The Flying Times

The Official Newsletter of the Valley RC Flying Club

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Pres's Korner

Spring looks as if it might finally be here... maybe by the end of the week as on Sunday it was a little on the cool side. Made the ears act like wings but got in 3 flights, even with about an 80 degree cross wind.

This month I am going to mention my flustrations about control rods and the pieces that go on each end. I got out 5 assorted rods from my collection of pieces from previous crash's and tried to make sense of them. First the biggest problem is that the rod diameter is not always the same on the unthreaded part as it is on the threaded part. For instance Rod =.067 ... thread = .075... 2/56 thread it is not. Its close but no workie. I buy clevis's for 2/56 and of course they won't work. If I cut the thread off, I need a least .082 rod to thread it. So that doesn't work either. I don't know how many times that I have ran out of thread using a clevis and wanted to thread more but have to change the whole rod. I found rods with diameters of .067, .07, .072, .0725 etc. Threaded ends had .075, .0765, .082 etc. Randy tells me that when the rods are made they are not threaded but are pressed/molded on which makes the threaded part a bigger diameter.

Now that is not all the problem as the Metric versus American thread size enters into it. This I believe has caused many a plane to decide straight down is a normal flight path. I have had what I thought was a good thread fit when winding on a clevis only to find out a good tug will pull it off.

The problem even goes further. At the other end of the rod I use a lot of those 90 degree rod bends and use plastic keepers. I have found that, even within a kit that the keepers are not properly sized for the control rods they supply. The ones I buy are usually sized in ASA sizes and don't fit odd sized rods very well because of the rods being thinner. This also applies for those short threaded adapters that connect a clevis to a plastic push rod. The ASA /Metric problem can result in the assumption of a good connection which is later found out to be the cause of a crash.

In conclusion I hope that the industry would get their act together and either go Metric or ASA and not squeeze the rod diameter. Yes I know that it saves weight but a downed plane is a lot more expensive then a little more weight.

Till next month --- I Hope I can find a subject.

Dave Burgess

Safety Reminder==========

Carbon Fiber WARNING:

CF is some nasty stuff!! While you drill, cut or sand CF parts to fit your application take precautions to avoid breathing the CF dust and to avoid getting CF splinters. Your body does not naturally repel CF, your body will make some inflammation tissue around it and the CF splinter will stay underneath your skin or in your lungs. Use a vacuum cleaner and a dust mask when machining or drilling the gear.

Randy Sampson

Meeting Notice ==========

The April meeting of the Valley RC Flying Club will be held at the Bridgewater Church of the Brethren, Tuesday, April 4, 2006 at 7:30pm.

Upcoming Events==========

Hello all Valley R.C. members. Just a reminder we have set April 22 as Flying Field clean up day. Lets meet up at the field at 10:00am. If you have a weed eater you can spare for an afternoon, bring it on with you. Jim Stogdale has volunteered to bring down his Kubota mower to get us started off right for the season.
It won't take very much time to get the field spruced up, and it's always fun to do it as a group. If we get rained out on the 22nd the following Saturday will be our rain day. Whatever time you can volunteer will be much appreciated. Also, Cheri will be printing up a *(Mower Sign Up Sheet)* for us very shortly.

Appreciate your time,
Aaron Swindle
Field Marshall

On June 3, the CVRCA will hold our Spring air show at our field located in Lynchburg
VA. Spectators and guest flyers are welcome. For more information, please contact
Gary Cowden at garyandnancy@netzero.com or Gene Patzsch at GPATZSCH@ADELPHIA.NET. We hope that you will share this information with your club.

Food For Thought==========

From Mike Meffert:

As a new member of the Valley R/C Flying Club, and as a new R/C pilot, I thought it might be helpful to share a recent experience with prospective members & R/C "flyers". (I'm sure the "old timers" don't need this information). This relates to a "dumb" thing that I did while at the field last Sunday (3/12/06). Since soloing I have only flown one airplane, a Nexstar "trainer". Prior to my first attempted takeoff on Sunday, since it was forecast to be kind of windy I was in a hurry to get into the air. I did my preparations (wing assembly, fueling, etc) very quickly. I did a very quick (and not thorough) control check, only noticing that all control surfaces & the throttle were moving.
I thought things were working properly, & attempted a takeoff. During a long takeoff roll and after reaching flying speed, I applied up elevator. About that time, the upwind wing rose, the airplane slightly nosed down & the prop contacted the ground which stalled the engine. The plane was pretty far down the runway, & it was kind of hard for me to see exactly what was happening. Thinking that my problem was caused by a wind gust, I went down the runway, retrieved the plane & returned to the takeoff position.

I then attempted another takeoff, which resulted in a duplication of my first attempt. Feeling quite frustrated, again I returned to the takeoff position & told Aaron Swindle that maybe he (being an experienced pilot) should get the craft in the air for me. Aaron & Cheri who had been watching, said that perhaps we should check the control surfaces for proper movement. Upon checking, sure enough they discovered that the elevator servo was "reversed", and that my "up" inputs at takeoff speed were really "down" inputs. Thus when I applied "up" elevator, the result was actually "down" elevator which resulted in the nose going down, the prop digging in, which resulted in the wing rising & the engine stalling.
Here is an explanation of the events that caused my problems:

1. I have only one transmitter, and had recently assembled an ARF "Big Stick". During assembly in mounting the servos, I reversed the mounting of the elevator servo in order to give the adjacent servo arms more clearance. Because of this reversal, when testing the elevator servos for proper movement I had to change the position of the elevator servo reversing switch. After my "Big Stick" servo checks, I left the elevator servo reversing switch in it's "Big Stick" test position.

2. Several days later (which was Sunday 3/12), I loaded up the Nexstar fuselage, wing, fuel, transmitter, etc. & headed for the field. Upon arrival at the field I did not do a careful, thorough, "range check", noting the proper movement of all control surfaces.

So, the moral of my story is to be sure and abide by rule #9 of the Valley R/C Flying Club Field and Flying Rules, which states, "Make sure to test all transmitter, receiver, and accessory batteries and to perform a transmitter-to-receiver range check". Had I done this properly, I would have not experienced my problem.

P.S. After this experience, Aaron told me that I was lucky that it was not the aileron servo-reversing switch that I had changed. (had this been the case, I would have gotten airborne & lost the airplane!)

Editors Note: I want to thank Mike for sharing this story for everyones benefit. While incidents like this one may prove embarassing, sharing the information will doubtlessly save someone else from a possible re-kitting of their airplane. As mentioned, it was lucky it wasn't the ailerons that were reversed. I've lost count of how many times I've heard of that situation causing the demise of a plane, some on their very first flight. Over the years, I have looked over several planes before flight, and on one occasion had to do some serious talking to convince the pilot that the ailerons were in fact working backwards.

Tips and Tricks==========

Tip #1
Did you ever find yourself having to pull out a battery pack, or receiver, or even a fuel tank from a compartment and found it difficult to get hold of to pull it out? Next time you're putting in a fuel tank in a difficult place, take some packaging tape or filament tape and put around it, and leave a "tail" on the end where you need to get hold of. Then, if you

need to ever pull it out, (and you surely will) you can just pull on the tail you put on and it will slide right out. Some tank suppliers already mold in a plastic piece on the back with a hole where you can put a string in and use for a pull.

Tip #2

When working on a low wing plane where the wing attaches from the bottom, don't forget that when you are fastening things in place in the fuselage that you are working upside down. When attaching the receiver or battery pack, make sure that they are very secure, because when the plane is upright, the equipment will actually be "hanging" in the plane. If it comes loose, from a high g maneuver or just from the weight, it may fall down into some component, like a aileron servo or something else and cause it to jam. Or, in the case of a battery pack, it might move enough to change the CG location, which could result in the loss of the plane.

Tip #3 Fueling/Defueling

Sometimes, depending on the plane we happen to fly, we fail to incorporate a way to defuel the plane unless we disconnect the line feeding the engine and defuel through that. And sometimes, that is difficult to get to. Here's an idea I saw that really works. If you are running a 3 line system, as for a glow engine, (fill, vent, and feed line to engine), put a second klunk in the tank for the fill line. That way, you can fuel and defuel through this line and not have to remove the line from the engine. I got this idea from another site, and I was skeptical at first thinking the klunks would get tangled. The first one I did I tried every way possible to get that to happen but couldn't.

One reason for this in the first place is that if you leave fuel in the tank, and then take the plane in to work on it, and turn it upside down, you are probably going to fill the muffler with fuel, or run fuel out of the vent line.

Another reason is you will always be putting fresh fuel in the plane as opposed to stuff that may have been laying in there for some time.

Randy Ryman
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Notice==========

I have placed a new Verizon phone book at the field. It is currently in the white cabinet. If I can find a suitable weatherproof clear plastic holder, it will be placed where readily available for all members. It just might come in handy.
Randy Ryman

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