

# Tower Talk

2015 Newsletter Award Winner

John Livingston

March 2016

## Upcoming Events:

### March Events

- **1 - Tuesday, 7:00**  
Board Meeting, Airport Conference Room
- **5 - Saturday, 8:30**  
Breakfast, Cedar Falls Family Restaurant
- **15 - Tuesday, 7:00**  
Chapter Meeting, Airport Conference Room

### Iowa DOT Calendar:

[www.iowadot.gov/aviation](http://www.iowadot.gov/aviation)

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## Runway Zero

by Warren Brecheisen,  
Chapter 227 President



I've been on a couple of the fly outs arranged by John Bender this last week, after not having flown for a couple of months. Last Saturday, we went to Mason City for Liars and Flyers and today (Feb 26) we flew to Pella for breakfast. We always have a great time on these fly outs with a lot of good natured harassment going on, but also learning from one another. Of course, the main point is the flying. My desire to go on these outings has caused me to exceed my comfort zone a couple of times, and consequently I have stretched my limits a bit. We are very fortunate to have a gung ho person like John setting up these flying activities. I hope more of you will be able to take advantage of these opportunities this season.

In my article last month, I talked about the new Youth Protection Policy and we had some discussion about it during our February chapter

meeting. I contacted Brett Hahn, the EAA Chapter Manager, and discussed a couple of our concerns. EAA has had a lot of feedback from the chapters on this new policy and as a consequence has made the following changes (per Jack Pelton article in the EAA Hotline):

- Removing what many thought was an overly burdensome photography policy. There are now simple guidelines to work with parents when taking photos.
- No requirement to provide a Social Security Number when completing the background check (it is optional).
- Simplified requirements for ground volunteers at Young Eagles rallies, to require only two-deep leadership that has completed the training and back-

ground checks.

- Elimination of the staff-to-youth ratio for Young Eagles rallies.

Clarification on topics such as supervision in an aircraft, individual Young Eagles flights, and record keeping. We already knew the Social Security number requirement had been dropped. It appears that some of the heartburn that Chapter 94, who has some non-flying activities during their YE rallies, was having with the new policy has been alleviated by dropping the staff-to-youth ratio requirements for Young Eagle rallies. I haven't reviewed the latest version of the policy, but it sounds like EAA is listening to the chapters and trying to address the concerns.

The monthly breakfast will  
*Continued on page 2*

## *Runway Zero* from page 1

be in the Cedar Falls Family Restaurant next Saturday, March 5<sup>th</sup> at 8:30am. The March chapter meeting will be on the 15<sup>th</sup> at 7:00pm in

the meeting room at the airport terminal.

Let's get some daylight between the tires and the

ground!

Warren Brecheisen  
President,  
EAA Chapter 227

## **2016 Dues are Due by March 31<sup>st</sup>!**

*Don't forget to renew your Chapter 227 membership  
(if you haven't already done so)*

*According to the 227 bylaws,  
anyone who hasn't paid dues by March 31<sup>st</sup>  
shall forfeit membership privileges!*

*If you haven't already paid your dues,  
please make your check to: EAA Chapter 227*

*Send/give your dues to:*

**Dave Hummel**

**621 Eagle Ridge Rd**

**Cedar Falls IA 50613**

*along with any updates or use our membership form*

*[Click here for a downloadable/printable membership application](#)*

*Not a member but would like to join?*

*Visit our website: [eaa227.com](http://eaa227.com)*

*or ask any chapter member*

## *Fly Out to MCW, Feb 20<sup>th</sup> by John Bender*

Warren, John Dutcher and I flew to Mason City this morning and joined the lively group of "Liars & Flyers" for donuts and 'stuff'.



This video is of my newly installed ADS-B system. Warren and John are the 2 YELLOW triangles. They are yellow because of the distance apart we were. If 2 miles apart, they would turn red.

[Click here to see John's You Tube video](#)

Seems to be working properly.

### *Breaking News!*

## *Them People at the Airport Café at MCW*

*Will again be open Saturdays at 8:00AM  
effective immediately!*

*Check out their daily lunch specials on their Facebook page:*

[\*Them People at the Airport Café\*](#)

**Contact  
John Bender,  
Fly Out  
Coordinator,  
for more  
information**

**Join  
Liars & Flyers  
Saturday  
mornings**

## Tech Notes -

### Plumbers Friend (or Nightmare) - Part 3

by Mike Lewis

**“Only  
comment  
I’d make  
here is...”**

The last couple of months I’ve talked about some of the larger plumbing issues in building your own airplane.

How about primer lines? These are usually 1/8 inch diameter tube, probably most commonly copper. They could probably be aluminum too. Tony Bingelis proclaims that copper is more prone to work hardening than aluminum, and should be annealed at every annual. I really don’t have any experience that would support or deny that proclamation. On my RV-4 I chose to use 1/8 x .035 wall stainless steel tubing (McMaster-Carr part number [89895K631](#)). The stainless is somewhat more difficult to flare (OK, it’s a bear!), but it is mechanically stronger, and stiffer than copper or aluminum. I ran the stainless lines from the cylinders, to a T fitting mounted on the back of the oil sump, and then a small Aeroquip 666 hose to a bulkhead fitting on the firewall. By the way, I did use primers on all four cylinders on both of my airplanes. That may not be necessary (some Wichita equipment only primes one cylinder), just seems like it should reduce cranking time.

How about crankcase ventilation? Nothing too critical there. I think I used Aeroquip 303 (seems like it is 5/8 I.D.).

Only comment I’d make here is that it is a good idea to put a small slit (maybe an inch long) along the axis of the hose maybe midway along the length. On rare occasions, I have heard of the crankcase ventilation hose building up ice at the discharge opening in the winter. If there is enough ice build up to plug the hose, you risk blowing out a seal in your engine. Hence the slit.

Pitot and static lines. I chose to use Poly-Flo tubing (1/4 inch) for these. This tube can be used with barb fittings or Nylo-Seal fittings. You could also use a rubber type hose such as neoprene. My only reason for choosing the Poly-Flo is one of longevity. Most rubber types tend to deteriorate over time.

How about brake lines? On the Diamant I used Nylo-Seal tube and it worked just fine. Flexible all the way from brake pedal to wheel cylinder. It has a pressure rating of 2500 p.s.i. and I had heard that was what Burt Rutan was using for brake lines in some of his projects. When I built the RV-4, Van was using a nylon tubing for brake lines too (I assume it was Nylo-Seal). I ultimately concluded that the nylon tubes were less of a good idea on the RV. The RV was just a little faster on landing than the Diamant,

but the larger difference was that the Diamant had 6 inch wheels with 16 inch O.D. tires, and the RV had 5 inch wheels with a 14 inch O.D. tires. Additionally, the RV brake calipers were significantly smaller. The result was braking generated enough heat to melt one of those nylon brake lines. And I thought I was pretty easy on braking! Actually in discussing this with one of the A&P mechanics, he pointed out that as your brake pads wear down, the backing plates on the pads get closer to the friction source, hence get hotter. Makes great sense to me! Anyway, I wound up replacing the nylon lines from the firewall down the gear leg. I kept the nylon for flexibility on the pedal side of the firewall. I then made a junction at the bottom of the aluminum tube to an Aeroquip 666 hose assembly for about the last foot. I used the Aeroquip just for flexibility when I wanted to remove the brake cylinder for maintenance. If you have a telescoping gear system (Oleo struts or similar) you would need the flexibility for that as well.

If you are incorporating vacuum driven gyros you will have more plumbing challenges. All I can say is there’s GOT to be a better way!

*Continued on page 5*

**“Makes  
great sense  
to me!”**

## ***Tech Notes from page 4***

Seriously though, you better follow your vacuum pump manufacturer's recommendations if you intend to keep your pump warranty. They get pretty sensitive about that. Seems like the recommended hose is Aeroquip 306 or similar. No thread seal, Teflon tape or oil on fittings. I think I am all plumbed out!

***“ Seriously though, you better follow...”***

### ***From Jack Pelton:***

## ***Member Input Helps Simplify Youth Protection Policy***

***from eaa.org***

**February 25, 2016** - Earlier this month I mentioned in e-Hotline that we would be using EAA member feedback to make any necessary clarifications and improvements to the Youth Protection Policy introduced in January. Thanks to your input, we have done that.

The overarching purpose of the policy remains the same – to protect young people who are involved in EAA's youth programs and protect our volunteers who dedicate time, energy, and their own funds to these programs. Within that, we've split the policy's elements into three distinct areas: Young Eagles flights and activities, youth education programs such as aircraft building projects, and youth activities at EAA AirVenture Oshkosh.

Within the Young Eagles segment, you'll note the following changes, thanks to the input

of members and volunteers:

- Removing what many thought was an overly burdensome photography policy. There are now simple guidelines to work with parents when taking photos.
- No requirement to provide a Social Security Number when completing the background check (it is optional).
- Simplified requirements for ground volunteers at Young Eagles rallies, to requiring only two-deep leadership that has completed the training and background checks.
- Elimination of the staff-to-youth ratio for Young Eagles rallies.
- Clarification on topics such as supervision in an aircraft, individual Young Eagles flights, and record keeping.

I urge you to also review the brief guidance sheet regarding the Youth Protection Policy and Young Eagles activities. It will help answer questions that you may receive, although it's important to know and understand the entire policy as it relates to Young Eagles. We'll have similar background sheets coming for other chapter youth activities and for AirVenture youth activities. For the latest updates, go to

[www.EAA.org/youthprotection](http://www.EAA.org/youthprotection).

Again, thanks for your input. We are all passionate and dedicated when it comes to EAA's youth programs, which is why they've been so successful. It makes us excited about the positive impact we can have on the future of aviation.

***“...we've split the policy's elements into three distinct areas...”***

## ***Young Eagles and EAA's Youth Protection Policy Summary***

***“...it belongs  
to all of the  
volunteers  
who have  
worked so  
hard to make  
it successful.”***

***“Rally ground  
crew are  
encouraged...”***

EAA has three distinct policies that cover Youth Protection; one of those is aimed directly at Young Eagles flights. This short document is intended to help you understand how the Young Eagles Youth Protection Policy works in an abbreviated format. The full policy is available at [eaa.org/youthprotection](http://eaa.org/youthprotection).

### **Understanding the program – Why do we need to do this now?**

The EAA Youth Protection Program has been put into place to keep youth safe in our EAA programs. Young Eagles is EAA's flagship youth program, and it belongs to all of the volunteers who have worked so hard to make it successful. The policy, training, and background screening are all key elements to a successful youth protection program, and mirror the process found in schools, scouts, churches, and other youth-oriented programs.

### **Training and background checks**

All YE pilots, YE coordinators, and YE field representatives are required to complete the online training and background check. This takes about 15 minutes. The training and background check need to be renewed after three years. There are no exceptions for this group.

Rally ground crew are encouraged to complete the training and background check.

Pilots are responsible for ensuring they are complying with the Youth Protection Policy. YE Coordinators and field reps are not required to check the status of individual pilots who fly for your rally. We do ask that you do not allow pilots to fly who you *know* are not compliant. As always you are encouraged to remind pilots of the minimum requirements to fly Young Eagles, including airworthiness certificates, pilot certificates, currency, etc.

If a pilot who has not complied with the EAA Youth Protection Policy flies at your rally, EAA will notify the pilot and the coordinator/field rep of the situation. EAA will work with the pilot to help him or her comply with the policy. The coordinator/field representative should ask to see evidence of compliance before allowing the pilot to fly at another rally.

### **Individual pilots flying Young Eagles**

Individual pilots flying Young Eagles on their own simply need to do the training and background check, as the rest of the policy applies only to rally situations.

### **Two-deep leadership**

Two-deep leadership is not required in any of the aircraft used for YE flights.

In a rally situation you need to follow two deep leadership practices. This simply means two people on the ground need to have the background check and training completed. Young Eagles pilots who are on the ground are eligible to be part of the two approved adults who need to be present and circulating during the event. This makes having eligible people fairly easy because there are generally pilots on the ground during a rally. If you have a situation where all of the pilots are in the air, you would of course need to have other ground personnel approved through the EAA training and background check.

### **Waivers, permission slips and record keeping**

The only waiver necessary for a YE rally or flight is the standard YE form which is sent back to Oshkosh after the flight. Chapters have no responsibility to retain any records from YE activities.

### **Communication and contact with youth**

Helping youth and their parents understand the flight and what to expect has a number of benefits. First,

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## ***Youth Protection Summary from page 6***

youth and parents who know what to expect are less likely to feel anxious and are more likely to be able to have fun. Secondly, our aircraft are small, and physical contact is inevitable; helping people understand that fact saves potential misunderstandings. It also makes it more likely that you will be made aware of potential concerns your participants may have so you can help make them more comfortable.

While EAA would love to see you mentor a young person, common sense practice in today's climate is to initiate all communications through parents, not directly with the youth. The policy reflects this approach in keeping with our focus on child protection. Misunderstandings are common when using electronic communications with young people, so it is best to contact parents with any information you may need to share. The

added benefit is that it is a great way to encourage the parent to get involved with aviation too!

### **Photography**

Taking photos of youth at a rally to share with parents and for chapter use is still encouraged. We ask that you not post last names of youth, and be willing to refrain from photos if parents are uncomfortable with such photos.

***“...are more likely to be able to have fun.”***

## ***EAA AirVenture Oshkosh 2016 Events, Air Shows to Commemorate 75th Anniversary of Pearl Harbor from eaa.org***

The 75th anniversary of Pearl Harbor's "Day of Infamy" will be commemorated at [EAA AirVenture Oshkosh 2016](#), with flying activities and other highlights recalling the events and heroism of that fateful day, which initiated America's involvement in World War II and changed our nation forever.

EAA AirVenture Oshkosh 2016, the 64th annual Experimental Aircraft Association fly-in convention, will be held July 25-31 at Wittman Regional Airport in Oshkosh.

Flying activities will include historic World War II-era aircraft of both American and Japanese origin, including the

popular Tora! Tora! Tora! air show performances. An unprecedented part of the commemoration will be the flying appearance of a restored Interstate Cadet

aircraft that was in the air for flight training over Oahu when the attack began on December 7, 1941.

An evening program on Wednesday, July 27, will highlight the events of December 1941, with participants expected to include Pearl Harbor veterans and historians



who have deeply researched the events before, during, and after that day.

Specific details on all Pearl Harbor 75th anniversary events at Oshkosh will be announced as they are finalized. Those details will be available at the EAA AirVenture Oshkosh [website](#).

***The 64<sup>th</sup> EAA AirVenture Oshkosh will be held July 25-31***

## NEWSLETTER INFORMATION

If you have an article, picture, or anything else you would like to share in a future newsletter, please contact:  
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