dinner!

**Chuck Doyle as Guest Speaker!**

Royal Cliff at Cliff Road & Cedar Ave

Invitations will be mailed in Oct w/details

## Oct 16-20 Tullahoma, TN "Beech Party"

Staggerwing & Twin Beech 18 Fly-in

931/455-1974

## Oct 19 Tea, SD (Y14) 7-11a

Ch 289 Fly-In Bkfst

## Oct 19-20 Ankeny, IA Airport 730a-11p

IA Aviation Heritage Museum Open

House USO Dance & Flight Breakfast

515/964-2629

## Oct 28 Anoka, MN (ANE)

Ch 237 Auction (612) 202- 1447

## Nov 16 Tea, SD (Y14) 7-11a

Ch 289 Fly-In Bkfst

## Dec 8 Cottage Grove WI (87Y)

Ch 93 Chili Feed Fly-in, Blackhawk Field

608/273-2586

## Jan 18 Marshfield, WI (MFI) 10a-3p

Ski-Plane/Wheel Plane Fly-in and Chili

Feed. Packed snow runways.

Contact Dave LeVoy, 715/687-4120

Wanted: 90 hp Continental with low time for my J3. Have a low time 65 hp (650 tt, 120 smoh) that I would be willing to trade. Also, looking for a metal climb prop for the same.

Also wanted: Clean T-Craft BC12 (for friend).

Jan Berghoff 952-361-9787 or email jberg66227@aol.com

For Sale: One Share in J-3 Cub Club, currently \$110 per quarter plus \$22 per hour wet. Hangared at Crystal, priority to Chapter 25 members. Dan Carroll 952-593-5785

Anyone building a PJ-260 Senior Aero Sport biplane?

Contact Mike Townsley <miket@southslope.net>

For Sale: 1936 Piper J-2 Project, three A40 Continental engines & parts, in hangar at LVN. Al Morphew 952/898-1640

Wanted: Kit project, new or used, partially built OK. Partnership OK. Looking for cruise range ~150. 952/435-5597

For Sale: Lycoming O-235C, 0 SMO, no accessories, all logs. \$4900. John Curry 952/983-0742

For Sale: one yellow tagged engine mount for a 1977 Decathlon. Mark Kolesar H 763-544-6766, W 612-371-5171.

## Oct 10-12 Prior Lake, MN

MN Aviatn Trades Assoc. Conv., Mystic

Lake, **Sherm Booen retirement bkfst.**

E-mail info@mataonline.org.

## Oct 10-13 Phoenix, AZ

Copperstate EAA Flyin,

www.copperstate.org 520/400-8887

## Oct 12 Princeton, MN (PNM)

Ch 1360 Young Eagle Rides

## Oct 12 Decatur IL

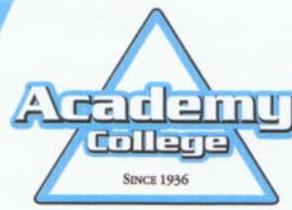
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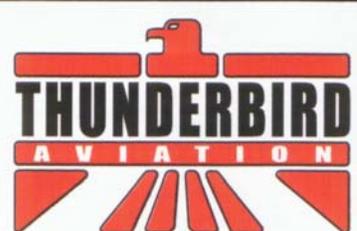


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