

# FlightLine

A Monthly Publication of Collins Model Aviators November 1996

**☛ Notice:** Due to construction in the main plant cafeteria, November's CMA meeting on Thursday the 7<sup>th</sup> will be held in the C-Avenue Complex cafeteria in building 106, and November's Build session will be postponed until December 5<sup>th</sup> after the normal meeting in the main plant cafeteria.

**November's Featured Models:** These are four of the models that showed up at September's fun fly.



Irv Anderson's SIG Senior



Michael and Bryan Wesner's SIG LT-40



Mike Eastman's SIG Senior



Doug Emerson's SIG Astro Hog

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## From the President

by John Michael

As I write this we are pretty much at the end of another flying season. It has been a fun year. Tuesday and Thursday evenings gave us lots of good weather and many people took advantage of the time to try out new airplanes and get some needed flying practice. I guess no one actually was signed off this year, but many are close.

I made it my goal to solo and be signed off by the close of this season. Unfortunately, that didn't happen. Having my airplane get totaled and being busy with some other things slowed me down. But I did make a couple of landings on the strip (and a couple in the corn) by the end of the season, so I am also getting close. Next year.

I didn't get a chance to publicly thank all those who had a part in the planning and running the picnic in September. The events were fun, the prizes were great, and everyone there had a great time. It's too bad more of our members could not come, but maybe next year.

If you didn't get a chance to see the club display on the bulletin board in the main hall on building 106, you missed a good display. Word has it that at least 30 back issues of the FlightLine were grabbed, and a number of club applications. Thanks to Rich Dean for organizing the effort, and Irv Anderson, Duane Smith, Basil Tilley, and Jim Doty, and anyone else involved I didn't hear about, for their help. It seems to have generated a lot of interest, so lets hope it generates a few new members.

The end of flying season signals the beginning of building season. Be sure to bring your projects to the build sessions in the main plant cafeteria for expert advise and help with that project that will be flying next year. Watch the FlightLine for the build session schedules.

Finally, don't forget to send in your club membership forms. And don't forget we need people willing to take the reigns of the club for next year. Send in those officer nominations.

See you at the November meeting.

John Michael, CMA President →

## Winter Build Sessions

by Rich Dean

The flying season is winding down. It is hard to get any flying done after work and by the time this newsletter goes out flight instruction after work will be over. Hopefully there will still be a couple of nice Fall weekends to close out the flying for the year. Summer really went fast but we had a lot of great flying this year.

Build sessions will start in November. They are the second Thursday of the month and will continue through March. **[Note: Because of cafeteria construction November's build session will be postponed until December 5<sup>th</sup> after the normal club meeting. JMD]**

Remember the guys who won kits at the fun fly:

- 1) Darrin Nebraska – Sig Ultimate Fun Fly 40 Biplane
- 2) John Michael – Ace Seamaster 40
- 3) Doug Emerson – Sig Mid-Star 40
- 4) Dave Dillman – Sig Four-Star 40
- 5) Dave Gillespe – Sig Kadet LT-40

If you want to see the kits or plans, let them know, or even better have them bring the kit to a meeting or build session for everyone to examine. There are many good construction techniques out there to get ideas from.

John Michael, Basil Tilley and I are building Clancy Aviation Lazy Bees [see Life and Times of a Bee on page 4] this winter and I hope to do a demo using the suggested method of laminating the wingtips and tailfeather outline pieces at the November meeting. Fly while you can then clean off your build table, Winter is around the corner.

Rich Dean, CMA Flight Instructor →

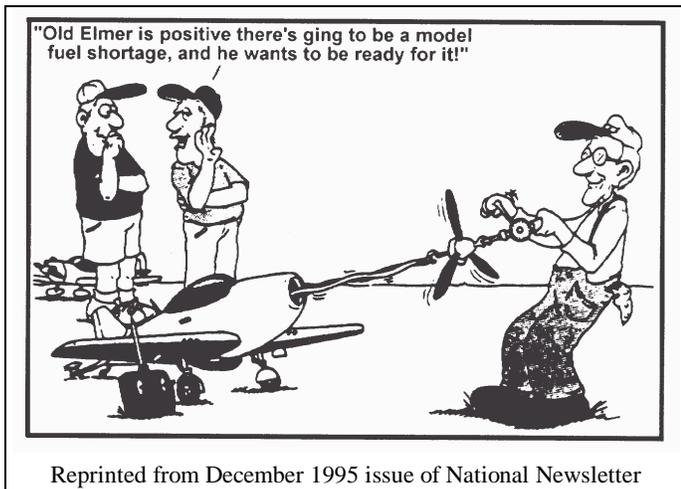
## The CMA Needs YOU

by Jim Doty

Its near the end of another year for the CMA, and its time to think about who will serve the next shift in the club leadership. We've had a good year, but we need your help to keep it going. A club like ours can only continue to flourish through the active participation of its membership. ↻

So volunteer as a club officer, or ask another club member if they are willing to run for office. If you promise to write an article every month, you might even talk someone into running for FlightLine editor ☺.

James H. Doty, FlightLine Editor ➔



## Anodize Aluminum

by Don Blewett

Want something different? How about learning to anodize aluminum? Imagine a tinted Tru-Turn spinner on the front of your plane. The following sequence is borrowed from Popular Hot Rodding Magazine, May 1 994.

The process of anodizing can be replicated with some common household items, an automotive battery charger and a battery electrolyte. Industrial anodizers use chromic acid . . . pretty radical stuff that should be avoided. Its properties can be imitated by electrolyte, which is actually sulfuric acid. It too, produces a hard finish that can be tinted, and when weakened by mixing it with 30% water, is quite safe to work with (of course, normal safety precautions - goggles and rubber gloves - should be adhered to, to guard against accidents). The acid (acquired for about two dollars a gallon at most battery wholesalers) is mixed with water in a rubber container. We used a common bucket to duplicate the process. Don't use a glass container, since it's prone to breakage, and by all means do not attempt this process without adequate

ventilation. A by-product of this process is hydrogen and we don't want a little garage Hindenburg. Always pour the acid into the water, not the water into the acid; this allows the acid to quickly and safely dilute without incident.

After mixing the acid, a negative contact (cathode) is created by wrapping a hoop fashioned of common aluminum ground wire (Home Depot) with aluminum foil (Vons). This is placed in the bottom of the bucket and connected to the negative clip of a car battery charger. The positive clip is attached to the pre-cleaned pan (creating an anode - hence the name anodizing) and immersed in the weak solution. Once the anode begins to fizz, leave it in the acid for 10 - 15 minutes. Although not necessary, you can use an ohmmeter to test the part. If the surface no longer conducts electricity, it is ready. Turn the power off and rinse the part in cold water (and dispose of the acid by diluting it down the drain).

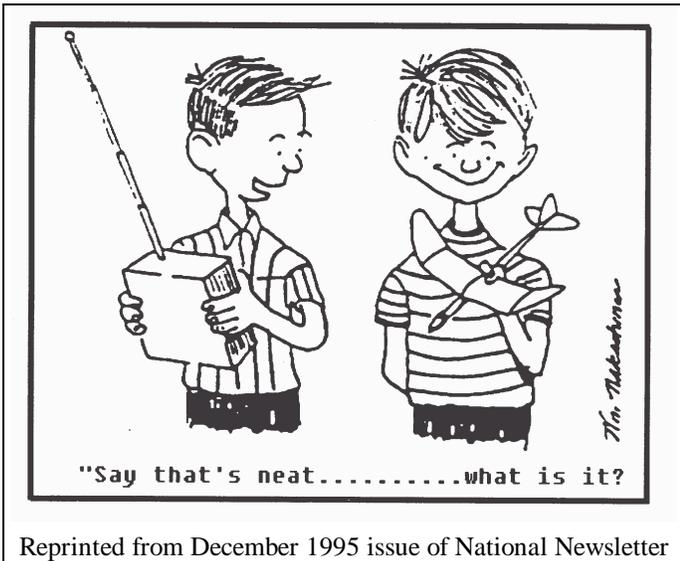
Now you're ready for the color. All that's needed is RIT dye. What a color selection! This part of the process is just like tinting canopies. Mix up a strong solution of dye and water in a container (that didn't come from your wife's kitchen) and place it over a low heat source. The stove works fine (but if you do this in the kitchen and something happens, don't blame me). The dye must be warm but not hot; too great a temperature will seal the surface and it will not accept the dye. Put the part in the solution. Check on the part frequently until the color is slightly darker than the desired. Then remove the part from the dye and dip it into boiling water to seal the surface. This step will leach some of the color out which is why you dye it slightly darker. Industrial anodizers use a nickel-acetate solution, but it's difficult to locate; boiling water works fine.

That's it! Make sure and try some test pieces before you attempt your \$35.00 spinner. The colors that are created are not always what you would expect. For instance, to get gold you use red dye. Gold is the first tone created by red. Green dye creates a unique yellow-green before darkening.

The pre-cleaning step is very important. Use carburetor cleaner or something similar to degrease the part first. Even fingerprints can cause problems in the final finish. Also the current density, or amps per square foot of surface, will limit how big a part you can anodize. Anodizing usually requires 10 to 40 amps per square foot; since the only thing that determines current is the size of the anode and the concentration of the acid solution, this process is on the low end, which is fine for the kind of work you will be doing.

From: The Transmitter  
Larry Hawks, Editor  
PO Box 1742  
Abilene, TX

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Reprinted from December 1995 issue of National Newsletter

## Life and Times of a Bee

by Wayne Meredith

The Lazy Bee was designed to fly in small fields like back yards. That makes it a perfect plane for the RAMAC field, I figured. Well, just joking, actually it can fly in an area as big as the pit area. This whole plane takes up about two square feet.

I chose to power mine with the O.S. 10 FP motor. For those of you not familiar with this powerhouse, it is pretty much equivalent to a couple of white mice on a slippery plate. This is a light engine though, and light is the secret of this plane. Mine came in at 32 ounces, a little over weight by about 3 ounces. Those of you who know me will probably find it hard to believe that I was only three ounces overweight, but honest, that's it!

This plane has only control over the rudder, elevator and throttle. Ailerons can be added but, of course, this will add weight. You can do barrel rolls, loops, fly inverted for about three seconds, do tail spins and anything else

you want to try at 10 to 20 feet altitude. I have also enjoyed flying this little plane at high altitude, which is about (I guess) 600 feet where it becomes a little dot in the sky. At this altitude you have to fly very carefully. You don't want to make any large control inputs. Have it trimmed before you get this high and then don't touch your elevator, just slight rudder inputs to change the course of the dot. I trim mine to climb at a moderate rate and circle by itself. Another good thing to know is what to do if you lose sight of the plane. You want to be able to bring it down so you can find it and not have it break up from too much airspeed. This is something you have to experiment with before you go high to find out what to do with those control sticks. Sometimes it may be an inverted flat spin, or a plain flat spin or even something else. I reduced throttle to about 1/4 throttle and gave it full up and

full right rudder for a controlled decent. This allowed me to pull out at about 15 feet and power back up. It is an attention getter.

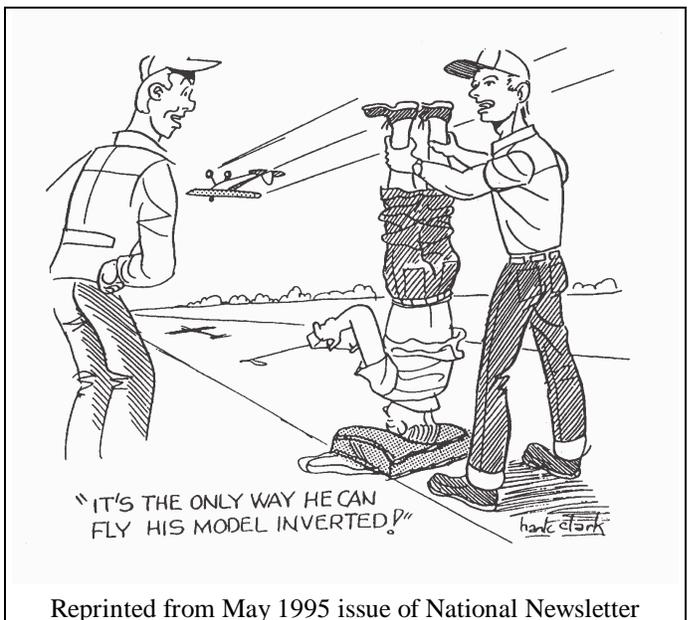
Rudder rolls at ten feet look daring, but with this gentle little flyer, they are really quite easy. Just pull the nose up a little then give it full rudder in either direction and when it rolls on its back. Feed in about 3/4 down elevator while still holding that rudder and then release the elevators as it rolls back up to upright flight and give it a quick blip of up elevator and you will be straight and level at the same elevator from where you started. Oh, yeah, don't forget to start breathing again!

Alas... my Bee flew away and no amount of searching found her anywhere. Actually, I think I flew it so much I ran the batteries down. However, it was not to remain lost forever. Thanks to the efforts of Art Steinbach who, with the help of a satellite positioning gadget, set out on an organized search for it and found it on January 1<sup>st</sup>.

I charged it up and flew it some more that day until something went wrong and it quit responding to control during one of those rudder rolls and it just kept rolling until it augured in. Well, may the Bee now rest in pieces. I recommend this plane to others and will again someday build another one. ~

from The Transmitter  
Ken Caldwell, Editor  
6526 Clearview Dr.  
Anderson, CA 96007  
Craig Watkins, Coventry, RI

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Reprinted from May 1995 issue of National Newsletter



## **Heads Up, CMA Activities**

**Thursday, November 7, 5:00 pm—Club Meeting**

**Note:** November's club meeting was moved to the building 106 cafeteria)

**Note:** November's build session was postponed and will be held after the December 5<sup>th</sup> club meeting

**Friday, November 22, 5 pm—FlightLine Deadline**

**Thursday, December 5, 5:00 pm—Club Meeting**

**Thursday, December 5, 6-9 pm—Build Session #1**

**Thursday, December 12, 6-9 pm—Build Session #2**

**Friday, December 13, 5 pm—FlightLine Deadline**

**Note:** The cafeteria construction should be over by the first of December, so December's meetings and build sessions should be held in the 35th street N.E. Facility (main plant) Cafeteria building 140. Look in next month's FlightLine for any changes.



### **Send your input for FlightLine to:**

James H. Doty

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### **Send your input for the CMA Web Page to:**

Tom DeWulf

tvdewulf@cacd.rockwell.com

### **1996 CMA Staff**

<b>President:</b>	<b>John Michael</b>
<b>Vice President:</b>	<b>Tom DeWulf</b>
<b>Secretary/Treasurer:</b>	<b>Duane Smith</b>
<b>FlightLine Editor:</b>	<b>Jim Doty</b>
<b>Web Page Editor:</b>	<b>Tom DeWulf</b>

**Flight Instructors:**

**Rich Dean**  
**Dave Decker**  
**Dave Dillman**  
**Mark Woytassek**

**Flight Instructors in training:**

**Irv Anderson**  
**Tom DeWulf**

**Test Pilots for first flights of new airplanes:**

**Rich Dean**  
**Mark Woytassek**

# 1996 CMA Membership

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<u>M/S</u>	<u>NAME</u>	<u>M/S</u>	<u>NAME</u>
108-103.....	Irvin Anderson	153-163 .....	Darrin Nebraska
108-166.....	Geoffrey Barrance	108-136 .....	Patrick Neu
124-114.....	Ross Beins	108-136 .....	David Neu
124-111.....	Bob Buschette	137-136 .....	Marion Payne
124-115.....	Raleigh Dean	120-105 .....	Elio Picchetti
120-131.....	David Decker	108-136 .....	Gary Prior
153-120.....	Timothy DeWit	124-123 .....	Wayne Savold
153-264.....	Tom DeWulf	139-125 .....	Gerald Showman
153-163.....	David Dillman	108-136 .....	Duane Smith
124-300.....	James Doty	108-136 .....	Brian Smith
106-183.....	Mike Eastman	105-152 .....	Basil Tilley
153-264.....	Doug Emerson	124-111 .....	Robert Tribuno
153-163.....	David Gillespie	124-111 .....	Robert Tribuno (for Peter Tribuno)
153-163.....	David Gillespie (for James Gillespie)	124-111 .....	Robert Tribuno (for Michael Tribuno)
153-163.....	David Gillespie (for Amy Gillespie)	120-131 .....	Ron Menti (for Tony Veit)
120-131.....	Ron Menti	139-142 .....	Charles Ward
108-166.....	John Michael	153-264 .....	Bryan Wesner
108-166.....	John Michael (for Kevin Michael)	107-110 .....	Victor Wolfe
		124-115 .....	Mark Woytassek

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John Crilley  
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Muncie, IN 47302

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R/C Adventures  
PO Box 284  
Marion, IA 52302

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**Is someone you know missing from this list?**  
**Give them a call and ask them to *Come Fly with us in CMA!***