

<http://www.famac.org>



# TaleSpins

Editor: Rick Oasen  
rloasen@fotoace.com



## Next Meeting

The next club meeting is March 10, 2005 at 7:30. The location is at VTS Productions.

## The grass is always greener....

Tom Tucker asks that anyone interested in helping to mow the airfield grass call him at 540-288-8525.

### Minutes of February meeting.

The Fredericksburg Aeromasters Club met at VTS Productions on February 10, 2005. 27 members in attendance.

The minutes were read and approved.

The Treasurer's report was read and approved.

President, Joe McCary requested the Committee Chairmen give a monthly report.

Programs Committee Chairman Scott Huff gave report on the planned tour of the Steven F. Udvar-Hazy Center. Attending members to meet at VTS Productions on February 19, 2005, 8:45 A.M..

Training Committee Chairman Doug Smith reported there will be 6 Students and 3 Instructors at the beginning of the 2005 training season. The Training Committee

request additional instructors. .Doug request Training Committee members meet at VTS Productions on March 10, 45 minutes prior to Club meeting

Safety Committee Chairman Bernard Arnold reminded members to paint their prop tips.

### Old Business

Joe McCary made a motion to change St Elmos Day yearly event to Charlie Rector Day,

Seconded by Scott Huff. So voted. Joe requested 4 Executive Committee meetings annually.

James Bingham will have the Club business cards soon.

Doug Smith and James Craig made a motion to have the approved no smoking sign read No Smoking from Pit to Flight Area. So voted.

### New Business

James Bingham announced the planned Boy Scout program to be held at Curtis Park on June 20-24, Club members will give flying demonstrations and displays.

Jim Braithwaite and Scott Huff made a motion to adjourn. So voted.

## Club Officers

### President

Joseph McCary Jr.  
patmccary@yahoo.com  
540-373-8841

### Vice President

James Chandler Jr.  
jamesec295@aol.com  
540-368-2063

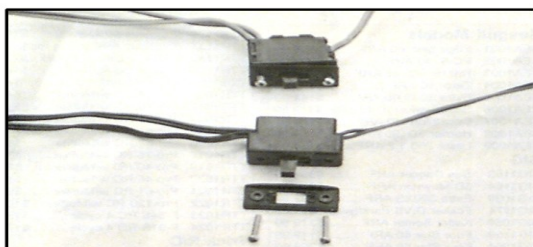
### Secretary

Ed Russell  
secretary@famac.org  
(540) 786-5454

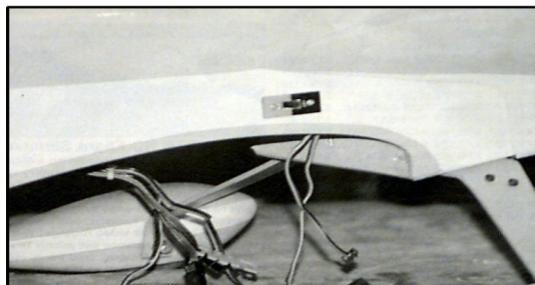
### Treasurer

Hank Mausolf  
mausolfh@yahoo.com

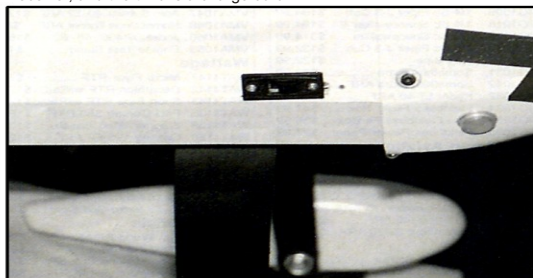
**Beginner's Bench** Jerry Festa  
reprinted by permission of  
**RCM Magazine** February 2005  
requested by president Joe McCary Jr.



"Switch Harness" and "Switch Harness II". Two examples of switch harnesses. Airtronics in the foreground, and JR in the background. Note the three sets of wires leading from the switch. One goes to the battery, another to the receiver, and the third is a charge cord.



"On-Off Switch" on this model of Great Planes RV-4 has a metal switch plate in two colors, red for "On" and black for "Off".



"On-Off II". This switch's location was possible because the plane (Funtana 90) had its engine mounted sideways, permitting the exhaust to exit out the bottom of the cowl.



"Cub On-Off". Planes like this J3 Cub permit the switch to be located inside the fuselage, accessible through a functioning door and window.

One of the necessary rituals modelers go through is installing the "On-Off" switch harness. This applies to either ARFs (Almost Ready to Fly) or kits. The primary requirement is that the switch be placed away from the engine's exhaust. With most trainer planes the engine is mounted upright, meaning the exhaust is commonly located on the right side of the fuselage. Therefore, we would not want to locate the switch where it could be exposed to the exhaust, but rather on the opposite side to eliminate any potential problems caused by this oily residue.

One question that commonly arises deals with the switch's orientation: should the switch be pushed forward or rearward to activate the airborne radio? There are pros and cons for whichever way you decide to mount your switch, so let's discuss a couple of them. When the switch is slid forward to turn ON the radio, the modeler handling the model must be careful not to turn the radio OFF when releasing the plane. One modeler claimed the long grass at the end of the runway turned his radio off. His switch did extend outside the fuselage side a significant amount and it was true his radio was on when he was taking off. Likewise, it was true his plane did proceed to fly through some tall grass on the end of the runway as he slowly climbed out after rotating. Then nothing ... no control. The plane did a slow roll and became a top candidate for practicing how to use thick and thin CA on a multitude of parts. Was the friction of the grass strong enough to slide the switch to the "Off" position? No one knows for sure, but the modeler in question is sticking to his story.

So two cases against positioning the switch forward, but like someone at our field recently said, when the plane hits the ground (aka "Crunch"), they want the switch to slide forward, turning Off the radio! Hummm, never thought of that before. Another modeler mentioned that frequently he forgets to turn on the radio until after he starts the engine (not a good practice!), so by pushing the switch rearward he is pushing the aircraft away from him as he is positioned in front of the plane. That whole scenario gives me nightmares! Some modelers will mount their switches so that it will move up or down to turn on or off the radio. Other than a clumsy handler, one shouldn't mess that one up but it is possible. So "Up" is on or off, it shouldn't matter.

Many of the newer ARFs and kits are suggesting a location for the On-Off switch by including a horizontal slot on both sides of the fuselage. The iron-on covering is hiding these two openings and the modeler only

has to remove the covering on the side that is to be used. It should be noted that this should be located in lite ply. Mounting a switch in a balsa- only area will cause problems overtime. If the location you choose does not have plywood doublers, please add one to the inside of the fuselage. The last thing you want is to have your "On-Off" switch flopping around inside your plane.

To mount a switch, many modelers use the switch cover as a guide. The cover is usually a piece of black plastic that has two holes and a slot that permits the actual switch to protrude through. This cover can be placed on the fuselage and used as a template. When removing the material from the slot, be careful and remove enough balsa/plywood so the switch can travel its entire length - in both directions!

The two holes that hold the switch cover to the fuselage and switch can be drilled with a 1/16" or 3/32" drill bit. The switch slot can be opened up with a #11 X-Acto blade.

The most common switches supplied with currently purchased radios have three wires leading from the switch itself. Each of these three sets of wires has a connector already secured. The "wire" is actually two or three smaller wires molded together in a bundle. One of those bundled wires will have a connector that will only connect to the battery. This connector is commonly found in the wire bundle consisting of only two wires (a positive and negative) and has a female connector. Also leading from that same end of the switch will be another set of wires which can lead to the receiver.

I personally think the black plastic switch cover is pretty flimsy and the words "On" and "Off" can barely be read. Therefore, the switches on-off status should be indicated on the fuselage so there isn't any doubt as to which direction indicates "On" at least. Some ARFs and/or kits supply a decal sheet that can be used for this purpose. If your plane lacks any indication concerning the switch, you could use a permanent marker to write the words "On" and "Off".

Maybe you have been at the field and saw a little black knob that protruded from the fuselage that was used to move the switch. A couple of manufacturers offer a clever device that secures the switch on the inside of the fuselage and only requires a short threaded rod to exit the plane. This makes the plane look a bit more streamlined and is quite small, and if placed at just the right location, it can even appear to be a door knob!

Anyway, this product can be purchased from companies like Great Planes, Du-Bro, and a few others for less than \$4.00. On the inside of the plane the switch is suspended on a plastic tray and is activated by a short wire pushrod. This makes for a very nice, neat installation.

To go one step further, both of the aforementioned companies offer a combination charge jack along with the switch in this configuration. The advantage to this is that the battery status can be determined with an ESV (Expanded Scale Voltmeter) from the outside of the aircraft, thereby eliminating the need to remove the wing in order to plug into the charge cord. Many a plane has been saved from total destruction because the prudent modeler decided to check the battery status before a flight and found it lacking!

The "Pull-Push" type of switch gives rise to another dilemma j is it better to push the switch to turn the plane on or is it better to pull? There are advantages and disadvantages with either choice, but let's agree on one thing - use what makes sense to you! I personally like to arrange the switch to turn on when the pushrod is pushed j but maybe that doesn't make any sense to you. Yes, the switch could get pushed in (and, therefore, "on") during the trip to the field, and yes I could arrive at the field with a dead or low flight battery. But I'd rather take that chance as opposed to having someone bump the switch in (and therefore "Off") as they release my plane!

Model Sport Magazine took a survey a couple of years ago addressing modeler's opinions concerning switches and which direction the switch should move to be turned on or off. The results were evenly split- about half of those who responded said forward is better, the others indicated backward was! Likewise, half thought pushing to turn on the plane was favored over the other half that selected to pull the switch to turn the plane on!

As you progress in this hobby, some of you will decide to hide the switch. Whereas most switch cover plates are black, you can hide the switch by running a thick black stripe down the side of the fuselage, and mount the switch in the black area.

Another method is to put the switch in the cockpit. This often works with those planes with what we call "Open Cockpits". WWI planes frequently did not have a plastic bubble protecting the pilot from the environment and that opens an area in which the On/Off switch can be located.

If you happen to be making a propeller driven "Jet", the dummy jet exhaust area is frequently home to the On/Off switch, and even within a fuselage when you have an opening door on a plane like the J-3 Cub. You can also make a box within the fuselage that holds the switch and then cover this area with a hatch like a cargo door.

In conclusion, the choice of mounting the switch is yours and you should have your reason(s) to slide, tug, or pull the switch the same way on all your models. That way you can become a creature of habit and not start your plane with the radio off. Therefore, go forth, mount your switch to your latest and greatest airplane and maybe I'll be lucky enough to see you at the flying field!