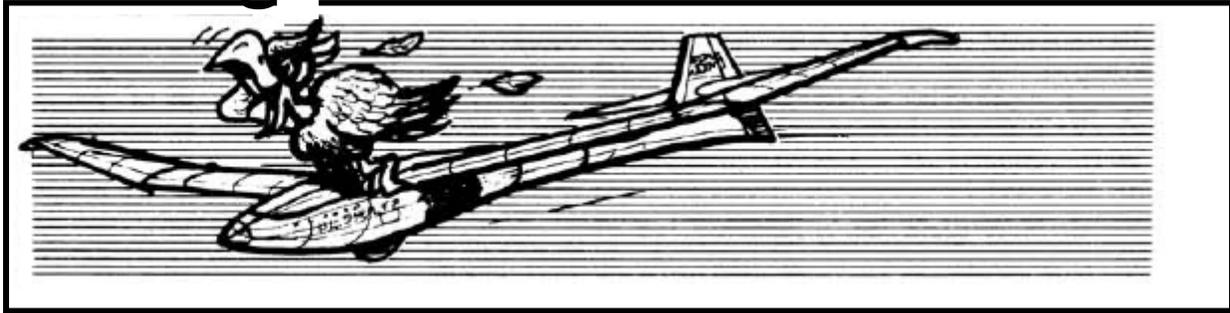




President: Harvey Jenkins **Contest Dir:** Eber Graham
Vice President: John Barr **Treasurer:** Bruce Aveson

Equipment Manager: Major Anderson

Soaring



Keith Kindrick January 2014

By the time you have read this we will have already brought in 2014 with two contests and survived the Colby fire. December was the coldest event we have had on record for a few years. January was a lot better! We had a cool day with the upper 60's making the 5, and three 9 minute flights challenging. Most of us barley climbed above the normal launch height on all of the flights for the day. Dan Borer was on rails with his landings. He easily obtained the top score in open and overall. John Barr really had great task for the conditions. There were even a few new faces out at January contest let's keep up the good work. New members are what we need to keep SWSA growing.

On the drive into the flying field Sunday morning I saw a new open sky line to the east. I was totally surprised to see the tree line amazingly more open. It is looking to me that the river folks have been using them for fire wood. I was told they had been given a 10 day notice to leave. Maybe they can get a couple more down before they leave!

Okay, how many of you saw the new equipment that has just shown up at the field after the gate combination has been changed? It was very obvious as you drove in so if you missed here is the clue for today.



At the AMA show there was a very odd rudder design that is out for the DLG guys. The new the Stobel V3 is apparently going to be available



Silent Wings Soaring Association

January 2014

soon with a solid core wing and a radical looking new vertical stabilizer with "saw tooth" leading edge. Apparently it is based on principles that the new saw tooth propellers that are being used in f5D utilize. Bob said the manufacturer is claiming an increase in launch height.



On the next page you will see the F5B propeller that uses this idea for increased efficiency. It was designed and built by Built and developed by LE-Composites and Paul Schreiber in 2009/2010 for world championships in 2010. No idea how well the propeller worked. It is different though.



Skip Miller Models has just released its newest light weight EGIDA. It has a much slimmed down weight to 54 ounces.



The trend has been to make these F3J sailplanes lighter and lighter so they have the ultimate light air performance. This all comes at a trade off in durability for both handling the model during equipment installation and making hard landings. If you decide to buy a light weight model keep in mind it will not be as strong as the standard version. All the reduction in weight is really ounces of carbon being removed!

Going back a few years some might remember the Airtronics Aquila. Founding member Dan Taum built and flew one for a while as did Jay Siren. Lee Renaud actually was a member of SWSA when Airtronics was located in Arcadia. I happened to see this rare Vee tail version in a picture. It never made it into production.





For those who have opened up a kit to find a set of ribs that is not perfect this tip is for you.



Gaps in die cutting are common problem as seen above. So what to do? One easy option is to mix up some long slow curing epoxy with micro balloons added to create a spooge. It needs to be the consistency of tooth paste. Just load up a syringe and apply in all the gaps. Make sure that you do not over do it. All the extra spooge adds weight.

Epoxy spooge below



Futaba has new servos.

The BLS173SVI is for elevator use. It is a direct fit replacement for the JR DS3421. It is smoking fast (.11s) with 95 ounces of torque on LiFe. This servo is fully programmable.

S3173SVI and S3174SV. The difference is that SVI models have a new connector on the servo case and the SV models use standard servo cables. The 3173 has the same mounting lug configuration and size as the DS398. They too are fully programmable.

All of these servos are compatible with standard PWM cables and receivers. They are also compatible with Sbus and Sbus2 radios. One neat feature is that the wing servos have two connectors on the case, enabling you to daisy chain the servos together in the wing, reducing the total amount of wires needed.

If you run them in the Sbus configuration, they use serial communication and only need two wires (positive and negative) per servo. So it would be possible to substantially reduce the amount of wires and cable weight in an airplane. One benefit of the Sbus2 receivers are that they include servo position in the telemetry, if you run the SV/SVI servos.

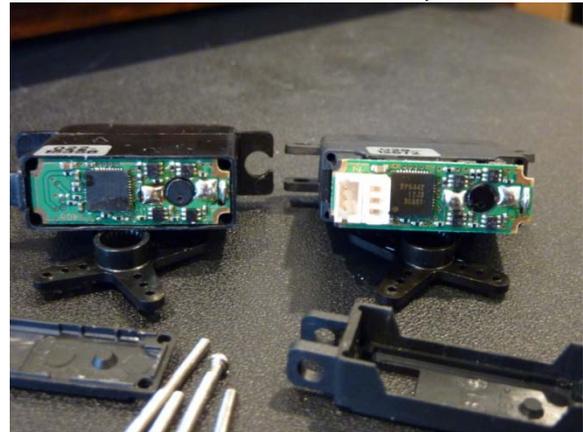
BLS173SV servo specs:

Torque: 105.6 oz-in (7.6 kg-cm) @ 7.4V
94.5 oz-in (6.8 kg-cm) @ 6.6V
Speed: 0.10 sec/60° @ 7.4V, 0.11 sec/60° @ 6.6V
Dimensions: 1.30 x 0.59 x 1.07" (33 x 15 x 27.1mm)
Weight: 0.99 oz (28 g)
Power Requirements: DC 6V to 7.4V

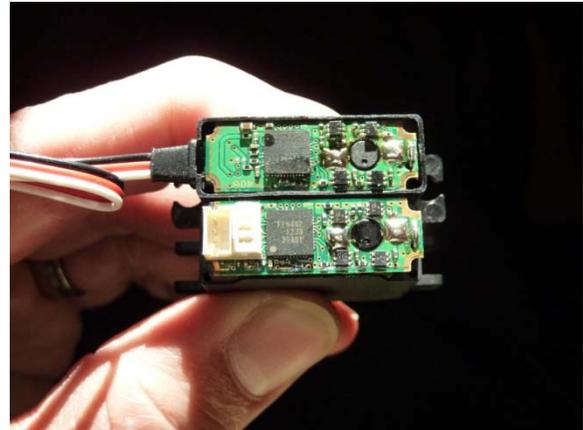


JR3421 servo specs:

Torque: 4.8V: 65.0 oz-in (4.68 kg-cm)
6.0V: 75.0 oz-in (5.40 kg-cm)
Speed: 4.8V: 0.18 sec/60°, 6.0V: 0.15 sec/60°
Weight: 1.04 oz (29.5 g)
Dimensions: Length:1.30 in (33.0 mm)
Width:0.58 in (14.7 mm)
Height:1.02 in (25.9 mm)



S3173SVI and S3174SV shown side by side



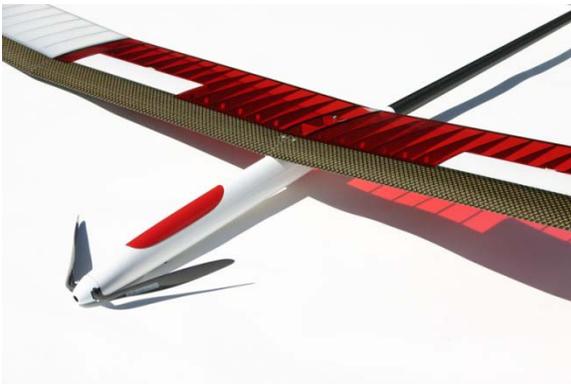
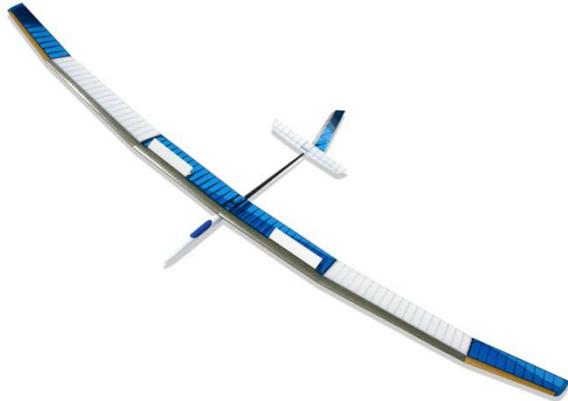
Not the connectors on the case. This allows direct connection to the servo.



For those who want to know “what’s in the box” Below are some photos comparing the 3173 to the 3172 and 3155. The motor/pcb is pretty tightly press-fit into the case so I did not remove it to examine the potentiometer.



Eagle 3.6 from Soaring USA For those of you who are looking for a new Open Class Glider you might want to check out the new machine. It is available in a RES, Aileron and Flap, and RES Electric versions.



[Future Events](#)

SWSA February 9th Monthly

Task will be made known at the event
Starts @9:00 AM

If you have any events let me know