

# ONLINE

EAA CHAPTER 25

MINNEAPOLIS / ST PAUL, MN

MARCH 2004



*Ron with grandson Sean & the Mark III*

## **KOLB** **Mark III** **Classic**

**by Ron Hoyt**

My interest in flying goes back many years. I was an avid model maker. I first started flying with a friend, a fellow engineer from work who flew a Cessna 150. I began taking lessons at an FBO at Crystal and latter at Flying Cloud. It was Thunderbird aviation, but they were in a building now replaced

*(Continued on page 4)*

## **Near Miss** by Frank Hanish

*It was the first good weather in a long while, just a beautiful Saturday in February when everybody was out flying. I had breakfast at Marv Getten's in the morning, and got the Debonair out in the afternoon. Took off heading west, went by Winsted, then on to Appleton, MN !!! Then it seemed like a good idea to log a landing in South Dakota, so I progressed over the border to Milbank... Got back at 2:45 pm, and had a near miss 3 NW of FCM that I won't forget any time soon...*

*(Continued on page 6)*



*Flying Cloud Airport, approaching from the west*

**Cleared for Takeoff Pat Halligan**  
**March Meeting, February minutes**  
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# Cleared for Takeoff

by Pat Halligan

On February 18<sup>th</sup> three dozen chapter members met at AirOvations (one of our chapter sponsors) for our monthly meeting and ended up enjoying an evening that will long be remembered. Todd Owens, the owner, went above and beyond the call of duty to make sure we had a wonderful meeting. There was a table set up with food and drink – even dessert – that looked like a banquet setting. After our chapter meeting and Todd’s presentation they had a drawing and gave away jackets, shirts and caps. After the drawing we checked out their paint shop and fabric burn test area and looked at a few airplanes they were working on in their hangar.

We are so lucky to have companies like AirOvations as our sponsors. I hope our members will patronize Airovations every chance they get. Thank you Todd, Mary and the rest of your crew, that was a first class operation by a first class corporation.

With the Sport Pilot/Light Sport Aircraft (SP/LSA) program growing day by day and becoming a larger part of EAA, we decided it would be nice to have a few members designated as resident experts in this area. In the true spirit of volunteerism, Peter Denny and Dick Reinke stepped forward to fill these positions. Now when someone has a question about SP/LSA we can steer them towards Peter and Dick. If you would like to join Peter and Dick please let me know.

We tried to have a Young Eagle rally this morning, but it didn’t come together as we had hoped. Not to fear, there will be more this year. I was fortunate enough to give a ride to one of Washburn’s special needs student named Colin. He never said a single word about having a good time, but the smile on his face that went from ear to ear and the occasional thumbs up said everything. Colin may have thought he was the only one having the time of his life in that Cessna, but trust me there were two of us having a great time sharing the freedom of flight.

We had our annual chili feed over the lunch hour today and I made it to the hanger around 1PM and was able to get one of the last bowls of chili. It’s always fun to visit with our members and now with the hangar heated it was a perfect setting to do some hangar flying. Thanks to all involved, especially Mike Dolan who spent about one hour shoveling the heavy, wet snow off our cement apron so we could move a couple of the airplanes out of our hangar.

We continue to discuss a number of issues:

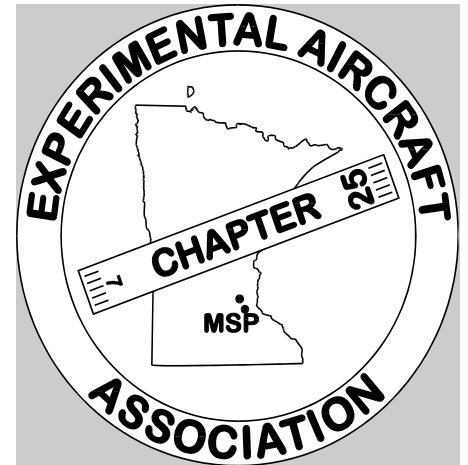
- Hosting an annual fly-in breakfast
- Offering a High School senior a \$500 scholarship for further aviation education.
- Finding a worthy individual to sponsor for the EAA summer camp.
- Finding a hanger/raffle restoration project.
- Getting Peter Denny’s Sonex project up and running.

I enjoy getting your e-mail’s, so please keep sending me your thoughts and ideas.

See you on St. Pat’s night at the hanger,  
Paddy O’ Hooligan



# ON FINAL



Minneapolis/St. Paul

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

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The Leader In Recreational Aviation

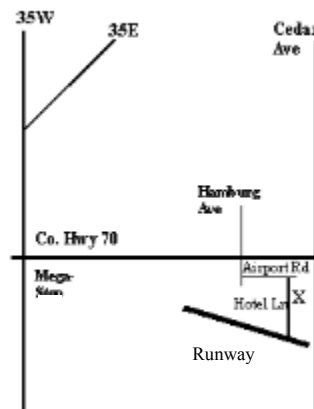
# ***This Month—Mar 17th—Chapter Hangar—6:00 pm***

**Grill on at 6:00, Meeting starts at 7:00**

**Bring something to grill. Coffee is free, soda 50 cents donation.**

**Speakers:** We've lined up two speakers for our March meeting at the hanger. One is Dane Smith who owns the new pilot shop at Flying Cloud Airport. The other fellow is Greg Reigel, an aviation lawyer. Greg will talk about things you need to know in order to protect yourself in ramp checks and FAA enforcements.

**Directions to Meeting:** South on I-35 to Hwy 70 (Megastop), then East to Hamburg Ave (3rd stop sign.) Right turn and South to airport perimeter road. Left on airport perimeter road then right on Hotel or India Lane. Use good judgment in choosing a parking place—depending on the temp, the ground may be soft, so don't drive/taxi on the grass until you are sure it will support the weight of your vehicle.



## ***Saturday, March 30, 1 pm: Young Eagle Event, see page 7***

### **EAA Chapter 25 Meeting Minutes**

**February 18, 2004**

**Presiding Officer: Pat Halligan**

**Location: AirOvations (Flying Cloud Airport)**

#### **Business meeting discussions**

New members and guests introduced themselves:

Percy Parr, Bill Brown, and Mike Sutton

Dane Smith of Aviation Pro Pilot Shop was introduced as a new sponsor.

Ron Oehler gave a brief treasurer's report for January:

Beginning Balance	\$7,414.07
Income	1,988.55
Expenses	1,723.42
Ending Balance	7,679.20

Jon Cumpton and John Koser gave a Young Eagles update. We will have a rally on March 30 at Airlake FBO. Kids from the Boys and Girls Club will be bused in. Get in touch with Jon or John if you can help. We are taking nominations for this year's Air Academy scholarship. Submit names to a chapter officer.

Recent work to the hanger is complete. Ceiling is installed and insulated. The heater is functional. Insulating the door is next when funds are available.

Peter Denny gave an update on the Washburn program and his attempts to obtain a Sonex kit. NW Airlines declined to support the program. Peter is looking urgently for any leads to businesses that might be a partial sponsor. Call him ASAP. Mike Dolan indicated he would spearhead an effort to raise funds from chapter members.

We still are encouraging members to sign up for email distribution of the newsletter. We save \$1 for each newsletter that doesn't go through the post office.

The chapter is looking for someone to spearhead and be the "expert" on the proposed Sport Pilot/Light Sport Airplane ruling. See a chapter officer if you would like to help with this role.

Don Sletten knows of a Kitfox Model 1 which is for sale. Contact Craig Nelson for additional information.

Plane & Pilot magazine had an article about a program called "Build a Plane" in which groups who are looking for a building or restoration project are matched with donors who can provide a project or kit. Pat submitted our chapter to be on the list that desires a project.

Our chapter plans on pursuing offering a \$500 scholarship to a Lakeville or Washburn student. It was suggested that we work with a Community Scholarship Foundation who will administer the scholarship.

The chapter plans on reserving a campsite at AirVenture this year that can be used as a gathering space in the evening for those who are in attendance during the show.

The chapter officers propose having a fundraising pancake breakfast the weekend of Sept. 11/12. We are looking for a volunteer to be a committee chairman and lead the effort. Please indicate your thoughts on pursuing this event to the officers.

#### **Program**

Todd Owens of AirOvations (a chapter sponsor) gave a short presentation and answered questions about their business. They specialize in restoring aircraft interiors and can do some exterior paint work. Tours of their facility were also conducted. Many thanks to Todd and the crew at AirOvations for being such great hosts.

Submitted by Craig Nelson  
March 4, 2004



# Kolb Mark III Classic *(Continued from page 1)*

by Elliot Aviation. I learned in Cessna 150's, and rented for about 5 years after I got my private certificate on 3/16/70. This got to be expensive, inconvenient and conflicting so I stopped flying for 20 or 25 years.

Then, I began thinking about building a plane of my own, and started comparing the different models at Oshkosh. I intended to do most of my flying in the local area with a few short tours, so had no need for a cross-country airplane. I intended to fly in and out of grass fields, so wanted a STOL design. And I really liked the visibility of the high wing pushers, where the pilot sits forward of just about everything else.

After a year of debating, I was at Oshkosh again to narrow down the selection between Rans and Kolb, I believe it was 95 or 96, when Kolb offered a free rib kit for anyone willing to put a down payment on a plane. I took the plunge, and started off with the wing and tail kit for a TwinStar Mark III Classic. Then came the cage, and finally the engine. Kolb had been testing a 912 with a new short-wing prototype called the Slingshot, and wanted to swap out the 912 for another engine, so put this one for sale on the Kolb List. It turns out I was the first to respond and was given the option to buy. The package included everything needed from the "firewall forward", engine, mounting hardware, propeller, control cables, etc. The engine already had forty hours on it.

I started the build in 1997 and finished my Kolb Mark III Classic in October of 2002 after 5 years of work. The original kit consisted primarily of a supply of tubes and a welded cage. The spars are 6061 aluminum tubes 6" in diameter with ribs made up of 5/16" aluminum tubes with pop rivets. The bow ends and struts are also aluminum tubes, as are the leading and trailing edges. The wings have almost zero dihedral, and the Mark III is a tail-wheel only design.

Many things are left up to the builder with this design, which leaves lots of room for inventiveness but also results in a lot of trial and error. The net effect was to add about three years to the fabrication when the kit was built in two. The kit's original tail-wheel did not break away to swivel for tight turns, so I had to use the differential brakes which put a lot of side stress on the tail-wheel. After about 30 hours of flight testing the plastic wheel collapsed, so I have now gone to a new type that breaks away to full swivel for sharp turns.

The basic kit has no electrical system. The electrical system and avionics are left up to the builder's desires. The 912 engine provided electrical power and that was enough for me to develop an electrical system that did not exceed the power available. I have a full VFR-night capability. In my case, going with the Rotax 912 placed an additional 50 lbs aft of



*New tailwheel*



the wings, so it made sense to position the battery in the nose, and to cluster conventional instruments into a formal panel rather than going with more of an ultralight approach. My electrical and avionics choices added 20 lbs to the total weight.

With the 912, I also decided to design 8-gallon wing tanks to replace the original pair of 5 gallon jugs in the baggage area. This gives me more endurance along with a more forward center of gravity. With 1000 lb gross and 650 empty weight, I have 350 lbs of useful load. After doing the weight and balance, I placarded the cabin for minimum weight of 190, about right for myself and some extra gear.

In the UK this is a certified aircraft if they add a pan under the seats. They had some hard landings where the people injured their backs. I used this excuse to make custom seats that are much more comfortable than the factory provided slings.

With the STOL design and the 912 Rotax, I am getting 1000 to 1200 fpm climb at 50-55 mph, close to best angle of climb. Stall occurs at around 45 mph with power off, but I find I can climb out at 45 mph with no feeling of being near the stall. It is spooky going up with that much pitch. The design is a little tail heavy with the 912, but because the engine is positioned high in this design, it tends to pull the nose down and counteract the weight aft of the wings. The best glide is somewhere around 50 to 55 mph with about 600 fpm descent.

This design pulls to the left in normal flight, requiring a fair amount of right rudder.



der. So most builders put a hefty trim tab on the rudder. Mine measures about 20" by 3", with 28 degrees of deflection. Starting over, I would consider canting the engine a bit to avoid the need for this. I still might do it. Otherwise, the rudder works fine and has full authority.

The elevator trim is interesting. Instead of a trim tab, which once set would hold the elevator in a specific position, the trim control simply changes the tension on a spring, which pulls the elevator up. So the resulting position of the elevator is really dependent on airspeed vs. the strength of the spring. It works, but I prefer the more conventional design of a trim tab.

I've had some interesting learning experiences in the first 40 hours. I had someone with experience in the Mark III perform the first flight. The experimental flight zone for the Mark III has been the same as for others based at Airlake. Draw 3-mile circles around Airlake, Mankato, Dodge City, and Zumbro, then connect the circles where the outside tangents coincide. I got some dual in a similar model before taking it up myself. I had a hard landing on one of my early flights, and had to make repairs to the right main gear.

I have also experienced one engine out after about 30 hours of flying. I was up at 3500' one day when the engine instrument alarm indicated loss of fuel pressure. Turning on the backup made no difference. Shortly the engine quit. I brought it down over a tree line into a picked cornfield. The landing over the stubble was a little bumpy, but very nice. It turns out that I had left the gas cap off the right tank, and although there was plenty of fuel left in the tank, the suction from the air flowing over the tank in the wing prevented fuel from draining into the gascolator. I cleared the air from the gascolator, capped the tank, and flew it out of the field. After this experience, I decided to install a separate vent on the gascolator itself, so that even if an air bubble were to develop, it would flow back up into the tank. I have not seen air in the gascolator since.

As I have flown off the required hours, I have discovered a number of additional changes I would like to make someday. The cabin cage is too small and is designed very narrow in the front with the seats canted inward, so that when you are flying from the left seat you are turned slightly to the right rather than facing straight ahead, parallel to the flight path. I find this canted orientation a little uncomfortable because it alters perceptions in flight. This design also leaves too little room for the feet and rudder pedals, and also leaves the instrument panel a little cramped. I would like to split the cabin cage and add about 6" to the front width. This would result in more of an egg shaped cabin, which would be not only more comfortable but would be better faired for efficiency than the more triangular shape it has now.

At the same time I would make some changes to the doors. As you can see in the cover picture, the top of each door is located outboard and down from the center. This results in a lower head clearance and makes it difficult to get in and out

## Save Barnstorming Flights!

**Deadline for Comments on NPRM FAA-1998-4521 extended to April 19, 2004**

**Part 135 rules to be applied to sightseeing flights!**

**Still haven't sent in your comments objecting to the plan to place sightseeing flights under part 135 rules? Your comments can make a difference! Send them to:**

Document Management System  
U.S. Department of Transportation  
Room Plaza 401  
400 Seventh Street, SW  
Washington, DC  
20590-0001



of the plane for someone of normal height. I would like to run an aluminum tube along the top-center of the cage, make that the top of each door, and design new gull-wing style doors. This would make it a lot easier to get in and out of the cabin.

I would also relocate the power panel away from the top of the windshield up into the wing and provide more headroom. I originally attached the panel below the duct to the radiator. As you can see in the picture below, I would need to fit the power panel into the area near the left tank fuel gauge. I would also need to redesign the air intake for the radiator.

I have 42 hours on the Mark III, and it is now down for annual. In general the plane flies well and is easily controlled. Now that I have the test time flown off, I can't wait to complete the annual and get back in the air. I've got three grandkids who are waiting for their first flight, and I am really looking forward to all of the local fly-ins this summer.





# Near Miss *(Continued from page 1)*

I had reported "13 miles NW, Mound inbound w/Mike" and was given the customary report 3 NW for right downwind 28R. It wasn't until about halfway inbound that I first heard tower ask the other aircraft (after just departing 28R westbound to re-cycle their xpndr.) Then a second call to re-cycle because the departing aircraft was not repeating or acknowledging any transmissions.

Next -- I was 3.3 NW, and controller getting upset bluntly asked the departing aircraft (who was supposed to be westbound) for their present location. At this time that pilot replied that he was 3 NW... I started to scan the projected area as I was now still descending to pattern altitude but was still at 2200 MSL. I instantly spotted the Cessna Centurion climbing directly toward me. I keyed the mike, and quickly broadcast "turn right, turn right" as I banked to my right. The Cessna passed to my left going the opposite direction, and it did not bank right until it was almost abreast (roughly at my 10 o'clock position.) I assume perhaps that this was when he first saw me? The separation was believed to be 10 feet vertical, and less than 100 feet horizontal.

Contributing factors; a busy airport environment, departing aircraft was experiencing an inoperative transponder, this pilot seriously failed to communicate and/or reply to the controller's requests, and was not where he declared he was going. Keep in mind, this is a controlled airspace. Westbound IS meant to be westbound within +/- 10 degrees, you mustn't fly 45 degrees from a westerly heading (i.e., northwest bound) without seeking permission to make such a right turn.

I had immediately reported clear of the traffic. Confirmed my evasive action was to avoid the said Cessna Centurion who was now north - northwest bound. Even after this near miss, the Cessna continued outbound once again without replying to the tower!

The tower gave me instruction to "enter right downwind, and cleared to land 28R." Upon clearing the runway, the tower apologized for this mishap. Though it clearly was not the controller's fault. I thanked them for the presence of mind to ask for the other aircraft's present location, and further that once out of four requests being issued that the other pilot at least replied to giving its present position at that time.

When this airport is busy (and it's been much busier at times) I wish that the tower would vector all traffic much the same as experienced in TRSAs. It was basically CAVU in bright daylight. I had my strobes on, while neither aircraft had the landing lights shining. On my Debonair, this would not have helped because the landing gear was still retracted. Something that perhaps an STC could improve upon... My summation is that the Centurion pilot repeatedly made bad judgments by both not communicating with the tower, and not flying the declared departure path. If he had turned crosswind in the process of returning to the airport for a transponder check, then he should have stayed in the pattern. I remember my primary instructor's instructions in all chaotic situations...you must fly the airplane, and communicate.



## *In a Hurricane over the Channel*

Just a little further gal,  
the black water gives me fright.  
We're pretty low-  
the waves 'r' high,  
no rescue boats in sight.

Yer steadfast heart  
is some offbeat -  
yer missin' regular.  
There's gas aboard,  
but we've been hit and  
both hurt bad, for sure.

I know we'll be okay -  
if you get me to the green.  
I'll land you safe and  
get you patched -  
you'll be good to go agin.

You've been my home, my friend, my love.  
my world, my armor too,  
We've shared the joy, and now the pain  
the lot that we've been through.

I'm not sure I'll be there, tho,  
when they roll you out once more.  
My seein's blurred,  
I'm tastin' blood,  
I'm dizzy, cold and sore.

I'm goin' to sleep now gal,  
stay with me while I rest.  
Yer motor's din  
is fadin' fast.  
I'll see you in the West.

**Noel Allard**

***Please, please  
bring your old  
aviation calendars  
to the March meeting  
for use in Young  
Eagle events!***



# Young Eagle News

by Jon Cumpton and John Koser

The snowstorm on March 5<sup>th</sup> seemed to dampen our efforts on the 6<sup>th</sup>. Only a few kids came out, but they had a quality time. Just look at the smiles in the photo! A couple of kids got to fly left seat in Pat Halligan's 172!



We have received Young Eagle credit letters for all pilots who flew at least 10 Young Eagles last year. We use these credits to "buy" tuition for a deserving Young Eagle at one of the summer Air Academies at Oshkosh. NOW IS THE TIME TO IDENTIFY THE YOUNG PERSON WE WILL SPONSOR!!!! Please give us your suggestions by the time of the next meeting. We need help here!

Also, a reminder to all Young Eagle pilots that certain costs associated with Young Eagle flights are tax deductible. You can read these guidelines on the Web at

[www.eaa.org/youngeagles.yefaq.html](http://www.eaa.org/youngeagles.yefaq.html).

**Our next event is with the Boys and Girls Club on March 30<sup>th</sup> at 1 pm, Airlake FBO. Ground crew and pilots needed! If you can help out, please contact:**

**Jon Cumpton 715-760-0203 [jcbroke40@aol.com](mailto:jcbroke40@aol.com)**



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# Chapter Events and Fly-Ins

**Mar 17 Chapter 25 Meeting**  
**Chapter Hangar at Airlake**  
 6 pm Grill on, bring something  
 7 pm Meeting (see page 3)

**Mar 30, 1pm Boys & Girls Clubs**  
**Young Eagle Event—Airlake FBO**

**Future meetings 4/21, 5/19, 6/16,**  
**7/21, 8/18, 9/15, 10/20, 11/17**

**Mar 13 Tower Mn (12D) 11a-3p**  
 Ski/wheel plane fly-in 218/753-2331, vanair@rangenet.com

**Mar 20 Cloquet Mn(COQ) 10a-2p**  
 Fly-in lunch. jt Zack@msn.com

**Mar 24-26 St Paul Mn Radisson**  
 Av. Mnt. Tech. Conf 800/657-3922

**Mar 27 Bloomington Mn 830-noon**  
 Rich Stowell's Av. Safety Seminar  
 Radisson South 494&Normandale  
 612/812-3873 sportaerobatics.com

**Apr 13-19 Lakeland Fl Sun & Fun**

**Apr 17 Bloomington, Mn**  
 Aviation Hall of Fame banquet.  
 Thunderbird (Ramada) Hotel.  
 To get on mailing list, mail card to  
 Mn Aviation Hall of Fame  
 P.O. Box 284 Chaska, MN 55318.

**Apr 23 St Cloud Mn(STC) 7-10p**  
 Hangar dance, Wright Aero Hgr 2.  
 320/308-2395

**Apr 24-25 Cloquet Mn (COQ) 9a**  
 Annual Swap Meet 218/879-6814

**Apr 28-30 Rochester Mn**  
 MN Airport Symposium  
 Civic Center 651/296-8061

**May 7-9 Deerwood Mn**  
 Mn Seaplane Pilots Conference

**May 10-12 La Crosse Wi (LSE)**  
 Wisc. Aviation Conference  
 715-358-2802 daredem@nnex.net

**May 14-16 Keweenaw WI (EZI)**

Midwest Aeronca Festival  
 jodydeb@earthlink.net

**May 22-23 Blaine Mn(ANE)**  
 Discover Aviation Days, RV Fly-in  
 Fly-In bkfst, pig roast, hangar dance  
 763/786-5004 715/386-1239

**May 25-27 Red Wing Mn (RGK)**  
 Salute to Vets. Education events,  
 Air show. 612/685-4506

**Jun 5 Amery Wi (AHH) 7a-noon**  
 Fly-In Bkfst 715/268-6899

**Jun 6 Albert Lea Mn (AEL)**  
 Fly-In Breakfast 7a-1230p

**Jun 6 Reedsburg Wi (C35) 7a-12p**  
 Fly-in bkfst 608/524-6888

**Jun 11-13 Brown's Airport.**  
 Pvt strip. Pork feed Sat at 4 p.m  
 Call ahead 320/392-5869.

**Jun 13 Fergus Falls Mn (FFM) 7a**  
 Fly-In Breakfast 218/739-3733

**Jun 16 Cornell Wi (4T5) 9a-2p**  
 Brkfst Fly-In, Grd opng of air park  
 Don 800/305-0366

**Jun 20 Hutchinson Mn (HCD)**  
 7a-12p Fly-in bkfst  
 4-7p Pork chops 320/587-3802

**Jun 20 Grygla Mn (3G2) 7a-noon**  
 Fly-In Pancakes 218/459-3436

**Jun 27 Caledonia Mn (CHU)**  
 Fly-in breakfast 730a-noon  
 brianm@acegroup.com

**Jun 27 Springfield Mn(D42) 7-12p**  
 Fly-in bkfst 507/723-5664

**Jul 2-4 Starbuck Mn (D32)**  
 Heritage Days, firewks Sat 10p  
 Flyers Bkfst Jul 3 7a-noon  
 320/392-5869 or 320/795-2786

**Jul 3 Cloquet Mn (COQ) 730-1130**  
 Pancake Fly-In 218/879-6814

**July 27-Aug 2 Oshkosh Wi (OSH)**  
 Airventure 2004

## Stuff for Sale/Wanted

For Sale: Grumman Yankee AA1B with 160 hp Lycoming. 1500 hr smoh for more info call Hal at 952-469-3965

For Sale: Misc. welding stuff: torch, gauge, extra tips, hose & goggles, \$40 or make offer. Ken Hanson 952-920-8031

For Rent: Trailer for hauling cars etc. It is available for a \$25 tax deductible donation to Chapter 25. Mike Dolan 952-652-2436, mdolan@tcq.net

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.

For Sale: 1971 Piper Cherokee 140, white with red trim, high time engine, annual-ed August 2002, compression 78 to 80 on all cylinders, Navcoms are 4 years old, not IFR, asking \$25K, I can send you a picture. Roger Steiner, CBXRoger@cs.com



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