



# Experimental Aircraft Association

## Chapter 135

### News



May 2017

## NEXT CHAPTER MEETING

will be held

**SATURDAY - MAY 13, 2017**

**Board Meeting at 5:00 PM**

**Regular meeting 6:00 P.M. - Exec 1, upstairs**

**May Program features Stuart Rauh,  
Drones, facts, and rules, and a display of one or two  
modern "Unmanned Aerial Vehicles"**

**We have \$220 of YE credits for use at EAA camps this year.**

**We are looking for worthy applicants.**

**Alan Core**

### UP COMING PROGRAMS:

**May 13 program** features Stuart Rauh, Drones, facts, and rules, and a display of one or two modern "Unmanned Aerial Vehicles"

**June 10 is open.**

**July 8** is scheduled to be Bruce Gapstur from Belle Plaine on flying Chinook helicopters.

**Aug. 12th**, breakfast meeting with the museum. Micky McGilvra will give a program on re-building the Champ.

**Sept. 9th**, Corey Butcher, building the Voisin 35 aircraft

**Oct. 14th**, Al Hummel and Classic Aviation, ADSB Upgrades

**Nov. 11th**, open, and election of officers and board members

**December**, date to be announced, Christmas Party, Smoky D's

### **Recap of the March Meeting:**

Jerry Grogan gave us information on building small metal parts for airplane construction. Measuring, bending, welding, along with properties of metals, and also metal coatings.

Very interesting.

See next 2 pages for more information

# Anatomy Of A Good 4130 Metal Fitting

### **Metal Size**

1. Use the proper thickness called for the part
2. You may use the next size larger but it adds weight

### **Lay Out**

1. Take time to lay out your part properly
2. Check twice before you cut

### **Grain Orientation**

1. Make all parts to bend against the grain of the metal

### **Cutting**

1. Band saw is the best home method

### **Bend Radius**

1. The easiest bend radius is 1 times the metal thickness
2. A bigger radius is not always better

### **Bend Angle**

1. Make your angles as close to specks as you can
2. The closer the angle to specks the more stress it can handle

### **Bend Allowance**

1. Bend allowance = BA or the distance it takes to bend a piece around a radius
2. The formula for BA is  $BA = (.01743r + .0078t)n$
3.  $r$  = radius,  $t$  = metal thickness,  $n$  = degrees of bend
4. Set back. This is where the bend starts and stops = SB
5.  $SB = r + t$

### **Edge Distance From Hole**

1. A minimum of 1 x diameter of the hole, 1 1/2 is better

### **Smooth Edges**

1. Smooth edges prevent cracking or braking

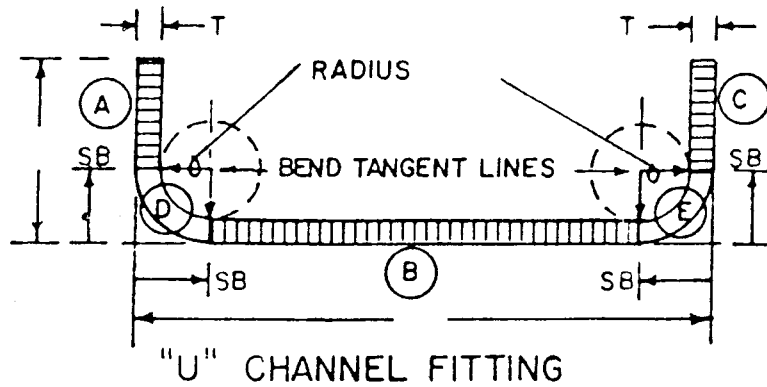
### **Hole Size**

1. It is acceptable to use the next larger letter size drill bit for a hole than the bolt

### BEND ALLOWANCE TABLE

RADIUS	1/32	1/16	3/32	1/8	5/32	3/16	7/32	1/4	9/32	5/16	11/32	3/8	7/16	1/2
.020	.062 .00069	.113 .00125	.161 .00179	.210 .00233	.259 .00287	.309 .00343	.358 .00397	.406 .00452	.455 .00506	.505 .00561	.554 .00626	.603 .00670	.702 .00780	.799 .00888
.025	.066 .00074	.116 .00129	.165 .00184	.214 .00238	.263 .00292	.313 .00348	.362 .00402	.410 .00456	.459 .00510	.509 .00566	.558 .00620	.607 .00674	.705 .00784	.803 .00892
.032	.071 .00079	.121 .00135	.170 .00189	.218 .00243	.267 .00297	.317 .00353	.366 .00407	.415 .00461	.463 .00515	.514 .00571	.562 .00625	.611 .00679	.710 .00789	.807 .00897
.040	.077 .00085	.127 .00141	.176 .00195	.224 .00249	.273 .00303	.323 .00359	.372 .00413	.421 .00468	.469 .00522	.520 .00577	.568 .00632	.617 .00686	.716 .00796	.813 .00904
.051		.134 .00141	.183 .00203	.232 .00258	.280 .00312	.331 .00368	.379 .00422	.428 .00476	.477 .00530	.527 .00586	.576 .00640	.624 .00694	.723 .00804	.821 .00912
.064		.144 .00160	.192 .00214	.241 .00268	.290 .00322	.340 .00378	.389 .00432	.437 .00486	.486 .00540	.536 .00596	.585 .00650	.634 .00704	.732 .00814	.830 .00922
.072			.198 .00220	.247 .00274	.296 .00328	.346 .00384	.394 .00428	.443 .00492	.492 .00547	.542 .00602	.591 .00656	.639 .00711	.738 .00821	.836 .00929
.081			.204 .00227	.253 .00281	.302 .00335	.352 .00391	.401 .00445	.449 .00497	.498 .00554	.548 .00609	.598 .00664	.646 .00718	.745 .00828	.842 .00936
.091			.212 .00235	.260 .00289	.309 .00343	.359 .00399	.408 .00453	.456 .00507	.505 .00561	.555 .00617	.604 .00671	.653 .00725	.752 .00835	.849 .00944
.125				.284 .00316	.333 .00370	.383 .00426	.432 .00480	.480 .00534	.529 .00568	.579 .00644	.628 .00693	.677 .00752	.776 .00862	.873 .00970
.188						.417 .00475	.476 .00529	.525 .00583	.573 .00638	.624 .00693	.672 .00747	.721 .00801	.820 .00911	.917 .01019
.250								.568 .00631	.617 .00685	.667 .00741	.716 .00795	.764 .00849	.863 .00959	.961 .01068

NOTE: Bend allowance for 90 degree bends-use upper numbers.  
Lower numbers give bend allowance for 1 degree. (Multiply the number by the number of degrees of bend intended.)



Lay out of part = A+B+C+D+E

A and C = the height minus the set back (SB)

B = the length minus the set back twice or times 2

D and E = the bend allowance (BA)

# Iowa Department of Transportation

## Office of Aviation Calendar

May 2017

Saturday, May 13

### Marion Municipal Airport (C17)

Pilot social  
8 a.m. – 11 a.m.  
**Phone:** 319-377-0457 (Cole Norton)  
**Email:** cole.norton@fly-iowa.com  
**Website:** fly-iowa.com

Sunday, May 21

### Cherokee Municipal Airport (CKP)

Flight breakfast  
7 a.m. - noon  
Pilot in command eats free  
**Phone:** 712-225-2810 (Brian Lauck)  
**Email:** lauckaviation@hotmail.com

### Green Castle Aero Club (IA24)

Green Castle Aero Club (IA24)  
Fly-in Brunch  
10 a.m. – 2 p.m.  
PIC eats  
319-545-2101 (James Beeghly)  
**Email:** GCAC.response@gmail.com  
**Website:** www.greencastleaeroclub.com

### Chariton Municipal Airport (CNC)

Iowa 99's monthly meeting  
11 a.m. - 3 p.m.  
**Phone:** 563-650-0342 (Jenny Myren)  
**Email:** iowa@ncs99s.org  
**Website:** iowa.ncs99s.org

Sunday, May 28

### Marion Municipal Airport (C17)

FAA Safety Team Meeting  
6:00 p.m. – 8:00 p.m.  
**Phone:** 319-377-0457 (Cole Norton)  
**Email:** cole.norton@fly-iowa.com  
**Website:** fly-iowa.com

June 2017

Sunday, June 4

### Audubon Municipal Airport (ADU)

Flight breakfast  
Fly-ins eat free  
6:30 a.m. - 10:30 a.m.  
**Phone:** 712-563-3780 (Barbara Smith)  
**Email:** audchmbr@iowatelecom.net

### Denison Municipal Airport (DNS)

Flight Breakfast  
7 a.m. – 11 a.m.  
**Phone:** 712-265-1608 (John Amdor)  
**Email:** jeamdor@gmail.com

Saturday, June 10

### Marion Municipal Airport (C17)

FAA Safety Team Meeting  
6:00 p.m. – 8:00 p.m.  
**Phone:** 319-377-0457 (Cole Norton)  
**Email:** cole.norton@fly-iowa.com  
**Website:** fly-iowa.com

Sunday, June 11

### Red Oak Municipal Airport (RDK)

Iowa 99's monthly meeting  
11 a.m. - 3 p.m.  
**Phone:** 563-650-0342 (Jenny Myren)  
**Email:** iowa@ncs99s.org  
**Website:** iowa.ncs99s.org

### Spencer Municipal Airport (SPW)

Flight Breakfast  
7 a.m. – 11 a.m.  
**Phone:** 712-262-1000 (Gayle Brandt)  
**Email:** spencerairport@smunet.net

Sunday, June 18

### Maquoketa Municipal Airport (OQW)

Fly-in breakfast  
7 a.m. - noon  
Pilots who fly in (and kids under 12) eat free  
**Phone:** 563-652-2484 (Brian Wagner)  
**Email:** maqcity@maquoketaia.com

### Dodge Center, Minnesota Airport (TOB)

Fly-in breakfast  
7 a.m. – noon  
PIC eats free  
507-226-1310 (Tom Hall)  
**Email:** Secretary@EAA100.org  
**Website:** http://EAA100.org

Tuesday, June 20

### Independence Municipal Airport (IIB)

Summer grill-out  
Pilots in command eat free  
5 p.m. - 8 p.m.  
**Phone:** 319-334-4000 (Walter Aviation)  
**Email:** office@walteraviation.com  
**Website:** www.walteraviation.com

Tuesday, June 20 – Friday,  
June 23

### Spencer Municipal Airport (SPW)

Air Race Classic (stops in Spencer)  
See website for route information  
**Phone:** 712-262-1000 (Gayle Brandt)  
**Email:** spencerairport@smunet.net  
**Website:** www.airraceclassic.org

Sunday, June 25

### Marion Municipal Airport (C17)

Fly-in breakfast  
6 a.m. – 1 p.m.  
**Phone:** 319-377-0457 (Cole Norton)  
**Email:** cole.norton@fly-iowa.com  
**Website:** fly-iowa.com

### Pender, NE (OC4)

Fly-in breakfast  
Pilot in command eats free  
8 a.m. – noon  
**Phone:** 816-210-2081 (John Miller)  
**Email:** ppeters@skyww.net  
jamiller1976@hotmail.com

July 2017

Sunday, July 2

### Emmetsburg Municipal Airport (EGQ)

Flight breakfast  
7 a.m. – 12:30 p.m.  
712-260-5651 (Mark Evans)  
**Phone:** 712-260-5651 (Mark Evans)  
**Website:** mevans@maxyieldcooperative.com

# Iowa Department of Transportation

## Office of Aviation Calendar *Continued*

Sunday, July 16

### Forest City Municipal Airport (FXV)

Flight breakfast  
Pilot in command eats free  
7 a.m. - 11 a.m.  
**Phone:** 641-581-2880 (Richard or Theresa Trimble)

Thursday, July 20

### Marion Municipal Airport (C17)

FAA Safety Team Meeting  
6:00 p.m. - 8:00 p.m.  
**Phone:** 319-377-0457 (Cole Norton)  
**Email:** cole.norton@fly-iowa.com  
**Website:** fly-iowa.com

Monday, July 24 - Sunday,  
July 30

### EAA AirVenture

Oshkosh, WI  
**Phone:** 920-426-4800  
**Email:** communications@eaa.org  
**Website:** www.airventure.org

Wednesday, July 26 -  
Friday, July 28

### Clinton Municipal Airport (KCWI)

Cessna 150-152 Fly-in  
**Phone:** 301-275-2476 (Mark Buchner)  
**Email:** cessna150flyin@gmail.com  
**Website:** www.cessna150152flyin.org

Friday, July 28 - Saturday,  
August 5

### National Balloon Classic

Indianola National Balloon Classic Field  
**Phone:** 515-961-8415  
**Email:** becky@nationalballoonclassic.com  
**Website:** www.nationalballoonclassic.com

## August 2017

Sunday, August 6

### Humboldt Municipal Airport (0K7)

Fly-in  
7 a.m. - noon  
Pilot free  
**Email:** dave@growthland.com

### Monticello Municipal Airport (KMXO)

Fly-in breakfast  
7 a.m. - 12:30 p.m.  
Pilot in command eats free  
**Phone:** 319-465-5488 (Teresa)

Friday, August 11 - Sunday,  
August 13, 2017

### Spencer Municipal Airport (SPW)

Doug Yost Aerobatic Challenge (aerobatic contest)  
**Phone:** 712-262-1000 (Gayle Brandt)  
**Email:** spencerairport@smunet.net  
**Website:** www.iac78.org/cms/?contest.html

Saturday, August 12

### Marion Municipal Airport (C17)

FAA Safety Team Meeting  
6:00 p.m. - 8:00 p.m.  
5 p.m. - 8 p.m.  
**Phone:** 319-377-0457 (Cole Norton)  
**Email:** cole.norton@fly-iowa.com  
**Website:** fly-iowa.com

Tuesday, August 15

### Independence Municipal Airport (IIB)

Summer grill-out  
Pilots in command eat free  
5 p.m. - 8 p.m.  
**Phone:** 319-334-4000 (Walter Aviation)  
**Email:** office@walteraviation.com  
**Website:** www.walteraviation.com

Saturday, August 19

### Abel Island Airpark, Guttenberg (IA23)

Abel Island Fly-in, float-in, potluck, & BBQ  
Noon - 3 p.m.  
2,600 ft turf strip / Mississippi River for seaplanes  
**Phone:** 319-480-0913 (Gary Fisher)  
**Email:** FlyinEyeDr@aol.com  
**Website:** www.abelisland.com

Sunday, August 20

### Galesburg, IL Municipal Airport (GBG)

Iowa 99's monthly meeting  
11 a.m. - 3 p.m.  
**Phone:** 563-650-0342 (Jenny Myren)  
**Email:** iowa@ncs99s.org  
**Website:** iowa.ncs99s.org

Saturday, August 26 -  
Sunday, August 27

### FLY IOWA 2017

Ottumwa Municipal Airport (OTM)  
Abel Island Fly-in, float-in, potluck, & BBQ  
**Phone:** 515-964-1398 (Chuck McDonald)  
**Website:** www.flyiowa.org

Sunday, August 27

### Fremont, NE Municipal Airport (FET)

Fly-in breakfast  
7 a.m. - 1 p.m.  
**Phone:** 402-727-2610 (Brian Newton)  
**Email:** newt@bright.net  
**Website:** www.rotaryfremont.org

Monday, August 28 -  
Wednesday, August 30

### 4 States Airport Conference

Kansas City Marriott Downtown  
Kansas City, Missouri  
**Website:** www.4statesairportconference.com

## September 2017

Saturday, September 9

### Marion Municipal Airport (C17)

Pilot social  
8 a.m. - 11 a.m.  
**Phone:** 319-377-0457 (Cole Norton)  
**Email:** cole.norton@fly-iowa.com  
**Website:** fly-iowa.com

Sunday, September 10

### Carroll Municipal Airport (KCIN)

Flight breakfast  
6:30 a.m. - noon  
Fly-in pilots/passengers free  
**Phone:** 712-792-4980 (Don Mensen)  
**Email:** don@carrollaviation.com

Saturday, September 16

### Marshalltown Municipal Airport (MIW)

Fly-in breakfast  
7 a.m. - 11 a.m.  
**Phone:** 641-752-0012 (Stephen Valbracht)  
**Email:** stevevalbracht@gmail.com  
**Council Bluffs Municipal Airport (CBF)**  
Great Plains Wing CAF Flight Breakfast  
Pilot in command eats free  
8 a.m. - 11 a.m.  
**Phone:** 402-981-4633 (Jeff Hutcheson)  
**Email:** jeffhutcheson3@gmail.com

# Iowa Department of Transportation

## Office of Aviation Calendar *Continued*

**Marion Municipal Airport (C17)**  
 Trunk or treat/Chili cook off/Pumpkin drop  
 10 a.m. - 2 p.m.  
**Phone:** 319-377-0457 (Cole Norton)  
**Email:** cole.norton@fly-iowa.com  
**Website:** fly-iowa.com

Sunday, September 17

**Le Mars Municipal Airport (LRJ)**  
 Iowa 99's monthly meeting  
 11 a.m. - 3 p.m.  
**Phone:** 563-650-0342 (Jenny Myren)  
**Email:** iowa@ncs99s.org  
**Website:** iowa.ncs99s.org

Thursday, September 21

**Marion Municipal Airport (C17)**  
 FAA Safety Team Meeting  
 6:00 p.m. - 8:00 p.m.  
**Phone:** 319-377-0457 (Cole Norton)  
**Email:** cole.norton@fly-iowa.com  
**Website:** fly-iowa.com

### October 2017

Sunday, October 15

**Fort Dodge Regional Airport (FOD)**  
 Iowa 99's monthly meeting  
 11 a.m. - 3 p.m.  
**Phone:** 563-650-0342 (Jenny Myren)  
**Email:** iowa@ncs99s.org  
**Website:** iowa.ncs99s.org

Tuesday, October 21

**Independence Municipal Airport (IIB)**  
 Chili fly-in  
 Pilots in command eat free  
 RSVP for 1 p.m. pumpkin drop  
 11 a.m. - 2 p.m.  
**Phone:** 319-334-4000 (Walter Aviation)  
**Email:** office@walteraviation.com  
**Website:** www.walteraviation.com

### November 2017

Sunday, November 19

**Muscatine Municipal Airport (MUT)**  
 Iowa 99's monthly meeting  
 11 a.m. - 3 p.m.  
**Phone:** 563-650-0342 (Jenny Myren)  
**Email:** iowa@ncs99s.org  
**Website:** iowa.ncs99s.org

## Scales Rental Info

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

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

Chapter 135 members (must be member 3 months prior to rental date.) ..... \$25.00 for 3 days  
 National EAA member but not Chapter 135 member .. \$75.00 for 3 days

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

Copy of rental agreement available by fax or email by calling Craig Martin at 515250-3124 or emal to cmartindsm@gmail.com

Scales are kept at Wisecup Willow Aviation (Craig Martin) Nash Field, Indianola.

## Membership Dues

Name \_\_\_\_\_

EAA No. \_\_\_\_\_

Address \_\_\_\_\_  
 \_\_\_\_\_

Phone \_\_\_\_\_

e-mail \_\_\_\_\_

Dues are \$20.00 per year  
 Dues are due July 1 and run through June 30.  
 (After January 1st you may pay \$30.00 for 1½ years)  
**LIFETIME MEMBERSHIP DUES ARE \$200.00**  
 You must be a member of the National EAA.

You may mail your dues to our treasurer:  
 Dave Kalwishky  
 4224 Grandview Ave.  
 Des Moines, IA 50317



## *THE LINDBERGH SPIRIT OF ST. LOUIS FLIGHT AT 90*

**Thursday, May 18<sup>th</sup>**

**Social Hour & Food: 5:15 pm - 6:15 pm**

**Movie: 6:30 pm**

***"The Spirit of St. Louis" Starring Jimmy Stewart***

**Camp Dodge: 7105 NW 70<sup>th</sup> St • Johnston, IA**

- Government issued photo ID required for entry to Camp Dodge -

**Theater Bldg 3583 & Dining Hall Bldg 3572**

**Free for IAPG Members • Guests: \$10 and includes Intro Membership**

**To RSVP & For More Information, Contact:**

**Mike Vogt: (515) 402-7153 • mmm\_iowa@hotmail.com**



**June 17<sup>th</sup>**, at the Iowa Military Heritage Museum – Ankeny airport – Major Mark Musak, presentation on a Howard Hughes conspiracy surrounding his death. Sponsored by the Museum, all EAA members are invited to come.

## **The Faked Death and Final Decades of Howard Hughes!**

Hear an incredible story with the ingredients of fabulous wealth, a reclusive man unable to escape his famous life, assistance from the CIA providing an alternate identity, and a loving wife who knew how to keep secrets.

On Saturday, June 17, at 1:30, at the Iowa Aviation Heritage Museum, Major General (ret.) Mark Musick will be presenting the details of how Howard Hughes pulled the wool over the eyes of the public, faking his death in 1976, and living an additional 25 years with the woman he loved. Hughes finally died in Nov. 2001.

Mark Musick grew-up in Nebraska and immediately went into the Air Force after college. He spent eight years on active duty prior to returning to Nebraska and joining the Nebraska Air National Guard.

He retired from the military in 2008 at the rank of Major General. During his military career he was the Commander for the Nebraska Air National Guard, the Assistant Adjutant General for the Air National Guard in Nebraska, and his final position was the Mobilization Assistant for the Deputy Commander of United States Strategic Command at Offutt Air Force Base.

In early 2002 he met a woman named Eva McLelland, whose husband had just died. She relayed an unusual story to him which he spent years researching. Please attend and hear about this history changing story.



## EAA Chapter 135

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

## 2017 Chapter 135 Officers and Board Members

### Officers:

President .....Ralph Briggs ..... 515-554-8187 .....rbriggs55@gmail.com  
Vice President.....Vacant  
Secretary .....Vacant  
Treasurer .....Dave Kalwishky..... 515-266-4001 ..... dave@kalwishky.com  
Newsletter Coordinator.....Marc Broer ..... 515-289-2625 .....marc@countylinesprinting.com  
Young Eagles Coordinator .....Alan Core ..... 515-961-4524 ..... indypurr@juno.com

### EAA Chapter 135 Board Members

Craig Martin.....515-250-3124..... cmartindsm@gmail.com  
Mike Graber.....515-993-3421 ..... mgraber914@msn.com  
Paul Reinke.....515-367-2105..... preinke@energycontroltechnologies.com  
Alan Hummel.....515-783-9092..... hummel7304@gmail.com  
Paul Steingrabe .....515-265-1317..... casdogs@q.com