

FlightLine

A Monthly Publication of Collins Model Aviators

August 1997



August's Featured Model — Large B17 model at the Skyhawks' Demo Days

Reminders:

- August's CMA meeting is on Thursday the 7th in the main plant cafeteria at 5:00 p.m.. Come by and help plan the September 6th Fun Fly.

August's Featured Model: I took this photo of a B17 at the Skyhawk's Demo days at the Marion Airport on Jun 30th. The model was powered by four four-cycle motors. I bet this one really sounds great rolling down the runway for takeoff.

For more photos from the fun fly see *Skyhawks Demo Days* on page 2 ↗

James H. Doty, FlightLine Editor →

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**Skyhawks had a good turnout for Demo Days at the Marion Airport.
Dan Coolie took this photo when he stopped by.**



Demo Days featured a static model display, flight demonstrations, flight training, and a raffle.



Flyers ready for demonstration flights. Demos included aerobatics, an electric glider, and even a candy drop for the kids.

Skyhawks' Demo Days

by Jim Doty

On Sunday June 30th the Skyhawks took part in the Fourth-of-July festivities at the Marion Airport with their Demo Days. Activities included aerobatics demonstrations, a quiet flight by an electric glider, and a candy drop for the kids.

After the flight demonstrations crowd members lined up for quick sample flight training session. It was a great way to see what it is like to fly RC plane.

I got some good photos of the planes. I put the photos under my FlightLine web page:

<http://rweb.cca.rockwell.com/~jhdoty/fl/planes/demodays/index.htm>

Demo Days also helps the Skyhawks to raise money. They raffled off a complete ready-to-fly Sig LT-40 including a SuperTiger engine and an Airtronics four channel radio. The plane was beautiful, and it was obvious a lot of care went into the construction. The plane was even decorated with special Skyhawks graphics.



A lot full sized planes also came out to the Event. Its a great place to look for scale modeling ideas.



The Skyhawks sold raffle tickets to raise money



The Skyhawks raffled off a ready-to-fly Sig LT-40, fully assembled complete with a SuperTiger 45 engine and four-channel Airtronics radio. Just add fuel and go



I think this guy forgot his transmitter



R/C Adventures set up a booth at the Marion Airport. I don't know how much they sold, but it is nice to have local businesses showing their support for the event.

Even the ticket tumbler was first-class. An eight-sided colored Plexiglas added style to the drawing. Unfortunately someone "less worthy" than myself won, but the plane will probably last longer in someone else's care anyway. I haven't gotten a chance to stop by the Skyhawks field lately to see if it is flying.

It's great that the local modelers have a way to show off our hobby. Its this kind of exposure that keep up membership.

James H. Doty, FlightLine Editor ➔

President's Column

by John Michael

It has been a few months since the club has heard from me. Blame that on the busy spring and summer months. But also, there has not been much unusual going on. Flying season has been going strong. The weather on Tuesday and Thursday evenings has generally been good, and we seem to have a consistent good crowd for training nights out at the field.

I have to admit that when I cracked up my third trainer airplane after only a few flights this spring I was somewhat discouraged. Not only did I crash the plane, but I still had no idea why. If I could put my finger on something wrong, that may be different. But just losing control and watching it come down doesn't make a guy feel very confident. I blame it on a combination of questionable radio and lack of skill.

Since that latest crash I am flying again, and with the same airplane, thanks to the skillful hands and glue bottle of Geoff Barrance. Geoff helped me put all the pieces back together, made a few pieces to help hold it together, and generally gave me the confidence I needed to think that it could fly again. Thanks Geoff.

I also got a new radio. I hate the thought of having an expensive piece of hardware sitting around not useable, but I have to admit I don't trust it anymore. There will always be that question. A new (fancier) radio helps.

There are some things that we can start thinking about as the summer speeds by. The first is the annual fun fly the first Saturday in September (Sept 6 - rain date Sept 13). People are starting to make plans for that day. This year we'll try starting later in the day to try to avoid the afternoon winds. We'll start gathering at 2:00, have the family picnic about 4:00, and then start flying around 5:00. The days are getting noticeably shorter by September, so we'll have to make sure we get started flying early enough. We'll see how this schedule works out.

The second thing to start thinking about is the election of officers. I know, that's in October. Why start thinking about it now. But hey, the country just about gets over one election when the politicians start campaigning for another. I can bring it up

before October. I would like all club members to start thinking about serving the club as an officer. There are many people in the club that have not taken a turn with one of these duties. So I'm bringing it up early. You can all start making plans to have your name on the ballot.

I think I dropped the ball on the July meeting. I was supposed to send everyone an E-mail and forgot. The meeting was at the field, and very few came. The next meeting is August 7th at the main plant cafeteria, unless you are notified otherwise. Watch the FlightLine just in case. I hope everyone plans on being there.

John Michael, CMA President →

From the Field

by Rich Dean

It is great to see all the new pilots and their planes at the flying field this summer. We have had several evenings of great weather with lots of planes getting into the air and new pilots getting lots of stick time. One of the questions that comes up is what propeller should be used on an engine. The instructions that come with an engine can be used as a guideline.

John Crilley showed me the instructions for a .90 four stroke he had just purchased and it must have had a dozen choices depending on the planes desired speed, size, if it was scale or sport and so on. He scanned the list and chose a size out of the middle and it has worked fine.

For .40 sized engines a 10X6 (10 inches in diameter, 6 inches in pitch) works fine. The .45 sized engines are running good with a 10X7 and the .61 sized engines are running good with 11X7 props.

If you have trouble finding the peak RPM when setting the high speed needle on your engine the prop is too big, in diameter or pitch or both.

When taking off listen to the engine RPM. If the engine sounds like it unwinds a little when you are done climbing and have just leveled out you have matched the prop to the engine. If the engine unwinds fully when you are climbing and does not seem to unwind when you level out chances are the prop is too small.

There are big engine/small plane combinations out there that break all the rules but by the time a pilot is flying one of those combinations he has usually figured out what prop goes with which engine.

Another question that comes up is how close to the suggested center of gravity(CG) does the plane need to balance? It is desirable to be as close as possible. The plane should balance somewhere between the CG to 1/4" in front of the CG. If the plane balances behind the CG it is tail heavy and is likely to stall at a higher speed than if it is correctly balanced. We don't need the plane stalling and possibly doing a snap roll when slowing down for a landing. But we all practice slow flight and know the stall characteristics of our airplanes right!

If the CG gets too far forward and gets nose heavy the plane will not stall but at landing speeds the horizontal stab may not have enough bite to hold the nose up. It is a bad feeling to set up for a landing, slow down and run out of elevator control as a plane continues to dive for the runway.

If you are experimenting with moving the CG make a small change then try slow flight to see if the change has the desired effect. If the plane snaps when slowed down or dives and you are bending the transmitter stick hoping to level out the slow flight you know you are going to be in trouble when it is time to land. If your plane snapped, land as soon as possible. Any fuel you use up will make the plane lighter in the nose or more tail heavy causing the plane to snap at even a higher speed. So you need to land at a higher speed than the plane will snap. If the plane did a big dive when slowed down indicating it was extremely nose heavy fly it around and burn off fuel then land at a high speed.

Some very good flying ARFs are showing up at the field. They are built light and are showing themselves to be as good as some of the kit built planes. If you are short on time to build a plane or you have crashed your plane in the middle of the

flying season and want to get flying again before the snow flies then an ARF may be the kind of plane to get. Talk to the pilots at the field who are flying them and get some ideas for any modifications they made to the plane or would make if they were to build another one like it. One area that seems to need help in most ARF planes is the way the servos are mounted. They are screwed into a piece of 1/8" three layer lite ply. It is not enough wood to keep the screw from working loose after some flying. Add some 1/8" five layer aircraft ply at the servo mounting locations to

give the screws more wood to bite into. Some builders harden the screw holes with CA before final assembly which adds a lot of strength to the wood.

Another area that seems to need help in most ARF planes is the aileron torque rod wire that goes into the aileron. Some ARF manufacturers just plug the wire into the hole without gluing it in. This lets the wire work against the balsa making the hole larger. The problem is usually first noticed while flying when the plane makes a low frequency buzzing sound that is different than any normal flying sound. This sound usually indicates a loose control surface flopping in the breeze transmitting severe shock back to the controlling servo. If you are lucky to slow the plane down before the servo gears get stripped the flutter will usually stop. Land immediately and find out which control surface has a loose linkage problem.

In the case of the loose fitting aileron torque rod wire drill a hole through the aileron covering and balsa to the wire. Drop glue in the hole to glue the wire to the balsa aileron, patch the small hole in the covering and the problem is fixed. Inspect the aileron servo and linkage for damage by running the aileron full left to full right from the transmitter while holding onto the aileron and providing some resistance. There should be positive response at the aileron with no dead time or slop. A clicking sound indicates stripped teeth on a gear inside the servo. Replacement servo gear sets are readily available at the hobby shop for \$3-\$4.



The Ankeny Air Show is a big event with great model shows and battle reenactments

Time to stop talking and get flying. See you at the field.

Rich Dean, CMA Flight Instructor →



The pyrotechnic shows are one of the great draws at the Ankeny Air Show

Ankeny Air Show

by Jim Doty

Photos by Basil Tilley and Dan Cooley

I didn't make it to the Ankeny Air Show this year, but Basil Tilley and Dan Cooley went to the show and were kind enough to let me scan some of their photos. The event is held every year and features displays and flying demonstrations of models as well as full scale planes.



The Star Aerobatic Team put on a great show



A full scale B25 bomber makes a pass with bomb doors open



If you thought the B17 on the cover was big, take a look at this one. Yes those are full sized chairs in the photo. It takes two transmitters to handle this baby.

One of the best parts of the show are the battle reenactments. These presentations are full of pyrotechnics and planes, always a favorite combination.

There are also many scale models and historic full scale planes. If your going to build a scale model, this is a good place to get a look at the original.



A B2 bomber makes a pass over Ankeny

Even the B2 Bomber made a fly-by. It's not often you get a chance to see one of those.

I wish I had been able to go to the show, but the photos from Dan and Basil let us share a little of the fun. Thanks guys, mabe next year I'll be able to join you.

James H. Doty, FlightLine Editor →

What's the frequency Kenneth?

by Plenny Bates

Forwarded by John Michael and Geoff Barrance

This is some info on channel interference provided by an interested outsider. If you don't know who Plenny Bates is, he is a retired doctor who is interested in R/C, mainly electric I think. He flies electrics at that sod farm that's about 3 1/2 miles west of our field. People in the Skyhawks seem to be very well acquainted with him.

John Michael, CMA President

As of 7-9-97 this is the status of 72 MHz band.

- Between channels 11 & 12 station comes and goes.
- Between channels 23 & 24 constant signal.
- Between channel 27 & 28 station comes and goes.
- Between channels 33 & 34 constant signal.
- Six meter band has been clean every time I have checked it.
- I have not checked 75 MHz band.

Nothing has changed since the March report.

Plenny Bates

plennyb@comic.net

Come to the Iowa City Fly-In

by Mark Hefron

Iowa City is having a fly-in:

Date: Sunday, August 24th

Time: Starts at 7:00 am

Place: Iowa City Municipal Airport

This is similar to (although better than) the Fly-In Breakfast at Marion Airport (no risk of being eaten by a pet mountain lion).

No, the Blue Angels, Thunderbirds or Bob Hoover will not be there but, there are lots of experimentals, great radio controlled aircraft demonstrations and other interesting aircraft.

There will be aircraft and helicopter rides, parachuting demonstrations and generally a lot of fun stuff for aviation enthusiasts. If you will be flying in, I have a copy of the FAA Temporary Arrival Procedures for this event. If you have any questions you may contact me 5-0402 or Iowa City Flying Service at 800-373-4237.

Hope to see you there!

Mark W. Hefron →

Local Events

July 30–Aug 5 EAA Annual Fly In Oshkosh, WI

Aug 2–3 Giant Scale & Jets. Oskaloosa Airport

Aug 10 Skyraiders Fly-In, Moline, IL

For more information contact:

Dan Jones 309-755-5621

Aug 15–17 SKYHAWKS Float Fly, Hannen Lake, Blairstown, IA

Aug 16–17 1st Claude McClough Fly In, Blakesburg IA

For more information call 515-682-0203.

Aug 16 Blackhawks Fly In, New Hartford, IA

For more information call 319-277-0211

Aug 23 SKYHAWKS Helicopter Fun Fly

Aug 24 Aerohawk Big Bird Fly In, Iowa City Airport

For more information call 319-354-5705

Aug 30–31 MDA Fly In. Taylor, MO

For more information call 573-393-2098.

Aug 31 Sig Memorial Fun Fly.

For more information call SIG Mfg.

September 6—CMA Fun Fly (rain date Sept 13)

👍 CMA Recommended equipment ✓

CMA members have had good luck with the following equipment:

Plane: Sig Kadet LT-40 — Great instructions, easy to build, great flyer

Engine: SuperTiger 45 — Powerful reliable, easy to set up

Radio: A good 6 channel radio with dual rates such as Airtronics Vanguard V6DR, or Radiant RD6P; Futaba Skysport 6VA, or 6XA; or JR XP642.

The CMA recommends the above equipment to any beginning flyer. However, there are many other good choices, and no particular brand of equipment is required to receive flight training or to fly at the CMA field.



Heads Up, CMA Activities

Thursday, August 7, 5:00 pm—Club Meeting

Friday, August 22, 5 pm—FlightLine Deadline

Thursday, September 4, 5:00 pm—Club Meeting

September 6—CMA Fun Fly (rain date Sept 13).

Friday, September 19, 5 pm—FlightLine Deadline

Note: Meetings and build sessions will be held in the 35th street N.E. Facility (main plant) Cafeteria building 140.



For membership information:

Contact: David Gillespie
CMA Secretary/Treasurer
MS 153-163
x5-8512
djgilles@collins.rockwell.com

For an AMA membership application:

<http://modelaircraft.org/Mem/Memapp.htm>



Send your input for the CMA Web Page to:

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AMA National Newsletter goes on-line:

<http://modelaircraft.org/News/Newsletters.htm>

For selected articles from AMA club newsletters around the country

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Rich Dean
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Send your input for FlightLine to:

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Flight Training

Flight Training is given every Tuesday and Thursday night from 6:00 pm until dark weather permitting

Tuesday night introductory flight training is given Most Tuesday nights at least one club trainer is available for introductory training.

Advanced flight training is held Thursday night Beginners with their own airplanes are welcome, but the club trainers are usually not available unless requested in advance

Check the CMA Hotline **295-8888** for the latest information on the training sessions

1997 CMA Membership

<u>M/S</u>	<u>NAME</u>	<u>M/S</u>	<u>NAME</u>
108-103.....	Irvin Anderson	108-136	Patrick Neu
108-166.....	Geoffrey Barrance	137-136	Marion Payne
124-111	Alan Bechtold	108-175	Elio Piccmenti
124-111	Bob Buschette	137-152	Steve Plantenberg
137-109.....	Brian Collins	164-100	Crist Rigotti
124-111	Dan Cooley	124-123	Wayne Savold
124-115.....	Rich Dean	137-137	Troy Simonton
153-264.....	Tom DeWulf	108-136	Duane Smith
153-163.....	Dave Dillman	108-136	Brian Smith
124-300.....	James Doty	124-115	David Sneitzer
106-183.....	Mike Eastman	105-152	Basil Tilley
153-260.....	Doug Emerson	137-101	Steve Timm
153-163.....	David Gillespie	107-140	Floyd Van Auken
153-163.....	David Gillespie (for James)	107-140	Floyd Van Auken (for Ehren)
153-163.....	David Gillespie (for Amy)	139-142	Charles Ward
108-166.....	David Mason	153-264	Bryan Wesner
108-166.....	John Michael	153-264	Bryan Wesner (for Michael)
108-166.....	John Michael (for Kevin)	107-110	Victor Wolfe
108-136.....	David Neu	124-115	Mark Woytassek

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