

# Radio Control Flyers Unlimited

## Flight Plan

AMA Charter # 1442

President: Larry Maxfield - 209-404-0659

Vice President: Steve Mesker - 209-595-2002

Safety Officer: Gregg Bixel—209-838-1241

IMAA Charter# 623

Sec/Treasurer: Steven Howie - 209-957-5088

Membership Chairman: Greg Mariani - 209-848-4828

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

### Current News

The pilot fence rule was changed by the members and will be incorporated into the club rules, by modifying the existing rule. It will then be posted on the web site.

We are still in the pre planning phase of the repaving of the field. We should have a good plan following the research.

Dick Belden has proposed to have a pattern contest on June 13 & 14 2015 at our field. Dick has been hosting this event at the field for many years. All of the pilots enjoy the field and the club gets extra monies for our coffers.

We are on the path to have our second annual pylon races. It will be held on May 30 and 31, 2015. We still need a few volunteers. You can volunteer for only one day. Please contact Dan Peterson at [petersondan@Hotmail.com](mailto:petersondan@Hotmail.com) or 209-338-7345.

### PILOTS CORNER

#### **Model airplane kits - building your own vs. modern pre-builts**

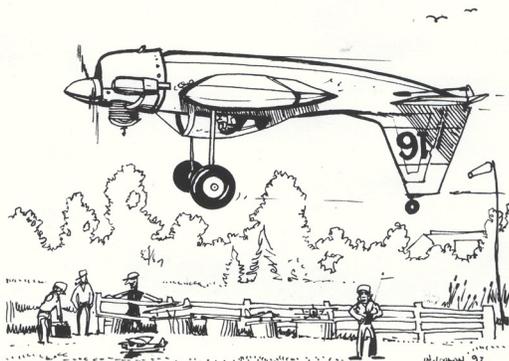
From R/C Airplane World

Traditional balsa model airplane kits are still favoured by those aeromodellers who enjoy the building side of the hobby as much, or even more so, than the flying side but such kits have taken a beating in recent years, with the advent of foam RTFs and good quality ARFs.

But with that said, there is growing evidence now that traditional model plane kits are making a comeback, as modellers who bought foam Ready To Fly rc airplanes as an easy introduction to radio control flying are seeking more satisfaction by getting in to the building side of the hobby.

A traditional model airplane kit typically comprises the **plan** and **building instructions**, all the **balsa** and **ply** wood needed to construct the airplane and most, if not all, of the **hardware** needed such as servo linkages, control horns, undercarriage parts, motor mount, fuel tank etc.etc.

The components of the plane such as wing ribs and fuselage formers may already be cut out either by CNC machine or, more commonly these days, laser. If the parts are not pre-cut then the outline of each one will be printed on to sheet wood and it's your task to accurately cut them out with a sharp modelling knife. Certainly CNC/laser-cut kits are the nicer option! Strip balsa will also be included in



...HE SAYS IT TAKES THE SWEAT  
OUT OF FLYING INVERTED...

the kit for use as wing spars, leading and trailing edges, fuselage longerons etc.

Below is a photo of what you can expect from a typical balsa kit...



Incidentally, despite its often soft feel, balsa is actually a *hardwood* and is ideally suited to model airplane kit construction because of its excellent strength to weight ratio. Thin model-grade plywood is also commonly used in certain areas of a model airplane construction, where more strength is required such as engine bulkheads (firewalls) and landing gear plates.

Model airplane kit construction takes place over the plan which must be laid out on a flat modelling board. Typically the balsa components are held in place with pins until the glue sets, so the board needs to be soft enough that a pin can be pushed in to it. Sheets of two or three inch thick insulating foam used in the construction industry make ideal modelling boards, but an alternative is to have a flat steel sheet and use powerful Rare Earth magnets to hold the parts in place, instead of pins.

Different glues are used when building model airplane kits and the type of glue depends on the joint and the wood type/hardness, as well as the builder's personal preference. White

wood glue (PVA), aliphatic resins and cyanoacrylate (CA) glues are commonly used on balsa to balsa joints, but where stronger joints are needed such as landing gear plates and engine bulkheads then two-part epoxy resin is common.

the plane (wing, fuselage, tail) then the wood needs to be a smooth finish, particularly painted holes and other imperfections with lightweight filler and sandpaper.

Personally, sanding is the worst part of taking the time because the imperfections in the airframe *will* show up and potentially spoil the model.

After the initial sanding and final sanding of the model is complete, the parts are then covered with a film of covering film, a common choice is a heat sensitive film which is often used for fuselages.

The adhesive backing which sticks the film to the balsa, then the iron or a heat gun is used to shrink the film over the model.

There's a definite skill to using such coverings and the manufacturer instructions regarding iron temperature settings should be followed carefully; if in doubt, practice on some spare balsa first!

Heat-shrink covering is a relatively modern invention and traditionally balsa model airplanes were (and still are in some cases) covered in lightweight tissue paper (or even silk) with a liquid such as 'dope' applied to the airframe to stick the tissue. Dope is then applied to the entire covered surface and as the dope dries it shrinks, tightening the tissue as it does so. Many builders of small scale model airplanes still use this method but these days ultra lightweight iron-on coverings are available to replace the tissue and dope method.

### 3 Tricks You Can Do With an RC Airplane

By Sheila Homer

#### #1: Inside Loop

You want to keep your plane at least 50 feet off the ground and make sure you are flying level. Aim the

plane so that it is flying straight ahead.

Raise the RC airplane's throttle to the maximum while pulling the elevator stick towards you as gently as possible. Make sure you hold the elevator all the way back so your airplane can do the first part of the loop.

Once the plane reaches the apex of the loop, lower the RC airplane's throttle. Leave the elevator stick in the same position as the plane finishes the second half of the loop. Holding the elevator stick back will bring the plane vertically through it.

Finally, put the elevator stick into the neutral position as soon as the plane finishes the loop. Then slowly open up the throttle to keep the plane steady as it goes back to its normal flight path.

**#2: Roll**

With the RC airplane in a straight flight path, push up on the elevator stick. You want the nose of the RC airplane to point upward so the RC airplane will stay at the same height while it rolls.

Now push the rudder to the left, which allows the plane to enter the roll.

Once the RC plane finishes the roll, put the ele-

vator stick into the neutral position.

Finally, move the elevator stick down just enough so that the plane straightens back out after it has finished the roll.

**#3: Outside Loop**

Just like the inside loop, you want to make sure you are flying your RC airplane at least 50 feet above ground and keeping it level. Aim it so it is flying straight ahead.

Next, decrease the throttle power, but not too much. Move the elevator stick away from you, which will cause the plane to start diving down.

Keep the elevator stick in the same position until the RC airplane is at the bottom part of the loop. You can also make more than one loop by holding the position and exiting the loop after the RC airplane comes around to the bottom the second time.

To exit the loop, put the elevator stick into neutral and slowly increase the throttle until the plane has fully pulled out of the loop.

**Cash Flow Report**

Income		Expenses	
Club Revenue (including initiation fees, field assessment fees, Donations, and Events)	\$672.60		
		Misc Expenses	\$76.38
		Portable Toilet	\$140.00
<b>Totals</b>	<b>\$672.60</b>		<b>\$216.38</b>

Last Month's Total .....	\$6,166.84
Income .....	\$672.60
Expenses .....	(\$216.38)
<b>Balance .....</b>	<b>\$6,623.06</b>

**The May meeting is scheduled for:  
Wednesday, May 13, 2015 at 7:00 pm  
at Casa De Modesto, 1745 Eldena Way, Modesto**