



OMAHA NEBRASKA
AMA 857

TAILSPIN NEWSLETTER

March 2019

President: Rick Miller

Phone: 402-624-2530 email: millerrick7@gmail.com

Vice President: Rick Haneline

Phone: 402-321-7577 email: richh55@msn.com

Field Maintenance: Jim Henley

Phone: 402-213-1451 email: jhandmehenley@cox.net

Treasurer: Dean Copeland email: dcopeland937@centurylink.net

Address: 15668 Fountain Drive, Omaha 68118 Phone: 402-334-2787

Secretary: Tim Ryan

Phone: 402-943-6731 email: old43school@outlook.com

Tailspin Editor: Nelson Carpenter

Phone: 402-709-3651 email: J3flyah@gmail.com

A Word from the President



I hope all of you will be able to make the March meeting. We may not have any more meetings before Flying season starts. That is assuming that the snow and ice ever stop!!!!

We should review the events for next year and let's get some of those show and tells out there.

See you at the meeting.

Let's go fly!

~ Rick Miller

Meeting: Thursday Mar 28th
Doors open 6:30pm Mtg at 7pm
Papio NRD - Wherspann Lake



Vice-President's Corner



I'm working on a few planes trying to get them ready for the flying season. I hope you all are getting some new ones ready too. Our next meeting is set for March 28th and it would be nice to have a good turnout. Enough said for now. Hope to see you at the meeting.

Go out and Fly!

~ Rick Haneline

BACK ISSUES TAILSPIN:

http://www.metrocflying.com/metro_newsletters.htm

Treasurer's Report



As of this report we now have 34 paid members for the 2019 season. It is obvious that flying is no longer possible with all the white stuff on the ground. So with that said you all should have plenty of time to finish and/or complete your projects for the upcoming flying season.

I still have new membership cards that need names on them. Send in your dues for the 2019 season, and you will be ready when the white stuff is gone. Hope you are staying well, and enjoying the New Year!

Your Treasurer ~ Dean Copeland

~ *Dues 2019 ~

*Application for membership or paying member dues may be mailed to:
Dean Copeland, Treasurer
15668 Fountain Hills Dr.
Omaha 68118

NOTE: Please include your postal mailing address when sending in dues. Also your phone number and current e-mail address.

~ Western RC Flyers Meetings ~

THE **MARCH 28TH** MEETING WILL BE HELD AT THE PAPIO NRD OFFICE (NATURAL RESOURCES CENTER) LOCATED AT LAKE WEHRSPANN. RUN TIME 7:00PM THRU 9:00PM. DOORS OPEN AT 6:30PM.

February Meeting Notes



A *Western R/C Flyers* meeting was held Thursday, February 7th at the *Papio NRD* offices in Chalco Hills, with 7 members in attendance. President, **Rick Miller** called the meeting to order a little after 7:00 pm.

Rick Miller led off the meeting by going over the AMA paperwork for WRCF's 2019 charter. This included running through a list of names of past member to determine their validity. This portion concluded with a brief discussion of AMA insurance and liability limits.

Rick also mentioned his receipts for 2018 fuel, and other club operating expenses totaled \$97.29 more than the proceeds from the two WRCF events held last year.

The next order of business was a discussion around *WRCF Club* events for 2019. All agreed that entry cost for pilots should be kept at \$10 to encourage as much participation as possible, and that fee would include lunch. Non participants would be encouraged to make a donation of at least \$5, and that would include their lunch.

Next, we got down to settling on WRCF events for 2019, and identifying dates and event coordinator for each one. We settled on three events for the upcoming flying season...

- **NEW - Western Flyers WWI and Golden Age Fun Fly** - Saturday, May 18th. Event coordinator - **Nelson Carpenter**.

A special interest scale fun fly for WWI aircraft and those models that fit the era between WWI and WWII.

- **Western Flyers Annual Spring Fun Fly** - Saturday, June 15th. Event coordinator - **Rick Haneline**.

All aircraft welcomed and other area fliers.

- **Annual Bud Hall Large Airplane Fun Fly** - Saturday, August 24th. Event coordinator - **Rick Miller**.

The club's premiere event that has been going on for close to 30 years. Criteria is 80" wingspan; biplanes 60" span and larger; or true quarter scale airplanes.

These events do appear on the current *Metro Area R/C* Flying calendar. We also intend to have the *WWI and Golden Age Fun Fly*, and *Bud Hall* events be sanctioned by the AMA to gain advertising via AMA publications.

Note - The *Sioux Falls Sodbusters R/C Club* will be hosting an auction on Saturday, March 23, 2019, at the Sioux Falls American Legion Post 15, 1701 W Legion Drive, Sioux Falls, SD.

That's it! ~ Tim Ryan

Not Revealing and Skin Danger

By Nelson Carpenter



Those who attend the March 28th club meeting will be in for a treat. No no food. This will be something that takes place which our club has not seen in several years. I promised not to reveal a thing, and I've probably said too much already. Show up at the meeting to learn what I'm talking about.

The March issue of *Model Aviation* mentioned what is an important topic that concerns all of us at the flying field. In the *RC Soaring* column by **Gordon Buckland**, he spoke of the extreme dangers of sun exposure as it affected him. Gordon's exposure resulted in skin damage and dreaded cancer. He's had several squamous cell carcinomas removed and gets examined yearly.

Most of us in the hobby have spent many hours in the sun. My years being over-exposed to the sun have also resulted in skin damage. Over the last ten years, I've had one squamous cell on my face cut out and numerous keratosis frozen off. I go to a dermatologist every six months for a checkup. So my take away for you is to be aware of the dangers, and protect yourselves from the sun. Cover up.

I'm still hoping to see some of you send in photos of your winter building projects or your favorite airplane. We've been carrying several build articles in the newsletter this winter. But it would be great to see other projects or airplanes from club members.

Remember, the March club meeting will be on Thursday the 28th at 7pm and lasts no later than 9pm when we vacate the building. The meeting will be in the larger board room to the right of the lobby. We can get in at 6:30pm. Be sure to bring a show n' tell.



Custom Aircraft Graphics

By Loren Blinde



I needed some obscure graphics for my current scale project. The commercial places are great for letters and numbers. BTW, thanks to Nelson for recommending doityourselflettering.com. Great work at a very reasonable price for custom vinyl text.

But what I needed was a manufacturer logo and squadron insignia from the 1930's. I found an image of the logo, and replicated the insignia with a drawing program. So now how to get them on a plane?



What I used was Avery full sheet shipping labels (#18665). It was simple to print the images on the label material. But I was concerned about the durability of ink jet printer ink. So my trick was to cover the ink side of the label with clear packing tape before cutting it to final size. Then remove the label adhesive paper and stick it in place.



I'm just hoping the plane flies as good as the stickers look. Just imagine any image at your fingertips, ready to decorate your plane. I'm now thinking of bomber nose art on my gliders. ☺





Academy of Model Aeronautics
National Model Aircraft Safety Code
Effective January 1, 2018

As an AMA member I agree:

- I will not fly a model aircraft in a careless or reckless manner.
- I will not interfere with and will yield the right of way to all human-carrying aircraft using AMA's See and Avoid Guidance and a spotter when appropriate.
- I will not operate any model aircraft while I am under the influence of alcohol or any drug that could adversely affect my ability to safely control the model.
- I will avoid flying directly over unprotected people, moving vehicles, and occupied structures.
- I will fly Free Flight (FF) and Control Line (CL) models in compliance with AMA's safety programming.
- I will maintain visual contact of an RC model aircraft without enhancement other than corrective lenses prescribed to me. When using an advanced flight system, such as an autopilot, or flying First-Person View (FPV), I will comply with AMA's Advanced Flight System programming.
- I will only fly models weighing more than 55 pounds, including fuel, if certified through AMA's Large Model Airplane Program.
- I will only fly a turbine-powered model aircraft in compliance with AMA's Gas Turbine Program.
- I will not fly a powered model outdoors closer than 25 feet to any individual, except for myself or my helper(s) located at the flightline, unless I am taking off and landing, or as otherwise provided in AMA's Competition Regulation.
- I will use an established safety line to separate all model aircraft operations from spectators and bystanders.

"Do Nots" after Age 65

By Tim Peters



Being short of content this month and in order to fill another page I've included a few do and do not's from very recent personal experience.

First of all the do nots the second will go some way to explaining the first. If you are outside the UK this will not mean anything to you and goes back a few weeks when *Duke of Edinburgh* at 97 years old smashed up his car well a car hit his when he was pulling out of a road / drive. There followed opinions as to whether someone 97 should still be driving all the pros and cons being thrown up well my extension of this argument is as follows. Should aero modelers cease certain activities at 65, the following being on my "not allowed" list:

1. Use a soldering iron.
2. Allowed anywhere near cyanoacrylate.
3. Permitted to use anything other than a blunt modelling knife.
4. Follow written instruction as they never follow them.
5. Have draws at head height which easily slide open are not self-closing. Any height on second thoughts.
6. Keep cellulose thinners on a shelf which is used to store other items, other items seem to become entangled and unstable with quality of being able to move and nudge what they are next to out the way.
7. In modelling area have a seat which seems to be able to move on its own, silently.
8. Attach things to hooks temporarily using postman's elastic bands. Temporary becomes long term and models gain weight. Rubber decays quite quickly too.
9. Walk barefooted in model area, especially when day before a box of pins was dropped.
10. While holding two items together when fast setting glue, epoxy is curing, and at same reach for cup of tea.

Mead Field Weather Station

<https://www.wunderground.com/personal-weather-station/dashboard?ID=KNEMEAD2>

The Need to get it Right

by Dave Kelly



Occasionally in photos I would notice that the picture seemed to show a B-26 with no visible flaps from top side of wing. Was I seeing things? I was not sure it was poor lighting or what, but I also noted the few I found were all early serial number airplanes. I dug for days trying to find a definitive photo or description to answer my question. Pure "chance" took me to a production film from 1941 filmed in the *Glen Martin Aircraft* factory. Sure enough, as a wing panel passed by overhead on the production line, I could see a pocket where a "split flap" would fit. When they brought it down to mate with the fuse, the upper surface showed no visible signs of flaps.

I sent out some emails and got a near immediate response from *Fantasy of Flight Museum* staff. They house the only B-26 in flying condition.....but it has not flown in many years. They sent me photos from rear bottom with the flaps down on their airplane. Voila! I was amazed. Nowhere that I can find, are pics of early *Marauders* that show this. And don't even get me started on the three views out there. Many many mistakes!

Another email I got gave me a breakdown by serial number of those produced with split flaps. Three of the aircraft in my father's squadron had split flaps, including the one he did most of his missions in, "Bucket O Bolts II" #41-17901. Also the original *Bucket O Bolts* #41-17906 that was lost on takeoff with subsequent fire. Only one survivor. My father was not on board, nor any of his original crew.

I guess early on, documentation was not as well covered as it was by just a few months later into the war. There were a lot of photos of the aircraft variants with slotted flaps during war time, but very few early in the effort, and none that I can find gave detail of the initial design split flap. Also the split flap arrangement, by pure numbers were outnumbered by those that had the slot flap design.



Typical inflight shot. Flap lines clearly visible.

Typical rear view flap arrangement I would find. So I was leaning toward that inflight pic was just poor quality.



This caught my eye as "no flap lines" on upper surface. I wasn't sure if it was just poor quality or lighting, but I could not find any shots from rear on ground to verify arrangement. This serial number 117876, was close to my father's rides, 117901 and 117906.



Voila!!!! This photo is a screen shot from video of Martin Aircraft Plant, circa 1941. It verified to me I needed to hunt more and send out some emails.



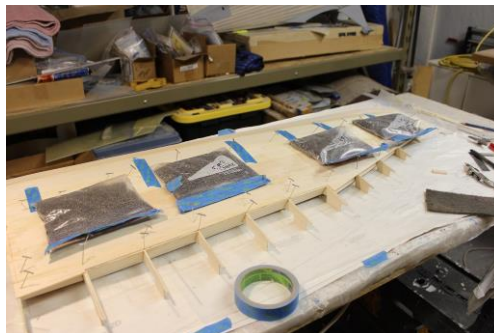
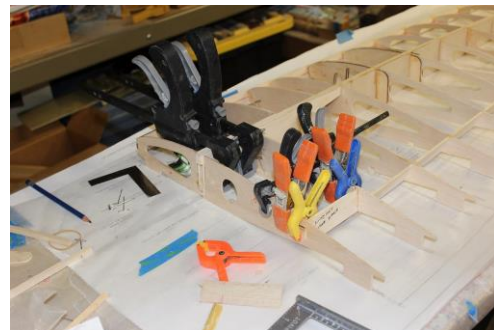
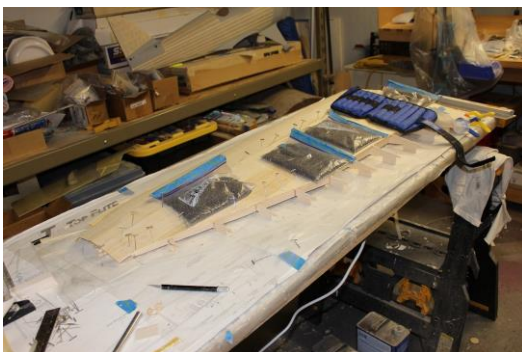
Photo provided by *Fantasy of Flight Museum* staff.

Giant Scale P-47 Thunderbolt

By Jim Henley



The P-47 build report for this month's newsletter; I have the wings framed and the tops sheeted. The retract mounts have been added and drilled. An aluminum tube has been routed through the ribs for routing the air lines. The DLE 55 RA has arrived and I have a few parts from Robart that should be here in a couple of days. I am at the point where I need to join the wing halves, and get the bottom of the wing sheeted. Then I can go back to the fuselage to complete the engine installation, and plumb the fuel system.



Western R/C
Flyers

PT-26 Cornell Project

By Nelson Carpenter



With the split flaps completed and functioning the way I intended, the landing lights were next. I wanted a feature on my PT that would stand out, so went ahead with the lights.

Figuring out what I wanted to do with the lights, it wasn't going to be a simple flip of a transmitter switch. Although that's what I've ended up with to turn them on/off. Further, I decided the lights would turn on automatically when the flaps were dropped. Off when flaps retracted. The flap switch is all I will use for the lights.

But I made it more complicated than that. After gutting two Harbor Freight mini-flashlights for their bright LEDs; I hacked off the front ends of these flashlights to house one landing light in each wing. The LEDs were then wired to 2 AAA batteries setup independently in each wing. The "housings" were embedded into the leading edge of the wings.

Wait... There's more to it. I bought some momentary switches with levers and positioned one in each wing near the flap servo arms. It took some adjustment, but now when the flaps drop, the servo arm moves away from the lever on the switch which turns on the light. Retracting the flaps turns off the lights. Again, same setup each wing. I managed to get both lights to turn on in sync with each other. Although the landing lights are a bit more complicated than they probably needed to be; it's all part of the fun and enjoyment of this hobby. Did I say these lights are super BRIGHT?



These LEDs put out a strong light. I also use the original reflective bezels from the mini-flashlights to provide more light.

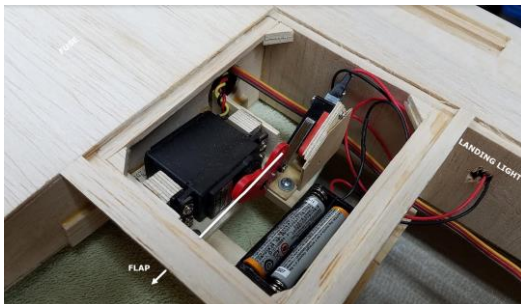
Now I can begin covering the PT in the dark yellow Ultracote. I have four rolls for the 89" span model, and that will be cutting it close -literally. Callie Graphics and Doityourselflettering.com will supply the Royal Canadian Air Force markings.



Flap channel turns lights on/off with flap use.



Anyone asking whether my landing lights are scale - my answer will be "Yes, of course they are."



Wide hatch covers will allow good access for servicing. Batteries will remain in place as they are normally off.



Underside of wing with housing feathered in.



Salvaging Bad Cells

by Tim Peters



I recently purchased a lipo-powered plane along with (2) 4000 mAh 6s 30C lipos. One of the lipos had two cells that were significantly lower in voltage than the others. If you are familiar with lipo packs you're aware that the 's' value means there are 3.7 volt lipo cells wired in 's'eries. The challenge that I had was

that one of the packs had two cells that were undervolt when measured with a lipo checker. I tried to charge the pack using my smart charger, but the charger is not capable of sensing that one or more cells are undervolt. Instead, the charger cut off the charge once the other 4 cells were



topped-off. Since the batteries were used (i.e. not new), I could not return them to a vendor, so I wanted

to see if I could salvage the two 'bad' cells.

I was successful in doing that and want to describe what I did. Before I do, though, I'll give you the 'standard disclaimer'. You need to have some electrical soldering skills; you will be working with narrow connectors. You also need to be extremely careful not to short the battery while attaching components.

Don't try this unless you are comfortable with what you are doing. There is risk of a Chernobyl-style meltdown, fire and damage to your batteries and/or equipment. You cannot hold me or WRCF responsible for anything that happens.

Here's what you need.

1. Soldering iron and solder/resin, etc.
2. Two pins cut from a servo connector. These are the male pins. I just cannibalized an old futaba servo connector and pulled the pins free from the plastic so that all that was left was the pin. You could potentially cut a straight pin or sewing needle or t-pin to do this. Note that you do have to solder to the pins.
3. A lipo charger capable of charging your pack. This charger needs to have a setting for charging a single cell (1s) as well as the setting for charging the complete pack. The charge rate needs to be adjustable and consistent with the charge range for your pack. In my case I used 0.5 amps and 1.0 amp, although the charger can go much higher than that.
4. Some 'reasonable gauge' stranded wire, ideally one red for positive and one black wire for negative. The wire needs to be able to handle at least 1 amp of current. Some heat-shrink insulation sized for your wire is needed. Preferably a short piece of black and one piece of red.
5. A lipo checker that can read voltages for the individual cells in the pack.
6. A battery plug that is gender-compatible with your charger cables. I used a Dean's connector for this.
7. Optional but useful: a digital voltmeter capable of reading low DC voltages. (0-30 volts DC)

This process requires an understanding of the connections on the lipo's balance connector. (Note that neither the main power connection on the lipo nor the balance connector on the charger is used at all for this process) In my example, the 6s balance connector contains a ground connection (this will be at one end of the connector and identified by a black wire) and (6) additional pins; one pin for each cell. The other pins will have wires with various colors; the colors aren't important for us. Use your lipo checker to identify the targets that need attention. In my case it was the first one (identified by '1s' on my checker) and the last one ('6s'). Use this information to identify which pins on the balance connector will be used. The '1s' cell uses the black wire at the end for (-) and the adjacent wire for (+). Working your way up the balancing connector pins, for cell '2s', it's (-) is the (+) wire from '1s', and its (+) connection is the next pin over (i.e. the 3rd pin from the end). So the negative wire for each successive cell is the wire that was the positive connection from the previous cell, and the positive wire is just the next pin. You can confirm this with your voltmeter. For me, the '6s' cell connections were at the opposite end of the connector.

What I did was set my lipo charger for a single cell (1s) and connected the charging leads directly to the appropriate female connectors on the balance plug. To accomplish this I soldered a heavy gauge wire to the end of one of the pins (from item #2 above). I tinned the wire along with the pin, then embedded the pin into the wire and heated the joint. The other end of the wire is soldered to the battery plug (from item #6 above). Repeat this with the other pin. When you are finished you'll have a battery plug where each connection goes out to one of the pins. Ideally you'd use a black wire for the negative pin and a red wire for the positive one. (*Not sure which is which?...check the colors of the wires on the charger cable from item #6.*) At this point I need to emphasize that your solder connections should be solid and capable of handling 1 amp of current. Use heat-shrink insulation at each end and shrink it down with a match or your tool-of-choice. The pins should have about a quarter-inch exposed for mating with the balance connector. Carefully check to see how the pins connect with the balance connector (*We haven't attached the plug to the charger yet so you should be safe....but be careful anyway. If you short the two adjacent pins on the balance connector you will know about it in a hurry!*)



Cont. on page 9

Western R/C
Flyers

Salvaging Bad Cells Cont.

Now you're set. Use the lipo checker to record the voltage for your target cell. Also record the voltage for a 'good cell' so you will know how much increase you are looking for. Turn on your charger and attach the cable you plan to use. Set the current for 0.5 amps (to begin with, later you can up the current) and set the number of cells to 1s. VERY CAREFULLY attach the pins to the target cell in your lipo. (Note that you only do one cell at a time.) As you might expect, the pins are very close to each other, so use care with this. Start the charger and let it run at 0.5 Amps. After a few minutes, stop, disconnect (if necessary) and read the voltage again. Hopefully it has gone up. My charger shows the battery voltage while the charge is underway so I didn't need to interrupt. With luck you will see the voltage increase (this can be a slow process at 0.5 Amps). Check the battery for temperature. If all is going well you may want to increase the current. As with all lipo operations, don't leave this unattended. Unless you are really comfortable with this process and its limits, don't charge at any higher than 1 Amp.

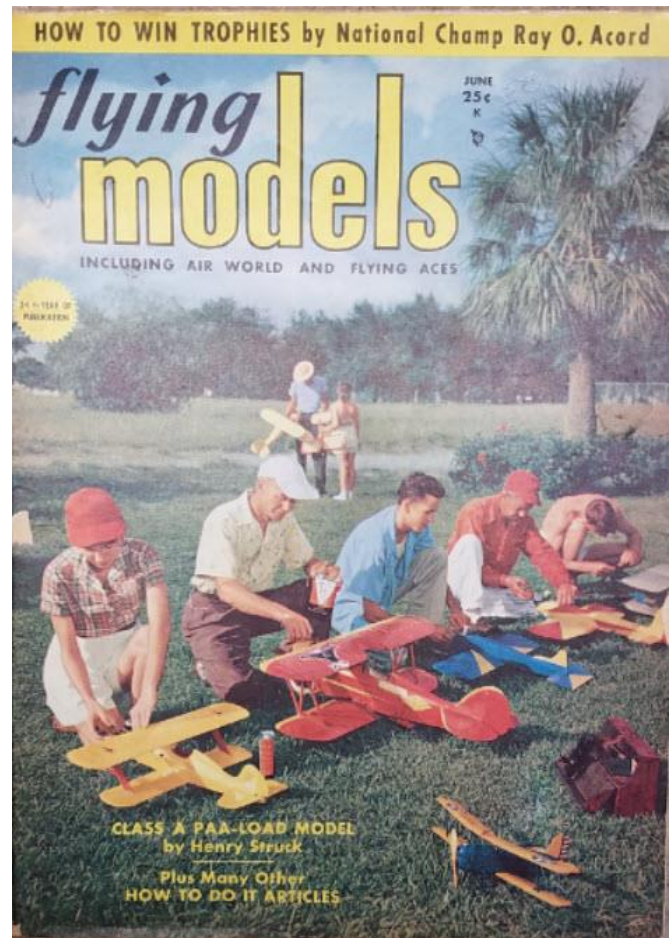
With luck you will see the target cell voltage increase to the point that it comes close to matching the other cells. At this point stop the charging, let the battery cool for a while and then do a normal charge cycle. Hopefully you will have successfully recovered your pack!

Note that not all batteries can be recovered. Sometimes the cell is damaged and cannot be recovered. If the voltage does not begin increasing, or if the pack gets warm, stop and discontinue. You may have to discard the lipo.

Mead Field Weather Station

<https://www.wunderground.com/personal-weather-station/dashboard?ID=KNEMAD2>

JUNE 1950



*Western R/C
Flyers*



~ Western R/C Flyers Event Schedule ~

Schedule for club events to be set and posted within **Metro Area RC Flying** website calendar. Our dates will be provided to Keith who maintains that website.

http://www.metrorcflying.com/metro_schedule.htm



Western R/C Flyers Inc. Membership Application 2019

Please print clearly!

Name: _____

Street: _____

City: _____ State: _____ Zip: _____

Evening Phone: _____ Day Phone: _____

Email: _____

AMA Number: _____ Dues Paid: \$ _____

2019 Dues: \$35 (Renewals should be paid by **April 1**) New ___ Renewal ___ (Check One)

Sign Here: _____ Date _____

Membership application subject to approval. AMA membership is required.

Make Checks Payable to: Western R/C Flyers

Complete this form (new applicants only) and send with check to WRCF Treasurer:
Dean Copeland 15668 Fountain Hills Dr. Omaha, Nebraska 68118