



SANDERSON FIELD R.C. NEWS



CHARTER NO. 3079

** Don't forget to vote **

CLUB MEETING

*This months meeting will be held
on Thursday Feb 13th.*

at The PUD auditorium

*2621 E John's Prairie Rd.
Shelton, WA*

No Minutes as the Christmas party was last month.

Tom talked about the Christmas party, everyone liked the venue. He noted that we have an anonymous donation of \$200 towards next year at the Colonial house and asked if the club would like the Christmas party held there again. He also noted that we basically collected enough money to pay for everything at last years party, Raffle items, awards and the Venue.

Tom Jr. motioned to have the Christmas party at the colonial house again, have more (smaller) raffle items for both men and women. seconded, Motion carried.

Tom noted that we did get the NMPRA championship race this coming September (24th-28th),

The days have been scheduled with the Port.

The Port is also waiving the tie down fee for people who fly their own planes in for the event and will be mowing before the event.

Tom Jr. has made a flyer to be posted on our web site.

Burt and Mary Daggett have been working with the Casino for rooms and banquet hall.

The crate storage has been worked out with Tom Sr. and Bob Mason.

Jody Diaz will let us use his trailer for pilot transport.

Tom will get the secretary the list of things to get done to be posted on our web site.

Chuck is working on the cost of port a potties.

Bonnie Beatty has gotten 10 tables and 40 chairs for the dinning area.

Dee Grout was welcomed as the new treasurer.

By-Law changes were discussed, changes made by the body include:

Article I section 6 and 7 - change "Calendar days per year" to "days per calendar year"

Article I Section 7 - add "If after a 1 month guest membership the guest wishes to join the \$25 guest membership fee applies towards a full membership, which would then be \$75.

Article II Section 1 - Add "year" between senior and of.

Article IV D) Add "timely" between for and depositing, Change "by the board of directors" to Members of the board of directors, Change Audit to "review" and change bi-annually to "annually". Gordie offered to help get the review process started.

Article XIV - Change "Port of Shelton" to "land owners".

Tom Jr. motioned to accept the revised by-law with changes, seconded and carried.

The 2014 contract with the port has been signed, the only difference from last year is a 2.5% cost of living increase. This amounts to around \$4 per month.

Dick Robb mentioned the Scale fly-in is not on the calendar. We need to schedule a day with the Port. Tom Jr. will coordinate with the Mt. Ranier club on dates.

Treasurers report was read and accepted as read.

Adjourned at 7:45

Tom Jr. won the raffle.

SETTING UP YOUR SERVO'S

Bob Ackerman, Mid-Missouri Radio Control Association

One of the problems for most beginners is that they rarely set up the servos properly. I have said for years that you need to learn how to set up your aircraft mechanically before you touch the computer on your radio. Therefore, I am going to review what I do to set up any servo on my aircraft.

If I am going to re-set up an existing aircraft, first I copy the current settings to an unused memory location. See your radio manual for exact instructions. After the current settings are copied, clear all the programming for an unused memory location. Set all radio trims to the center. At this point the servo end points should be at 100% and the servo subtrim should be zero.

With the control rod disconnected from the servo, move the control rod until the control surface is centered. Center the servo arm as close to center as possible. The servo arm should form a 90° angle between the arm and the control rod. Reposition the servo arm on the servo until you have it as close as possible, adjust the length of the control rod to match as necessary, and then adjust any subtrim to center the servo. Temporarily connect the control rod and look at all the links for that control. On a helicopter you may have two or three connections,

as the control rod runs through bell cranks, before the servo actually connects to the control surface. Check each of these 90° connections and adjust as necessary. Now disconnect the control rod from servo.

Now, turn on your radio and center joystick for that channel. The servo arm should be in the center position. Move the joystick to one end of its movement and hold the joystick there. Manually move the control to where the servo arm is now positioned.

Notice the end of the control rod carefully. Does it move past the servo arm reach? Does it not move far enough? Make note of that difference then move the joystick to the opposite end and do it again. The difference between the servo arm and the control rod should be equal on both ends. If not, you may have something else not set properly.

If the control rod goes past the servo arm in both directions, then the control surface will move farther than the servo will allow. At this point, change the positioning of the control rod on the control horn closer to the control surface a hole or two. Reposition the control rod until you get everything matched up. Sometimes a longer servo

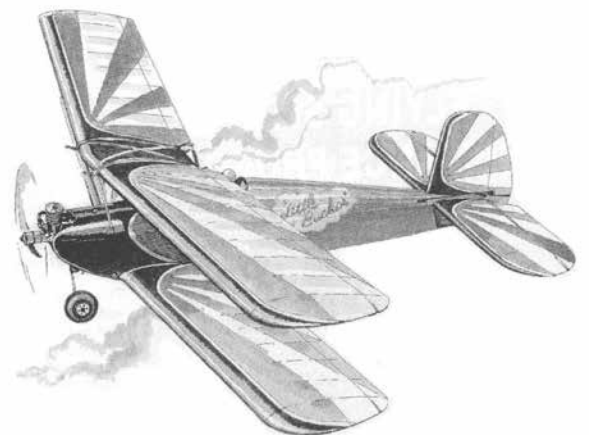
arm is required.

If your servo arm moves farther than the control rod will move, then use an inner hole on the servo arm until you get everything matched up.

At this point you have technically setup your servo. The servo is centered to the control surface and the control rod will move the control surface through its maximum range.

Now you can use your computer radio to adjust the end points for each servo to get the desired amount of control movement. Many times the control surface will move farther than recommended for normal, sport, or 3-D flight. Check your aircraft instructions for recommended control surface throws.

One warning: Helicopter pilots must ensure to check for any control binding during extreme joystick movements. The controls on some helicopters can move farther than necessary for normal flight, which can cause control binding during flight.



ELIMINATE BOUNCE IN YOUR LANDINGS

Twin City Radio Controllers, Inc., Minneapolis MN

In order for a taildragger not to tip over on its nose, its wheels must be ahead of the center of gravity (CG). As it is further forward, it can tolerate rougher ground, but the tendency to bounce is worse. But when a taildragger lands, the impact of the main wheels tends to push the nose up, increasing the angle of attack, lowering the tail, and increasing the lift—and the airplane is flying again.

Eventually, air speed is reduced and it falls to the ground again, maybe harder. The nose rotates, and the airplane becomes airborne once again. This process will continue until all flyable airspeed is exhausted. The aircraft may continue bouncing because of a phenomenon known as “loping.”

Loping occurs in a taildragger when the bounce of the main wheels causes the tail wheel to slam into the ground while the main wheels are still in the air. Then, the tail wheel bounces, slamming the main wheels onto the ground. This argument between the front and rear continues until momentum is lost. But the severity of the loping can increase in the interim.

Loping can occur in trike-gear aircraft as well. If the nose wheel strikes the ground before the main wheels do, the nose is pushed up severely, slamming the main wheels onto the runway. Being behind the CG, the rebound of the main wheels rotates the airplane forward so the nose wheel slams

down again, maybe harder than the first time. The process repeats.

Loping in a trike airplane can start with taxiing. If the main wheel hits a bump, weight is shifted forward onto the nose gear. It rebounds, returning weight backward. This ping-ponging can grow, especially if the airplane is accelerating. The only way to stop it is to stop the airplane.

The longer the distance between the main wheels and the nose wheel, the greater the tendency to lope. Loping also increases if the main wheels are too far aft of the CG. Stiff struts and bouncy wheels aggravate matters.

Trike gear has less potential for bounce because the main wheels can be placed closer to the CG. When the main wheels touch down, the impact lowers the nose and the angle of attack, reducing lift. Some trike-gear designs actually have negative angles of attack when sitting on all wheels. This holds the airplane on the runway.

Trikes have more positive ground steering because the nose wheel makes firmer contact with the runway than a tail wheel, especially at higher speeds.

Another little-known cause of bounce is main wheels that are too far apart. This may be shocking because this practice is generally considered good for ground handling. It usually is because it improves directional stability when rolling along the ground.

What happens when the airplane lands and one wheel hit the ground before the other? A lateral form of bounce occurs from

one wing to the other.

One might think that soft tires and springy struts would increase bounce. Not so. More often, bounce is aggravated by the landing gear that is too stiff. Rigidity does not absorb energy; it reflects it. The hardness of the runway contributes to bounce for the same reason. Some early racing airplanes, such as the Howard Ike, had landing gear so rigid they could not land on concrete runways because of the uncontrollable bouncing that occurred.

Moving the main gear close to the CG reduces bounce and improves tracking. The Spitfire, for example, is quite bounce resistant, but it tips over easily on rough ground.

Moving the nose and main gears closer together reduces bounce and loping, but it degrades tracking and increases the tendency to tip over on rough ground and in crosswinds.

Oleo struts help absorb impacts, but the spring tension must be just right—stiff enough to keep from bottoming out, soft enough to absorb shock. The same may be said of tires.

If your airplane rebounds into the air after a severe impact, head off further bounce by inching up the throttle slightly. Apply down-elevator if necessary to level the nose. This increases air speed, prevents a stall, and lowers the rate of descent.

TIPS AND TRICKS

Winter Spruce Up

With the flying season at an end for a lot of folks, it's time to think about other winter activities. While you're planning your winter build, it's also a good time to go over your old machines and repair all those things that you swore that you'd get at right away back in July.

Some things to think about are:

- Repairing torn covering.
- Checking engine mounts for loose fasteners and firewalls.
- Have a plan to test and recycle your transmitter and receiver batteries once or twice.
- Stock up on propellers now while you have plenty of time to balance them.
- Clean gunk from that old engine.
- Redo the plumbing in your fuel tanks.
- Send in your transmitter or receiver for a checkup, either to the manufacturer or to a third-party vendor such as Radio South RC.

There are more things to think about, but this will give you a good start!

From the Wing Busters Model Airplane Club, Massachusetts

ID'ing batteries

Can't remember which battery you used last time in your electric plane? Do like Stacy Myers does, take one of those little plastic things they use to keep bread wrappers closed and put it on the leads after charging. Take it off when you put it in the plane and you'll know at a glance which one needs charging at the end of the day.

**DUES ARE \$75 IF PAID BEFORE JAN
1ST, \$100 THEREAFTER.**

**IF YOU PAY BY MAIL SEND YOUR DUES,
PROOF OF 2014 AMA MEMBERSHIP
AND A SELF ADDRESSED STAMPED
ENVELOPE TO THE TREASURER:**

**DEE GROUT
P.O. Box 516
Union WA 98592**

Make checks payable to SFRCF

CLUB OFFICERS

President..... Tom Strom..... (360)350-0181
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Treasurer Dee Grout..... (360)898-2084
Secretary Bob Beatty (360)426-5601
Safety Officer Tom Strom Jr. (360)350-0181

BOARD MEMBERS

Board Member Tom Strom (360)350-0181
Board Member Jody Diaz..... (360)427-6102
Board Member Stacy Myers..... (360)426-9367
Board Member Bob Beatty (360)426-5601
Board Member Burt Daggett (360)427-6653
Alt Board Member Bob Mason (360)426-9256
Alt Board Member Chuck Kentfield (360)866-9473

February 2014

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				3:00 PM Training night		
	9:00 AM RC Breakfast	SFRCF Board meeting		3:00 PM Training night		
				SFRCF Club meeting 3:00 PM Training night		
				3:00 PM Training night		
				3:00 PM Training night		

I still have not received a list of sold days from the Port, I'm sure they're working on it.

<http://sfrcf.quintex.com/event/events.html>

Club Scheduled Events for 2014

Event dates in black are scheduled. Events in gray are complete.

The new contract allows us to schedule non-exclusive days again, however if the car clubs don't go to the new track we may not keep many.

January 1st 9:00 amFirst fly of the year - Sanderson field - Locks will be changed!
 July 13????Fun Scale fly-in
 Aug 2nd & 3rdpre championship Pylon race
 Sep 24-27thNMPRA National Championship Pylon Race
 December 12thChristmas Party @ the Colonial House from 6 to 10

dues \$75 before January 1st and \$100 on or after

Check out our web site at <http://sfrcf.quintex.com>