Springfield Radio Control Flying Club

AIRMAIL

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KEEPING IT SIMPLE

Upon examination of the wreckage of a recent model loss, it was highly suspected a push rod keeper came off the push rod at the servo end.

A 90 degree bend at the servo end of a push rod held on by a snap on push rod keeper is certainly easy and simple enough to install, but it adds another piece to the puzzle and another potential element of failure.

Some use the push rod connectors with snap on nylon nuts (on throttles only we hope!). Here we add two elements of potential failure: the screw binding the push rod and the nylon snap nut. A Z-bend is a more solid connection and keeps the linkage simple by eliminating other elements of potential failure. The only problem with Z-bends nowadays is that the metal push rods in many ARF kits will crack or break in an attempt to make a Z-bend in them.

Recommendation: use a Z-bend at the servo end of all linkages. If the metal push rod won't take a Z bend, replace it with one that will, or soften the rod with heat before bending. If a snap on keeper must be used, at least put a small piece of fuel tubing around the snap end to keep it snapped on. Keep things simple by eliminating unnecessarily complicated linkages.

NEXT MEETING

Thursday
FEBRUARY 3rd
7:PM
Community Room A
The Library Center
4653 S. Campbell

This Months Program is:

GOOD ARF/BAD ARF:
A ROUND TABLE
DISCUSSION OF
GOOD/BAD
BUILDING/FLYING
EXPERIENCES WITH
VARIOUS ARFS

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GAINS & LOSSES

First Flight:
P-47 by Ron Hyde
Cloud Dancer by Charlie Conlee
T-33 electric DF by Larry Askren
Spacewalker II by Barry Harper
Texan II by Barry Harper
Harrier 3D by Ron Hyde

Last Flight:
Barry's .32 size Modeltech Extra

Flying Again:
Steve Pennington's Four Star 40
Tim Hankins' Kadet Senior
Tim Hankins' Champion
Pete Brownell's modified Seniorita

President's Corner by Barry Harper

Well, the New Year's Day Chili Fly was a great success. If you were not able to be there you missed a great day! Even with the wind we had a lot of good flying with only one "incident".
As I said in last month's column, if you are not a winter flyer, it's time to maintain your aircraft and equipment. Why do I repeat this? Recently we had a close call at the field with a wild (out of control) model with dying batteries in the pit area 10-15 feet from vehicles and people. Word was this model hadn't been flown in some time and the batteries had not been properly maintained. In this newsletter we are including tips on winter maintenance of your models and equipment so you will be safely ready to fly when the temperatures get warmer. Think about it: it just isn't worth loosing a model or causing injury over a $10-$15 battery. If a battery is questionable, replace it. If you are unsure about it's power level, check it - usually there are several people at the field with a battery meter they'd be glad to allow you to use.

Continuing on a theme of safety, lately there have been some instances of what many of us deem "unsafe" flying at the field. In our last meeting, the question was raised as to what should be done. It was encouraging to hear the response. The sentiment was that safety is the job of all of us. Therefore, it is the duty of each of us to approach a person responsible, with an attitude of kindness and concern, and point out the violation of our safety rules. The safety rules exist for a reason: to prevent loss - whether that means that of a model, damage to property or injury to a person.

Our treasurer reports over 40 persons have paid their 2005 dues. This is a great gesture in our effort to support our land owner to whom we owe lease payments. We certainly want to keep him happy!!!

SPONTANEOUS FLY DAYS

Cold Fly: there was a recent cold flying day that started at 18 degrees and ended at 22. It's worth it on one of these days just to come and see a flier flying from inside a large cardboard box. Small space heater recommended, hot chocolate not included.

Fog Fly: Jan 3 there was a dense fog at the field: ceiling about 50 feet. Really neat if you like flying low.

Ski Fly: Jan 8 there was just enough snow on the field to fly off skis. It's odd having NOT to land on the runway. On days like this, come early. By afternoon, the snow was just about gone.

TIP: Epoxy - Did you ever have your six-minute epoxy start setting up on you after one or two minutes? Epoxy manufacturers suggest that you mix your epoxy on a flat, wide open surface as opposed to a deep container. It seems that mixing epoxy in a deep container speeds up its chemical reaction time. If you still want to use a deep container, add a little alcohol (don't exceed 50%) to the epoxy to slow down setting time.

Springfield RC club Minutes for January 2005. Ralph Todd, Secretary

Springfield RC Club, Minutes of January meeting - Thursday, Jan. 6, 2005. Ralph Todd, Secretary.

The club met at the Library Center on South Campbell Street. There was an excellent turnout of members and visitors. The meeting was called to order at 7 PM by president Barry Harper.

The minutes of last month's meeting and Christmas party were voted on and accepted. David Campbell, with the assistance of his wife Lanora, gave a detailed treasure's report. This was reviewed, voted on and accepted by the club. David also reported that we currently have 43 members that had paid membership for this year, after presenting proof of paying their AMA dues.

President Barry recognized Mark Wallenmeyer as being one of our newest members. We were also pleased to have some members wives at the meeting.

Barry gave recognition to last year's officers, and announced that Dan Copeland would be our new newsletter editor. He thanked Russ Rhodes for all of the work he had done as the previous editor. He reported that Jon White and his wife would continue maintaining our club's website. We are grateful for all of their work.

OLD BUSINESS:

It was suggested that we have one too many port-o-potties at the field. David Campbell said that it looked like, on his records, that we had paid $200 for the smaller one. Doug Bennett suggested that we let the company we purchased them from, take the unit back, and apply the $200 on the monthly service fee they charge to maintain the larger one.

Barry said that there had been some patching of a bad crack in the runway at the field. The general sealing job however, will have to wait until warmer weather.

Sparky Wessels volunteered to have Bert Turner's name added to the Top Gun plaque.

There was discussion concerning an upcoming air show that Greg Markel had recommended the club hold. President Barry asked for volunteers to serve on a committee with Greg, to study and weigh particulars concerning the event.

NEW BUSINESS:

Barry asked that members fill in the blanks of the form that was included in the newsletter, indicating what type of meeting would be enjoyed most. These need to turned in at next month's meeting.

There was a lengthy discussion as to the benefit of having several more elevated starting stands built and purchased by the club. The pros and cons were weighed carefully. It was decided to hold off awhile longer about deciding. The one that we have currently is being used, but not really by enough flyers. It needs to be used for mostly starting only. It was recommended that a sign be placed on the one we have, that states that it needs to be shared, and not "homesteaded on."

Jerry Kutz volunteered to check about getting protective fencing in front of the passways in the outermost fence. There appeared to be two weak places that "out of control" planes could get through.

It was agreed by members to continue posting safety tips in the newsletters of procedures that could help avoid injuries. There was some humor about close calls in years past that could have been serious.

President Barry asked for a motion to close the business portion of the meeting. This was made, voted on and passed.

Barry Harper, Bob Miller, and Charles Newton showed some very interesting and useful tools for building and rebuilding. Other members contributed useful hints that had been very handy. This turned out to be a very enjoyable sharing session. There were some tools that some members were unaware of that could make construction easier and more perfect.

The meeting dismissed at about 8:30 PM.

2005 MEETING LOCATIONS

March 3
Upstairs Community Room
Midtown Branch Library
397 E. Central

April 7
Community Room A
The Library Center
4653 S Campbell

May 5
Story Hour Room
The Library Center
4653 S Campbell

June 2
Community Room B
The Library Center
4653 S Campbell

THE NEXT CLUB EVENT

FUN FLY/FIELD MAINTENANCE
APRIL 23, 2005

MAINTENANCE CHECK LIST

POWER PLANT

1. PROPELLER
- ❑ Propeller nut tight
- ❑ Spinner on tight
- ❑ Propeller balanced

2. ENGINE
- ❑ Check firewall for any glue cracks or fuel soaking weakness
- ❑ Engine mount bolts tight at firewall
- ❑ Hold down bolts tight
- ❑ Head bolts tight
- ❑ Carburetor secure
- ❑ Glow plug tight

3. FUEL SYSTEM
- ❑ Lines connected properly
- ❑ Line routing , bends, kinks
- ❑ Check lines for pin holes, air leakage
- ❑ Tank mounting
- ❑ Clunk free

FUSELAGE

1. CONTROLS
- ❑ Throttle control free
- ❑ Servos mounted securely and tight
- ❑ Servo hardware tight
- ❑ Servo pushrods clear of mechanical interference

2. LANDING GEAR
- ❑ Main Gear and Nose Gear Hardware tight
- ❑ Wheels free and collars tight

3. RECEIVER
- ❑ Check all receiver plugs for proper seating
- ❑ Check antenna routing
- ❑ Check receiver overall crash protection

4. BATTERY AND SWITCH
- ❑ Check switch mounting (opposite muffler side of fuse).
- ❑ Check wire leads for routing and binding and proper hook-up
- ❑ Check battery crash protection
- ❑ Check battery voltage
- ❑ Cycle battery monthly during long non flying periods

EMPENNAGE

1. VERTICAL STAB
- ❑ Check all glue joints for rigidity where joined to fuse
- ❑ Check rudder hinges
- ❑ Check rudder control horn and clevis

2. HORIZONTAL STAB
- ❑ Check all glue joints for rigidity where joined to fuse
- ❑ Check elevator hinges
- ❑ Check elevator control horn and clevis

WING

1. CONTROL SURFACES
- ❑ Check aileron hinges
- ❑ Check aileron each control horn and clevis

2. WING ALIGNMENT
- ❑ Check wings center section joint
- ❑ Check wings for warp
- ❑ Check wing bolt mounting plate/blocks for fuel soaking weakness

AFTER THE CRASH

-by Clay Ramskill

Let's face it- sometime, some day, one of your wonderfully crafted RC planes may crash. Some RC airplanes may last years, until they're just flat worn out; others have been completely destroyed after only a few tense seconds of flight!

When a crash does occur, there are several things you need to do.

LOCATE- Whether or not you are the unfortunate pilot, if you see a plane go down out in the toolies, establish a line of sight (a bearing line) to the crash. Do this by noting your position at the time, and by sighting to some recognizable landmark; in the absence of anything that stands out, lay your transmitter down, antenna pointing to the crash site. Then, if possible, a search party can just walk out that line to find the wreckage. If two separate lines of bearing have been established, the wreck site may be even more accurately pinpointed.

In a dense forest or swamp, it may be helpful if someone will fly a plane over the bearing line to aid the searchers on the ground. And in those trees, don't forget to look UP, as well as down and around; the plane can very well be perched up in the branches and leaves.

RECOVER- When you find the plane, be sure to pick up everything of importance. If there's any doubt, pick it up! Even some smaller pieces can be of aid in reconstruction. Naturally, you're interested in locating all the expensive stuff- radio, engine and such. The hard part is that heavier items (engine and battery) can travel a long way from the initial impact site; they will often be found some distance off in the direction the plane was travelling at impact. And be sure to count servos- sometimes one may be separated from the fuselage or wing. Also at this time, be sure that any leaking fuel situation is not allowed to continue. Fuel soaked wood is very difficult to repair.

If you should have to leave without all the goodies, be sure that the crash site is marked well enough that you can return to it at a later time for further searching.

ANALYZE- Sometimes the cause of a crash is obvious, sometimes not. If not, do what you can to find out what happened. This is crucial to your peace of mind, and toward preventing future occurrences.

Radio failures are usually the most difficult to sort out, but you can often narrow down any fault to a specific component. If there was a complete loss of control and all the servos went "hard over," then that is definitely a radio or interference problem. But if you were able to cut the throttle, then perhaps only one servo went haywire. And if the plane `went in' with all the controls locked in the last commanded position, then the failure was more likely the battery, switch harness, or associated plugs. Note that on a PCM computer radio, your "failsafe" mode can give you a similar effect. If only one control surface failed, the elevator for instance, you not only need to check out that servo, but also the appropriate control linkages.

RECONSTRUCTION ?- That depends.

It depends on how bad the damage is, of course. But heavily damaged planes CAN BE REPAIRED. It's usually a question of whether you think it's worth it and many factors will influence your decision. But give yourself a chance; take the scraps home and think about it before you make any rash decisions to trash the plane.

And the repairs? -That's another subject..

PROPER PROCEDURE

Often, we have a mishap because we didn't follow an established routine or a proper procedure.

Recently one of the models at the field was damaged due to an aileron clevis coming off at the aileron control horn.

A simple check of the deflection of all control surfaces just before take off would have prevented this incident.

We all need to establish and stick to a standard routine or proper procedure.

This procedure at the field begins at the mounting of the wing to our model and connecting the servo leads and ends with the take off itself. There are many steps in between and vary with personalities and different types of models. But one thing is certain: deviation from an established routine or proper procedure can, and eventually will, cause an unfortunate, and often unnecessary, mishap.

STARTING STAND ETIQUETTE

We have a sturdy starting stand at the field but it has come to the attention of the general membership in the last monthly meeting that this starting stand is not being used exactly as the membership intended.

The starting stand is to be used just for that: starting. Once a model has been started and flown, the stand should be free for use by other flyers until it is needed again for starting.

flyers are "parking" or "homesteading" on the starting stand with their models and field equipment and not really allowing it to be used by other flyers for that day.

Until other starting stands are purchased, we ask all who use it to keep it freed up for starting models only.

WHEN YOUR AIRPLANE TRIES TO TELL YOU...

Once upon a time your author had a new pattern plane. On the first few days of flying it, everything was fine. But one day, on the first flight, it required several clicks of down trim (odd . . .) after take off, and after each turn or maneuver, the pitch trim would be off again (VERY odd . . .). Only when it took full down stick to fly inverted (JEEPERS!) was your author smart enough to realize something was wrong. After landing, the problem was obvious: I had not bolted the wing to the fuselage!

But the plane DID “try to tell me.” I just wasn’t listening. Only new, tight-fitting wing dowels

Continued...

had saved the plane from destruction—it certainly wasn't the pilot! Recapping later, I thought of a number of things that would have caused similar symptoms; servo or servo tray loose, bad servo centering, broken elevator hinges, loose control horn, etc. The point is, ALL of those things are BAD! And with the plane not behaving properly, WHY did I keep flying??

Just suppose you're getting an occasional glitch from your radio, something that doesn't normally happen. This could be an antenna problem. It could be metal-to-metal vibration causing home-grown interference, or a loose crystal. Will any of these get better while you keep flying? And speaking of vibration, what if you start hearing it in the air? It's your plane talking to you—loose muffler, engine mount, warn wing dowel holes, loose cowl mounting. Again, such problems don't get better, only worse.

One more example—this has happened to all but the most careful pilots. Your engine goes lean and sags at the top of a loop. It's TELLING you that the mixture is too lean. But, you don't listen and keep flying. A minute later, while doing another loop, you're suddenly dead stick!

The sky gods know—we have enough problems that pop up suddenly, and we don't have any opportunity to prevent them. Other times the plane "tells you" that there is, or will be, a problem. Unless you really enjoy repairing or rebuilding—LISTEN! Cutting a hop short to check out a possible problem is much quicker (and vastly cheaper) than building another plane!

from Sam Says
Dennis Woodcock, editor
Salinas CA

Charlie Conlee and his new Cloud Dancer