

# Radio Control Flyers Unlimited

## Flight Plan

AMA Charter # 1442

President: Jim Scott - 209-985-0859

Vice President: Jose Macias - 209-464-5313

IMAA Charter# 623

Sec/Treasurer: Steven Howie - 209-847-0567

Membership Chairman: Mike Cummins - 209-985-1550

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[www.rcflyersunlimited.com](http://www.rcflyersunlimited.com)

### Current News

Well, we have our new officers for 2009. They are as follows:

|                |                     |
|----------------|---------------------|
| Jim Scott      | President           |
| Larry Maxfield | Vice President      |
| Steve Howie    | Secretary/Treasurer |

Mike Cummins will continue to be our membership chairman, and Larry Harless will continue to be our safety coordinator until we appoint a new coordinator.

I have sent out the annual membership information form/invoice to each member for the upcoming year. Please return the form with all corrected information and fees/dues owed. Even though you may not have any fees owed and the form is current, it is imperative that you return the form. Otherwise, you will be dropped from the roster. This allows me to keep the membership roster current. Thanks for your cooperation.

Most of you will notice that you have not received your 2009 membership cards yet. I am in the processes of getting special membership forms that have a peel off card integrated on the form. I should be sending these out around December 15th.

The membership discussed the installation of a vinyl rail fence at the main entrance to the field. Larry Maxfield has stated that he can get used vinyl fencing including the

posts and rails for \$350. The fence is in very good condition and will be purchased for less than half of new pricing. There should be enough fencing to do the entrance to the field and down either side for a few feet. Once Larry gets the fencing material, then we can begin construction of the fence.

The club will be sponsoring a toys for tots toy donation at the field on December 14, 2008. Please come out and donate a toy for needy children. Donation to this event is voluntary, but if you wish to fly that day, a landing fee of a toy is required.

Please note: The club meeting will be held on December 14, 2008 at 10:30 am as well as the toys for tots event.

We have had a couple of instances of individuals entering the field prior to the stated 10:15 am time imposed by the club during duck season. This kind of surprises me, since there is a very large sign on the front of the gate stating that there is no entrance to the field until 10:15, that there should be anybody unlocking the gate and entering prior to 10:15 in the morning. Even though, these are isolated cases, please pay attention to all signs that are at the field. These signs are there for everyone's benefit. This includes using frequency pins when flying. Even if you are using the 2.4 GHz radios (spectrum), please put both your club card and your current AMA card on the board. This will ensure that only current club members or sponsored visitors are flying with current membership cards.

Speaking of frequency pins, we are missing at least two pins, 32 & 45. If you have one of these frequency pins, please return it to the field. We are currently in the process of making up new pins.

We have a couple of more firmed up dates for events next year. These are:

|                |                |
|----------------|----------------|
| IMAC           | June 6 & 7     |
| War bird event | August 15 & 16 |

There also will be a Pattern contest sometime in May. The date will be firmed up later.

## PILOTS CORNER

### WANTED

The loan of Model Aviation issues May 2004 and June 2004. These contain construction articles on models I am interested in building. Please call David Thornley, Tel 634 6944

Tammi is looking for plans for a Super Sportster 60 from Great Planes. If you have these, please call Tammi at 341-0519.

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### Soldering: It's All About Heat and Clean by Tom Ball

From the Sacramento Valley Soaring Society,  
Novato, California

When I was teaching school back in the 1950s, I got a summer job with the company that installed the first dial telephone system in Elk Grove. Eventually I moved on to other jobs as the work progressed, but initially what I did was solder each wire from a 200-pair cable to terminal blocks eight hours a day. By the end of the summer I had a pretty good idea how to attach two items together with molten metal while avoiding the dreaded "cold joint."

I just finished doing all the wiring for a new 1/5-size Cub that I am converting to electric power. While I had all the gear out, I also changed the

terminals on three batteries that I bought at the last swap meet. This seemed like a good time to write an article I had suggested some time ago.

Before I get to the preparation of the actual materials to be soldered, let me talk for a minute about irons, solder itself, and tools. My standby is an older model Weller 8200 rated at 100 watts. I love this gun because it is ready to go as soon as the trigger is pulled and I can lay it back down on the bench without wondering an hour later if I turned it off. For really heavy work, like joining 1/8-inch piano wire for landing gear, I have a conventional 100-watt iron made by a company called Drake. My third iron is a small Ungar, which does not show wattage, but it has a very fine tip and is good for jobs like re-attaching a broken wire to a speed controller.

For solder I used a good quality resin core 60/40. The last numbers refer to the proportions of lead in the mixture to tin. The flux I happen to have on hand at the moment is Otaey No. 5 solder paste. On hand means it has probably been around five or six years. With paste, a little goes a long way.

Many of the tools I use, like needle-nose pliers and small files, are just normal bench tools. A more specialized tool I almost always use is called a "third hand." It consists of a base supporting frame with two opposing alligator clips, which can be twisted and moved to almost any position.

By gripping the two parts to be soldered and holding them firmly together through the entire process, it helps eliminate burnt fingers and failed joints because of movement before the solder has completely cooled. The last two tools that always come out when I set up a job are a simple wire stripper and a small bronze brush which I use to clean off the tips of the irons when they start looking a little dull.

For a perfect solder joint, both surfaces must be clean enough and hot enough that the solder will melt and flow evenly on both items. Any dirt, rust, corrosion, or other foreign matter on either surface will prevent the solder from sticking to the dirty area and will cause a weak or imperfect joint.

This is less of a problem when dealing with new components and fresh wire than when doing repairs or reusing old components. Sandpaper,

files, a Dremel tool, and the wire brush I mentioned earlier can all be used to get a bright and shiny surface. When doing repairs, I cut back enough fresh wire if the wire is long enough to allow it.

One way to guarantee that you are dealing with two clean surfaces is to apply a light coating of paste and solder to each surface before you make the actual joint. This is sometimes called tinning and will show up any places that are not willing to take solder.

Once both surfaces are tinned, they must be held together in some immovable way through the entire process, from the application of heat to the final cooling when the solder itself turns from bright to dull. If you are going to do this without some type of jig, be sure to use pliers. There is no way you can hold something with your fingers close enough to the joint to be effective without burning yourself. For larger jobs, I use everything from small vises to C clamps.

The actual soldering is generally over within sec-

onds. The trick is to position the iron so that both surfaces are heated to the point where solder melts and flows.

For small jobs such as soldering wires onto plugs or terminals, you can generally get enough solder on the tip of the iron before applying it to the area. If more solder is needed, for example when building a heavy-duty landing gear, push the end of the solder right into the heated area but don't overdo it. Excessive solder buildup does not make for a stronger joint. Also, keeping an iron in an area until wire insulation and other components are melted does not make for a better job.

One last point to watch out for is the so-called cold joint. A true bond will be made only when both surfaces become hot enough to solder. Be sure that the tip of the iron comes in contact with both surfaces long enough for this to occur. Cold joints will often look fine and may even hold for while, but they have a nasty habit of failing on final approach.

### Cash Flow Report

| Income  |                   |  | Expenses             |                 |
|---|-------------------|--|----------------------|-----------------|
| Club Dues (including initiation fees, field assessment fees, and Donations) | \$3,255.00        |  | Port-o-potty service | \$140.00        |
| Net Event Income  | \$0.00            |  | Fuel for field usage | \$60.15         |
|   |                   |  | Fencing              | \$350.00        |
| <b>Totals</b>   | <b>\$3,255.00</b> |  |                      | <b>\$550.15</b> |

|                          |             |
|--------------------------|-------------|
| Last Month's Total ..... | \$9,662.67  |
| Income .....             | \$3,255.00  |
| Expenses .....           | (\$550.15)  |
| Balance .....            | \$12,367.52 |

**The December Club meeting is scheduled for:  
Wednesday, December 14, 2008 at 10:30 am  
at the flying field.**