

Cedar Rapids Skyhawks
LOG BOOK

Established 1962 - AMA Charter 1007

crskyhawks.org

MARCH, 2020



**Randy Lepsch's Giant Revolver
with Smoke on. Photo by John Cox**



Officers:

President

Todd Davis295-7311
tjdavis510@gmail.com

Vice President

Gary Owen393-3768
glowen@fmtcs.com

Secretary

Bob Vertz981-0979
bobvertz@gmail.com

Treasurer

Geoff Barrance373-0345
gbarrance@juno.com

Senior Advisor

Wendell Maakestad366-2650
wmaakestad@imonmail.com

Appointed:

Safety Coordinator/Publicity

Todd Davis295-7311
tjdavis510@gmail.com ..

Newsletter Editor

John Spargo393-0171
jspargo@spargoconsulting.com

Webmaster

Randy Lepsch447-0422
rnsiowa@msn.com

Field Coordinator

Jim Buttleman364-7333
tanyabear933@msn.com

<http://www.crskyhawks.org>

Upcoming Events.

Saturday, April 4, 2020, 10:00 AM to 4:00 PM, Lindale Mall Show. (More information in the Minutes)

Sunday, April 5, 2020, 7:00 PM, General Club Meeting at the Hiawatha Library.

Saturday, June 6, 2020, (Rain Date, June 7). **Flight Demo Day**. 1:00 to 4:00 PM.

Saturday, July 11, 2020, Electric Fly.

Saturday, July 18, 2020, Warbirds Over Iowa.

Saturday and Sunday, August 22-23, 2020, Pattern Contest.

September, 2020, Possible club fly 'n swap meet at the field.

He who demands everything that his aircraft can give him is a pilot; he who demands one iota more is a fool.

~Anonymous

“The Skyhawks are a great partner and add a wonderful recreational element to our city.”

Daniel Gibbins, ISA
Former Parks Superintendent
Cedar Rapids Parks & Recreation Department

All club members must read and follow the safety rules. They are available on the website.

Reminder: You must have your current Skyhawks Membership Card to fly at the field.

Your current Skyhawks identification badge must be worn when you participate in a flying activity. If you are flying on a 72 MHz frequency or Ham band, you must use a frequency clip. Thanks.

Cover photographs needed for the Logbook

We would really appreciate people submitting photos for consideration for use as the Logbook cover. Cover photos need to be in portrait mode, and should be as high a resolution as possible, preferably 2000 by 3000 pixels or more. Furthermore, the top third of the photo should be sky or some other appropriate background so as not to interfere with the banner of the Logbook.

Skyhawks Meeting Minutes

March 1, 2020

Todd opened the meeting at 7:00 PM.

There were 18 members present for the meeting.

Geoff gave the treasurer's report; there are 45 paid up members for the 2020 season.

Old Business

2020 calendar events were discussed. Following are the dates and events, etc.

April 4 Mall Show

Mall show will be held at Lindale Mall. Club cost will be \$170 for a sign plus \$25 AMA fee.

Todd provided a picture to the mall management which showed the stage layout from previous shows – they agreed to make it larger this year. Also a flyer will be sent out ahead of time which will help advertise the event. Expect the mall show hours to be ~ 10:00 AM to 4:00 PM on that Saturday. Geoff will bring an RC flight simulator for demo and public use. Everyone is encouraged to bring something to the show!

June 6 Demo Day

July 11 Electric-Fly

July 18 Warbirds Over Iowa

August 22-23 Pattern Contest

September Possible club fly ‘n swap meet at the field

FAA NPRM was discussed. The last day for comments to the proposed regulations is / was Mar 2.

New Business

Runway maintenance discussion will be forthcoming pretty soon. People that have been out to the field lately report the runway is really soft right now so it's advised not to

walk on it if at all possible.

Question came up regarding the possibility of having a permanent shelter built at the field. It was noted the CR Parks and Recreation requirements would need to be complied with which would cost an estimated \$20K. It was also explained that since we lease the field, there's a conscious effort to try and keep things simple as well as minimize what is considered permanent out there as there's no guarantee how long the lease will be continued.

Wendell provided a list of planes and field equipment that is for sale from a non-member. Contact Wendell if you would like more information. Todd commented that anyone can send him an email if you have things to sell to Skyhawks members. He will send out the info to the club.

Show N Tell

Gene Thorn brought his rebuilt Aero Hawk. This is the third time it has been transformed from kit pieces to a finished model and ready for maiden flight #3! Some of the modifications made to the 5 lb 12 oz plane include:

- 1) changed from rubber bands to wing bolts for wing attachment
- 2) replaced the glow engine with a 800 kV electric motor which can swing an 11x7 prop
- 3) uses a 4S 2200 mAh LiPo battery which is estimated to provide about 5 min flight time

Todd Davis brought his 1:3.75 giant scale Ki-61 "Tony" fuselage to show the completed cockpit. This bird is powered by a ZDZ 112cc inline twin, has a 120" wingspan (yes, that is 10 ft) and weighs approximately 37 lb. The cockpit is scratch built and even has Japanese nomenclature on the instruments.

Kevin Johnson brought a field box and radio gear that he acquired from an estate sale. He offered to give away all of the items for free to any club member(s) that might be interested in them.

Randy Lepsch shared and demonstrated some very interesting results of a study he had done recently regarding power losses caused by RC switches and wiring. It was a real eye opener! His test set up consisted of a typical RC installation that included a receiver, 5 servos, NiMh battery and OEM switch harness. He instrumented an oscilloscope to monitor the actual voltage getting to the receiver while the servos were moving under load. A couple of examples follow.

- 1) A 2000 mAh battery at 6.4 volts resulted in only 3.3 volts at the receiver.

2) A 4200 mAh battery at 7.0 volts resulted in only 4.2 volts at the receiver. The findings determined the voltage loss was caused by the switch harness and small wire gauges being used. Randy's solution to this situation is to replace the OEM switch harness with a DPDT toggle switch and run parallel wires from the battery to the receiver via the switch. He also intends on using 2 batteries in parallel using diode isolation as a form of redundancy in the system. His presentation was very informative and appreciated by all. Following are some more details from Randy's testing at home for the Logbook.

2000mAh NiMH AA size, 5 Cell (> 1V droop at the battery under load)

Battery voltage no load at the RX = 6.5V

No switch harness, just servo wire 24 AWG = 4.2V at RX under load

Single OEM Switch harness = 3.6 V minimum at RX under load

4200mAh NiMH C size, 5 cell (< 0.5V droop at the battery under load)

Battery voltage no load at the RX = 7.1V

No switch harness, just servo wire 24 AWG = 5.2V at RX under load

Single OEM Switch harness = 4.4V at RX under load

3000mAh Venom C size, 5 Cell (< 0.5V droop at the battery under load)

2 wires for power and 2 wires for GND to the RX through a DPDT switch and using the heavy gauge wire off of the battery.

Battery voltage no load = 7.0V

Voltage at the RX under load = 6.0V

Conclusion:

6V, AA size, 5 cell had the most voltage droop under load of > 1V at the battery

Recommend using a C size battery for RX with heavy gauge wire and higher current connector. Double up wires for Power and GND and running two switches minimized the voltage drop at the receiver. This includes two connections to the RX through Y cords.

Meeting ended at 7:50PM.

Skyhawks VP, Gary Owen

Gene Thorn's Aero Hawk



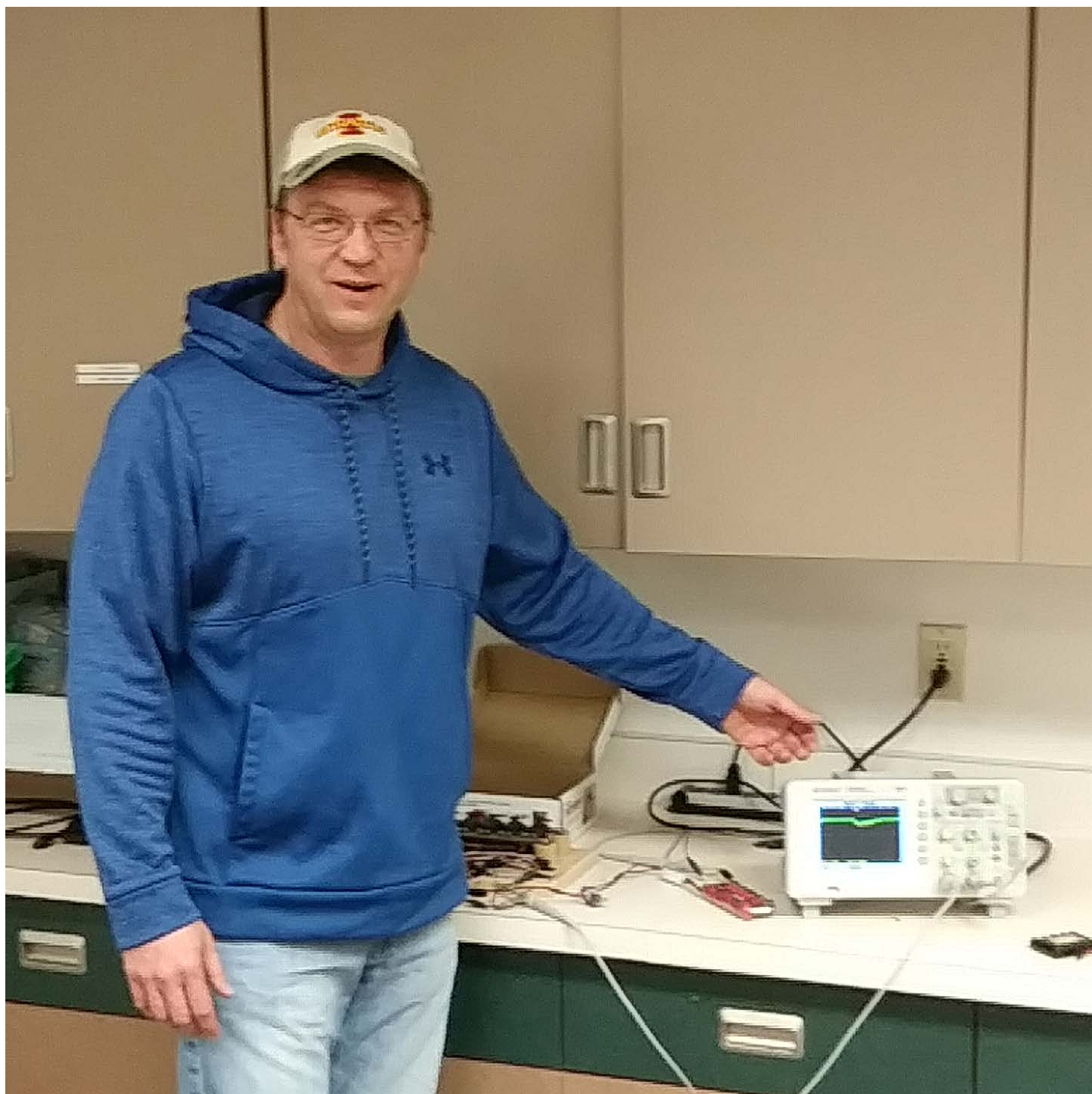
Todd Davis' Giant Scale Ki-61 "Tony" with Scratch Built Cockpit



Kevin Johnson Donates Field Box and Equipment



Randy Lepsch Demonstrates Battery Voltage Loss



Superstition Pattern Classic contestants; Mark Woytassek, Vince Bortone, Pete Collinson and Mark Barnett February 22&23, AMA Field, Mesa Arizona



Desert Pattern Challenge contestants Mark Woytassek, Pete Collinson, and Mark Barnett February 29 & March 1, East Valley Aviators Field, Apache Junction, Arizona



Mark Woytassek pointing out a possible flight hazard at an RC field outside Florence, Arizona



Mark Woytassek, Gary Switala, Mark Barnett, Jim Newman, Vince Bortone at Arizona Model Aviators Field, Mesa, Arizona



Cedar Rapids Skyhawks Instructors

We want you to have a positive experience learning to fly. The more successful you are starting out determines if you will enjoy the hobby. The most important first step is to find an instructor to help you get off to a good start. The best way to contact an instructor is to call and make an appointment. There is also an Instructor Availability Calendar on the Skyhawks Website.

Airplane Instructors

NAME	PHONE	EMAIL
Todd Davis	361-2513	tjdavis510@gmail.com
Wendell Maakestad	366-2650	wmaakestad@ImOnMail.com
Mark Barnett	310-2783	sharp11blade@gmail.com
Chuck Ficken	444-0839	charlesficken65@gmail.com

Helicopter Instructors

NAME	PHONE	EMAIL
David Shema	398-0995	dkshema@mchsi.com

Cedar Rapids Skyhawks Radio Control Club

Membership Application

Date: _____ Date of Birth: _____

Name: _____ Spouse's Name: _____

Address: _____ City: _____ Zip: _____

Phone: (H) _____ (W) _____ Email Address: _____ AMA#: _____

Proficiency Level (Circle One): Student Pilot Instructor

Xmitter Frequencies Used: _____ / _____ / _____ / _____

Active (Circle all that apply): Power Glider Helicopter Other _____

How did you hear about our club? _____

Membership Fees

Family \$78.00	Open \$60.00	Senior Citizen (65 and up) \$42.00	Junior (up to 14) \$12.00	Senior (15 to 18) \$30.00	Associate \$20.00
-------------------	-----------------	---------------------------------------	------------------------------	------------------------------	----------------------

All fees paid after October 1st each year will pay for the balance of the current year as well as for the following year.

If you are unable to pay at a club meeting, send your renewal with PROOF OF AMA (Photocopy of your current AMA membership card) to: Cedar Rapids Skyhawks, 1590 17th Avenue, Marion, IA 52302. AMA MEMBERSHIP REQUIRED TO FLY MODEL AIRCRAFT. YOU MUST SHOW YOUR CURRENT AMA MEMBERSHIP CARD OR PROVIDE A PHOTOCOPY TO A CLUB OFFICER IN ORDER TO OBTAIN A CLUB MEMBERSHIP CARD. ASSOCIATE MEMBERS WHO DO NOT FLY ARE EXEMPT.

Cedar Rapids Skyhawks
1590 17th Avenue
Marion, IA 52302

Deadline for submissions is the Tuesday following the Board meeting or the fifteenth of the month, whichever is later.
Consideration for exceptions will be made where the information was not available in time and is of wide interest.