Chapter 227 Waterloo, Iowa



Tower Talk

2015 Newsletter Award Winner

John Livingston

January 2017

Upcoming Events:

Chapter Events:

- 3 Tuesday, 7:00

 Board Meeting, Airport

 Conference Room
- 7 Saturday, 8:30
 Breakfast, Cedar Falls Family

 Restaurant
- 17 Tuesday, 7:00 Chapter Meeting, Airport Conference Room

Iowa DOT Calendar:

iowadot.gov/aviation

Inside this Issue:

Fly Outs by John Bender	2
Just another flight by John Dutcher	3
BJ called by John Dutcher	4
AirVenture 2017 Initial Air Show Performers from eaa.org	6
Contact Tower by Larry Lyman, Retired ATC	7
Listen to LiveATC.net	7
Tech Notes - Can McAfee Help? by Mike Lewis	8
Chapter Classifieds	10
227 Leadership Contacts	12

Runway Zero

by Warren Brecheisen, Chapter 227 President



The chapter had a fun Christmas party on the 9th of December at the Cedar Falls Family Restau-

rant. The food was good and the company was fantastic. I handed out the certificates of appreciation to the chapter cadre, which is always a pleasure for me. Then we moved on to the highlight of the evening - the drawing for door prizes. More than half the attendees went home with a door prize. To wrap up the party, I read an aviation version of "Twas the Night Before Christmas". I want to thank the people who contributed to the success of the party in one way or another. Glenda Salyer, Ann Campbell and Rich Shephard provided and set up the decorations. Rex Pershing, Keith Kaspari, Jim Lenius and Rich Shephard contributed door prizes. Rich Shephard also provided two potted evergreen arrangements that were also given away in the drawing. Thanks to all these folks and to the people that attended the party.

John Dutcher and I met with the commander of the AFJROTC unit at West High, Major David Richards (ret). The purpose of the meeting was to discuss holding a special Young Eagles event for the cadets. The Major was very enthusiastic about the idea. The Air Force encourages orientation rides in civilian aircraft, but the unit at West High has not had a venue to accomplish this in the past. John and Major Richards will be working out the details for holding the rally which, most likely, will be held in March or April.

I bought a Garmin Aera 660, a portable GPS, for my Christmas present. What an amazing device! Since I've been having some problems with my panel mount nav/com, I decided to hard wire the Aera in the airplane, including having it provide navigation data to my autopilot. The autopilot works better with this device than it ever did with my panel mount GPS. I've only flown twice with it so far, but I'm lovin' it.

We had a little break in the weather yesterday, the 22nd of December, so John Bender twisted several of our arms to fly to Pella for lunch. It was a beautiful day to be in the air. We had four people show up: John Dutcher, John Bender, Loren Miller (Marshalltown) and me. I took off my wheel pants for winter flying and lost about 8 to 10 knots in speed which was quite noticeable. The airplane feels like it's dragging an anchor without the wheel pants.

Let's get some daylight under those airplane tires! Warren Brecheisen President, EAA Chapter 227 Page 2 Chapter 227 Waterloo, Iowa

Mason City Fly Out, November 26th by John Bender



Great day for MASON CITY Fly Out, then on to Prairie Du Chien. 5 of us there. Good food both places. Great day.



Ames Fly Out, November 29th by John Bender

Great day. HICKORY PARK is always an excellent place to go. 40 - 50 knot winds up at 4 - 6,000'.









Pella Fly Out, December 22nd by John Bender

We had a great day for a Fly Out. Weather was great.

4 of us made it to Pella. Went to local Sports Bar.

All went well.

Just another flight... by John Dutcher

Over the years I have had a number of great experiences flying young people.

One of the most rewarding experiences was this year. I had flown into Clinton for the Fly lowa Young Eagle flights on August 13, 2016. My last flight of the day was a young man 11 years of age named Bridger.



I looked at his size and pulled out the cushion from the back seat so the he could be about 3" higher and see over the front cowling. I asked him if he had ever flown in a small plane. He indicated that this was the first time, but for the last 2 years he had flown planes on his computer with a simulator program. I told him this was his chance to fly a real plane. I witnessed the largest smile I have ever seen on a young man!

"...this was
his chance to
fly a real
plane."

As I started the plane I explained every detail. I told him as soon as it was safe on takeoff he could take over and fly. At about 500 feet above the ground and the plane set for a comfortable climb I let him know he could take over. Smoothly and comfortably he took control, climbed and turned left as directed, we leveled off at altitude and we reset the trim tab.

At that point I radioed "Clinton traffic" and stated that "we would be turning right and leaving the young eagle pattern, and returning soon". I told him to fly south of Clinton and follow the Mississippi River north, smoothly and steadily he flew the plane. I told him we should follow the main channel of the river north, with the ailerons he moved the plane right, then left, and followed the river. We went past Clinton and Fulton and then over the wide part of the river, and Bridger's smile grew wider. Just south of Wacker, about 15 miles north of Clinton, I asked him to find the airport, he looked at the Fore Flight program on the screen, identified the airport, and made the correct left turn to head to the airport.

About 10 miles out I radioed "Clinton traffic" and indicated that we would be over flying the airport and entering a left pattern for runway 32. I explained to him what we needed to do including turns and descending to 800 feet above ground. He handled the aircraft well and lined up well for the landing. He held on and we landed the plane.

As we taxied to parking I indicated that he had done a great job in piloting the plane and told him to "keep flying". On the walk to the terminal, he told me that he had considered being a pilot when he grew up, and now he knew that is what he wanted to do.

We were the last plane in and about 20 minutes after the plane that left after us.

Inside the terminal we completed the Young Eagle paper work, and log book. I added that I too had a log book for the flight. Chuck McDonald joined us, (Chuck is the exec-

Continued on page 4

"...he knew that is what he wanted to do."

Page 4 Chapter 227 Waterloo, Iowa

Just another flight... from page 3

"...it was
a true
honor..."

utive director of the Fly Iowa Program), I told both of them that I need a signature, I found the spot and slid my Fly Iowa Challenge log book over to my copilot and asked him to sign my log book. I explained to both that I really needed someone important to sign my book. He signed it "Bridger".

I found him at the pizza party after the event; he was explaining to his friends what he had done. I told them all that "he was a good pilot and it was a true honor for me to fly with him."

BJ called... by John Dutcher

On October 31st I got a call from BJ. He wanted to know if Andrea and he could get an airplane ride late Saturday afternoon. I asked if he had anything special in mind and he said yes. I told him I would have to check the weather to see if it was possible and get back to him.

I checked the weather for November 5th and it looked good so I called him back, told him a flight was possible, and asked what was going on. BJ stated that he wanted to propose to Andrea that Saturday night and he wanted it to be special. He wanted to fly over this farm just north of Hampton and possibly go out to supper somewhere.

A little background on this...

"...he wanted it to be special."

Andrea is a supervisor at the Shell Rock Healthcare Center where Sue, my wife, has resided for the last 2 years. I had taken Andrea on a number of flights over the past 2 years. Andrea and BJ joined me on a flight to and from Greenfield for breakfast on August 29th. They love flying!

So BJ stated that Andrea was not to know anything about this. We agreed to fly over the farm and then on to Prairie du Chien for dinner at the Black Angus. The problem was that I needed to get a date for the night. Call after call, I got turned down.

We got to the Waterloo Airport at 4:00pm. Andrea had not known where BJ was taking her until he turned into the airport. Still without a date, I noticed Brian's hangar was open and he was working on his RV. I stopped and asked if he wanted to go to the Black Angus for supper, he said he would think about it.

We checked out the plane. BJ sat in the right seat as we taxied over to Brian's hangar. Brian decided to go and was ready to climb into the back seat when I told him to sit up front. BJ climbed into the back seat with Andrea. I told ground we would be flying just north of Fredericksburg to take some pictures of a building and fly at 3200 ft.

Continued on page 5

BJ called... from page 4

Just north of Fredericksburg BJ indicated that his father's farm was just 3 miles away and could we get some pictures so that he could make them into a Christmas card. We flew over there and took some pictures. He then indicated that his farm was just 4 miles north and could we get a picture of that?

I missed the field on the first pass so we circled around and there it was—a 160 acre harvested corn field, gold in color, with 300 foot dark brown plowed letters "ANDREA MARRY ME?" I was hoping that she would not think that I had done that when BJ pulled out an engagement ring and gave it to her.

"...could we get some pictures..."



We flew on to Prairie du Chien and had a great meal at the Black Angus. At dinner the question came up as to whether she accepted the ring and yes she did.

It was dark when we left PDC, so we had to circle the Cedar Falls/Waterloo area, some of the lights sparkled like diamonds.

And the prime rib is still great at the Angus. And Brian makes a great date and is available some Saturdays. And Andrea and BJ will have a great memory forever.

"...the lights sparkled like diamonds."

TOWER TALK IS LOOKING FOR YOUR INPUT!

Please consider submitting anything of interest that is aviation related such as:

Progress on your project with photos

Pictures of your aircraft or from your aircraft

Fun places to fly

Memories of flights and interesting people you met along the way

Book reviews

Suggestions for upcoming events

Classifieds - Do you have an item to sell or want to buy?

Any item that may be of interest to the membership

Send your articles, pictures, stories, whatever you want to share to christ@cfu.net.

Thank you!

Page 6 Chapter 227 Waterloo, Iowa

Initial AirVenture 2017 Air Show Performers Confirmed from eaa.org

EAA
AirVenture
Oshkosh
July 24-30,
2017

Some of the world's top air show performers, including national aerobatic champions, longtime favorites, the United States Navy Blue Angels, and some talented Oshkosh first-timers, have made commitments to fly during the afternoon and night air show lineups at EAA AirVenture Oshkosh 2017, set for July 24-30 at Wittman Regional Airport in Oshkosh, Wisconsin.

Afternoon air shows are scheduled to begin at 2:30 p.m. daily, while the Wednesday and Saturday night air shows are scheduled to begin at 8 p.m.



This is just a partial list, with many more exciting performers yet to be announced in the coming weeks leading up to Oshkosh. Schedules and complete daily air show lineups will be announced as they are finalized. See detailed performer bios here >>

Look for updates at eaa.org

Vicky Benzing
Jeff Boerboon (John Klatt Airshows)
Bob Carlton
Kirby Chambliss
Matt Chapman
Class of '45 (Yoak/Tobul)
Kevin Coleman

AeroShell Aerobatic Team

Kyle Franklin Mike Goulian Rob Holland Jerry Kerby Greg Koontz Sammy Mason
Paul McCowen
United States Navy Blue Angels
Paradigm Paramotor Aerobatic Team
Jim Peitz
Redline Air Shows
Gene Soucy & Teresa Stokes
Bill Stein
Skip Stewart

Sean D. Tucker

Patty Wagstaff

Matt Younkin

Scott Yoak



Contact Tower by Larry Lyman, Retired ATC

Happy New Year! As always, I hope you had a safe and enjoyable holiday season, and remembered to make someone else's Christmas just a little brighter because of you. Was Santa good to you? If you were really good, maybe you now are a part of the ADS-B system! How does that impact ATC? Well, let's talk about it...

ADS-B is coming. Unlike other ideas that the FAA has proposed, this one is going to stick. You will have a clearer picture of the aviation environment in which you are operating, and ADS-B gives radar controllers a bit more precision in your location. Right now you are aware of other traffic in your vicinity because of traffic calls from controllers. You may even have a TCAS alert, if traffic is really getting close to you. ADS-B will allow you to see virtually all traffic in your vicinity, whether that traffic would impact you or not. One of the questions that I have been asked is how will this impact our controllers at Waterloo?

"You will
have a
clearer
picture..."

My understanding is that it won't impact the air traffic services at Waterloo at all. Yes, there is and has been much discussion about relocating the radar controllers, either to Des Moines or Cedar Rapids. However, any relocation will only change where your controller is physically working. It will not decrease the services offered, and may result in even better service.

Talk to your favorite FBO about ADS-B, look into installing a system, because it will provide another level of safety for you and a bit better target for your controller, and be ready for the future...it looks bright!



ICAO: KALO IATA: ALO Airport: Waterloo Regional Airport

KALO Flight Activity (FlightAware)

KALO Airport Info (AirNav) (iFlightPlanner)

KALO VFR Sectional Chart (iFlightPlanner)

KALO IFR Low Chart (iFlightPlanner)

Listen to
Live
ALO
Air Traffic

Listen: KALO Gnd/Twr/App

KALO Gnd/Twr/App Audio Archives

Sponsored by: FlyALO.com and EAA Chapter 227

Page 8 Chapter 227 Waterloo, Iowa

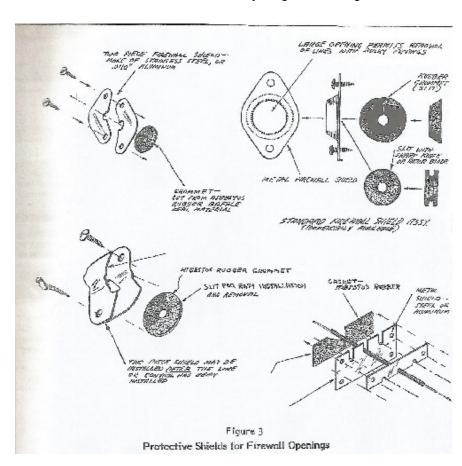
Tech Notes - Can McAfee Help?

by Mike Lewis

"I'm sure
you can
guess what
happens..."

I often get questions about how to protect wiring and control cables where they penetrate the firewall. This can be a tough issue. I think the homebuilt industry has come a long way in addressing it since I built my airplanes. The objectives are simple; the solution is less simple.

Where wiring goes through your firewall there must be some means of protecting against chafing. The hole edge in that stainless steel firewall is nothing short of a knife. I'm sure you can guess what happens if it cuts through electrical insulation. Historically some form of grommet and a grommet shield have been used, both in homebuilts and Wichita birds. Below is an illustration from Tony Bingelis showing various



"Where do you find such a thing?"

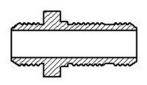
adaptations. You will note that Tony references asbestos rubber grommets. Where do you find such a thing? Even before the problems with asbestos were commonly known, I couldn't find them. He references baffle seal material which today is usually silicone. Silicone however will fail at much lower temperatures ($\sim 500^{\circ}$ F.) than asbestos (over 1000° F.).

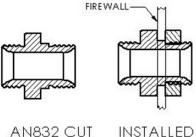
Continued on page 9

Tech Notes from page 8

When I did my airplanes, I used a modified tube fitting for some of my pass throughs. I used an AN 832 which is a bulkhead tube fitting. Below is an illustration of the modification I made.







"It does
however
provide a
valuable
function..."

AN832 CROSS SECTION AN832 CUT OFF AND BEVELED

I first cut the extra length off the fitting. I then "dressed" the ends of the inside diameter to provide a bevel or flare. I did this on my lathe but it can be done with a Dremel tool and a drill press. After feeding the wires or Bowden cable, etc. through I worked some silicone RTV in around the wire bundle to fill any voids in the passage. As I mentioned earlier, silicone is only good for about 500° F. which is well less than any flame. It does however provide a valuable function, namely in preventing air flow. If the air does not move through that fitting, it will not drag those hot gases (flames) with it.

In today's world there is probably an easier (although more costly) alternative. There are spherical metal grommets (firewall "eyeball" grommets) available. In fact Aircraft Spruce is marketing a stainless steel firewall penetration kit. This looks like a pretty nice solution to this issue. You can minimize the cost by planning the routing of the various components so as to bundle as many as possible into one pass through.

Well, none of this will protect you from viruses and hackers, but it should protect your wiring cables and help keep you cooler in an emergency.

"This looks
like a
pretty nice
solution to
this issue."



Page 10 Chapter 227 Waterloo, Iowa

Chapter Classifieds

Tools For Sale:

Quantity	Description	Price
1	Taylor T-2X rivet gun (new)	145
1	Unibit 1/8 to 1/2" (new)	15
1	Bucking bar (new)	15
1	1/8" dimple dies (Cleaveland, new)	25
1	3/32" dimple dies (Cleaveland, new)	25
1	3/32" close quarters dimple dies (Cleaveland, new)	25
25	Clecos, 1/8" (new)	10
50	Clecos, 3/32" (new)	20
1	Backriveting plate (new)	20
1	Rivet gage set (new)	5
1	Rivet set, 1/8" cup head (new)	5
1	Rivet set, 1/8" cup head double offset (new)	15
1	Rivet set, 1" mushroom (for flush rivets, new)	10
1	Rivet set, 1/8" cup head, 3.5" long (new)	5
1	Rivet set for backriveting (flush rivets, new)	20
6	#40 drill bits (new)	6
40	Abrasive disks, fine (new)	20
1	Dynaswivel air hose flow control (new)	20
1	Microstop (new)	20
2	Microstop (used)	15 each
3	Countersink cutters (#40, #30, #19, all new)	6
1	Rivet squeezer (Avery, 3" throat)	120
1	C-frame dimpler (Cleaveland, new)	150

Contact Warren Brecheisen 319-277-2118

Chapter Classifieds

Thank you to Rex Pershing who has donated some tools to the chapter!

Along with them is a prop extension to sell and donate the proceeds to the chapter.

FOR SALE: SAE 1 Prop Spacer It is a 6 inch extension off a Lycoming 235 that uses 3/8 inch bolts. \$100 or best offer

Please Contact:

Doug Mattson dougmattson@gmail.com 319-939-0179









C85-12F Engine

FOR SALE: Continental C85-12F Engine from a Cessna 140.

I cleaned and pickled this engine before 2000. Asking \$2500

Carburetor "MA3SPA"
I used it on the O290 engine in my exp Mustang II.
Asking \$400
I have more photos if needed.
In my hangar.

Please contact: John Peacock <u>Johnnyfpeacock@gmail.com</u> 319-266-3417 voice only.



Carburetor

Whether you are looking to sell something or looking to buy, please send your information to chrisr@cfu.net.

And be sure to let me know when it sells!

NEWSLETTER INFORMATION

If you have an article, picture, or anything else you would like to share in a future newsletter, please contact:
Chris Roberts
507 Chateau Court
Cedar Falls IA 50613
c) 319-240-8128
chrisr@cfu.net

Visit our website: eaa227.com





EAA CHAPTER 227 LEADERSHIP

Executive Officers

Executive Officers					
President	Warren Brecheisen	n146wb@cfu.net	319-277-2118		
Vice President	Marty Hoel	hoelm@mchsi.com	319-231-1367		
Secretary					
Treasurer	Dave Roberts	drdave@cfu.net	319-277-8128		
Board of Directors					
Executive Officers	See Above				
Members at Large	Dave Hummel	cfihum@cfu.net	319-266-9561		
	Robert Gutknecht	robert.gutknecht.rg@gmail.com	319-269-7970		
Past President	Dave Dunn	djrwcd@hotmail.com	319-296-2914		
Standing Committees/Positions					
Membership	Dave Hummel	cfihum@cfu.net	319-266-9561		
	Carl Campbell	annam39c@aol.com			
Program Committee	Marty Hoel	hoelm@mchsi.com	319-231-1367		
	Dick Poppe	richpoppe@mchsi.com	319-287-4788		
	Scott Weinberg	scottw@butler-bremer.com	319-404-4401		
Nominating Committee	Dave Dunn	djrwcd@hotmail.com	319-296-2914		
	Dave Hummel	cfihum@cfu.net	319-266-9561		
	Dave Roberts	drdave@cfu.net	319-277-8128		
Budget	Dave Roberts	drdave@cfu.net	319-277-8128		
Newsletter	Chris Roberts	chrisr@cfu.net	319-240-8128		
Webmaster	Dave Roberts	drdave@cfu.net	319-277-8128		
Public Relations	Chris Roberts	chrisr@cfu.net	319-240-8128		
FlyOut Coordinator	John Bender	JABGood@aol.com	319-827-3513		
Young Eagles					
Coordinator	John Dutcher	john@balboapt.com	319-240-2497		
Tech Advisor	Mike Lewis	mlewis@cfu.net	319-266-6461		
Tool Manager	Doug Mattson	dougmattson@gmail.com	319-939-0179		
Historian	Dave Dunn	djrwcd@hotmail.com	319-296-2914		

Do you have anything aviation related that you would like to sell? Please let us know so we can include items in CLASSIFIED ADS

Experimental Aircraft Association Chapter 227 publishes Tower Talk for the use education and enjoyment of Chapter members and others to whom it is provided. Chapter and national events, news of members, member projects, activities and general aviation items of interest to the membership are included. Editorial content is the opinion of the contributor and does not necessarily reflect the position of Chapter 227 or EAA and no claim is made for technical accuracy of material presented. Meetings are normally held the third Tuesday of each month in the Airport Conference Room. Please contact any officer for information about Chapter activities.