

the L.A.S.S. Edition

May 2011

Secretary's Notes

by Tom Wild

President Loren Blinde called the April 2011 L.A.S.S. meeting to order at 7:30 p.m., April 5th. The minutes from the March meeting were accepted as written.

OLD BUSINESS:

Loren asked if anyone had anything to report as far as the conditions of our field signs and no one present had been to the field since the last meeting so there was nothing to report.

The effort of the AMA lobbying congress on the upcoming FAA intent to regulate RC modeling was discussed and many members relayed their experiences with sending emails to Senator Ben Nelson and Mike Johanns varied from pleasant experience to being added to email mailing lists.

LASS has received a thank you note from Dick Britton's wife Amy Birky and Allison Petersen, past chair of Spring Creek Prairie.

Loren mentioned he received word through the Metro Area RC Flying website that Larry Puls is still in the hospital. Loren said he would ask into this to see what it going on with Larry.

Allan Worrest checked the Metro Area RC Flying website for the LASS contact information that was requested. Allan confirmed that Jim Baker was listed as the club contact (see below).

Lincoln Area Soaring Society is a small group of guys meeting monthly to plan, share stories and the latest building project.

Our 10 to 15 members enjoy a flying field at Lancaster Event Center on the northeast edge of Lincoln. It is very large and accessible. Perfect for thermal duration sailplanes but some of us fly electric there as well.

The field is members only but we love to have guests fly with us. Annually we host a handful of relaxed contests and fun flies. Many LASS members enjoy flying slope gliders at the dams in the area and at Wilson Lake, Kansas where we hosted a regional pylon style race for eleven years.

The Midwest Slope Challenge is still the longest running slope race in the country. Jim Baker will be glad to answer any questions about LASS if you give him a call at 402-540-1127.

In last month's newsletter under Odds & Ends was a note from Bob Turner passed on by Loren about a possible one design type event using the Radian Pro electric glider. This possible event may include the Western Flyers, Swift and Performance Flyers. Possible events for this electric glider would be a timed motor run and glide duration.

Minutes (Continued on page 2)

First LINOMA 2011

President Loren Blinde sent the following email to the membership:

FIRST FLY OF THE YEAR

Saturday, May 7
Lancaster Event Center
Pilot's Meeting 10 am
Winch launched sailplanes, duration and spot landing.

If we have enough people from here and there, we will call it a LINOMA. If not, we will just fly and maybe even keep score. No entry fee. Lunch if we're so inclined.

Loren

**CLUB MEETING Tuesday
May ., 2011
7:30 p.m.
Willard Community Center
Folsom & West B Street
Lincoln, NE**

RADIAN PRO PNP SPECS:

- **Wingspan:** 78.5 in. (2000mm)
- **Length:** 45.0 in. (1140mm)
- **Flying Weight:** 34.6 oz. (980g)
- **Motor Size:** 480 Outrunner Brushless Motor 960kV
- **CG (center of gravity):** 2.75 in (70mm) back from the leading edge of the wing at the root
- **Prop Size:** 9.75 x 7.5 in.
- **Radio:** E-Flite 30Amp Pro Switch-Mode Brushless ESC
- **Needed to Complete:** A 5+ Channel DSM2 compatible Transmitter, 3S 11.1V 1300mAh 15C LiPo Battery and compatible charger

NEW BUSINESS:

There are no events on the calendar yet for 2011 but the Swift opener usually takes place in late April or early May; for sure before June when the grass on our field becomes too tall for comfort.

Lincoln Sky Knights discussed the possibility of having a Quiet Flight Day at the LSK field for gliders and electrics and is looking for a CD.

Allan reminded us that it is that time of year to review our membership for those delinquents on their dues. Those not rejoining will no longer receive newsletters.

A flyer was passed around announcing Hobby Town's Grand opening of their north store on April 16th and 17th in the mini-mall on the south west corner of 27th and Superior behind Carlos O'Kelly's Mexican Cafe.

MODEL OF THE MONTH:

Jack Barry brought a Tropical Storm that he was willing to let someone else have. Wilson Hardy brought his Czech-built Valenta Models Thermic Excel . He also showed off a wing bag that he designed and made. Allan Worrest brought his Sunset motor glider.

IN MEMORY OF DICK BRITTON:

Dick's wife Amy Birky asked Jim over to go through Dick's workshop to clean out any items that club members

Regional Events

4/30/2011 - 5/1/2011 -- Solon, IA (AA) MISTY MEADOWS SOARING CLASSIC. Site: Club Field. Terry Edmonds CD PH: 319-624-2822 Email: terry-edmonds@uiowa.edu. Events 442, 444, 460(JSO). Sponsor: EASTERN IOWA SOARING SOCIETY

5/7/2011 First LINOMA, Lancaster Event Center field. Pilots meeting 10 a.m.

5/12/2011 - 5/15/2011 -- Lucas, KS (AA) MIDWEST SLOPE CHALLENGE #18. Site: Wilson Reservoir. Michael Tallman CD PH: 316-305-6241 Email: miketallman790@yahoo.com. Events 451, 452, 453, 454, 458(JSO). Sponsor: WINGS OVER WILSON SOARING CLUB

6/9/2011 - 6/12/2011 -- Waverly, NE (C) CORN HUCK FEST. Site: Club Field. Gary Dunkel CD PH: 402-469-5291 Email: gary-dunkel@hotmail.com. Visit: www.lincolnskyknights.org. 5th stop in the Flying Giants.com 2011 Huckfest Tour! 4 big days, 2 runways asphalt 40x450' and irrigated grass runway 80x450'. Club house, sun shelter, and RV hook ups. Lots of open flying with airshows, demos, prizes and raffles. Giants preferred, 3D, scale, heli and turbine jets. Visit website for more details. Sponsor: LINCOLN SKY KNIGHTS

might find useful. Jim wrapped the items up and we played a modified version of Christmas take-away game, drawing numbers and either selecting the corresponding numbered package or stealing a package away from a fellow club member. In the end we all took home workshop items that will be pleasant reminders of our friend Dick Britton.

The meeting was adjourned at 8:15.



The Lincoln Area Soaring Society, chartered by the Academy of Model Aeronautics as club #1853, publishes this newsletter. Any material in it may be reprinted without permission provided credit is given to LASS and the article author. Submit articles to the editor at the E-mail AWorrest@aol.com

President: Loren Blinde
Secretary: Tom Wild

Treasurer: Jim Baker
Editor: Allan Worrest

April Show & Tell



Jack Barry holding the Tropical Storm that he won at the MWSC. Thane Kirchoff is in the background.

Allan Worrest with his Sunset motor glider.



Above, Wilson Hardy shows the wing bag he made. Inside he had a Thermic Excel.



Sunset

Some planes provide good service and are fondly remembered. The Sunset is not one of them. It flew decently enough during its short life but it wasn't well designed. Northeast Sailplane Products had it on sale a couple of years ago. This plane is an example of one getting what one pays for.

I started construction on the plane late last year when I acquired a JR 11X. I wanted a full-house sailplane to explore the transmitter's potential. The Sunset was already bought and it promised to be a quick build. But that didn't turn out to be.

The major problem with the plane before it came off the bench is that it was extremely tail heavy. This plane has a two-meter wingspan. But with an outrunner motor heavy enough for a much larger plane, more than nine ounces of ballast had to be added up front just to get the CG barely to the most rearward recommended location.

I had several far-out ideas of making a lead firewall or skid, but rejected them. Instead I reconcile myself to mounting the motor on front of the firewall instead of behind it. The motor I was planning to use didn't lend itself to front mounting, so another was purchased. With the motor mounted outside of the fuselage, I had to design and build a cowl to keep dirt out of the motor on landing.

The front mount did solve another problem. The plane had no hatch to access either the battery or the motor and its wiring. The only access was through the wing opening. If the ESC and battery were pushed too far forward, the motor wires are at risk of being damaged by the outrunner's rotating bell. With the motor on the outside of the firewall, the wires could be safely routed to the ESC.

In spite of a front mounted motor and adding a cowl that weighed a couple of ounces, the plane was still tail heavy. I

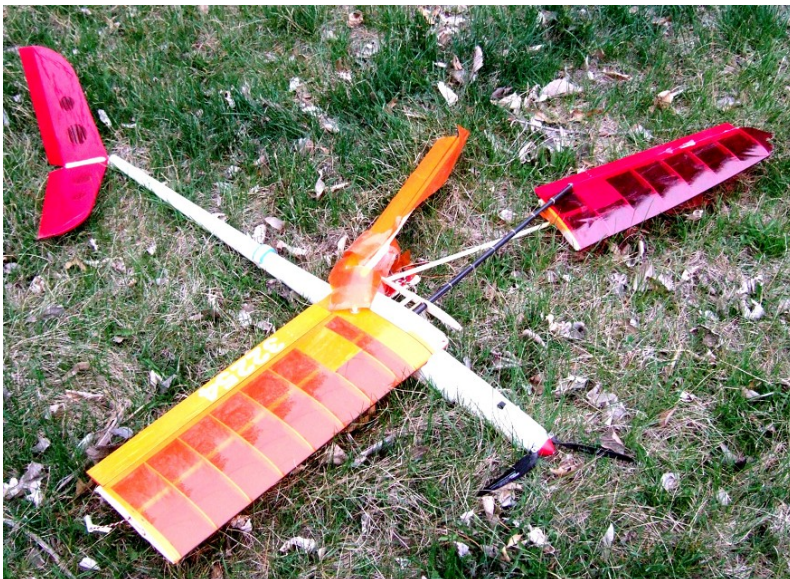
mounted a six-ounce lead disk just behind the firewall. This brought the CG all the way to the forward recommended spot. The plane was flown a few times before the meeting. It flew nose heavy. The day after the meeting, the weather was good enough to do more flight testing. I was anxious to try some dive tests and see how much I could reduce the weight in the nose.

In RCGroups, a person posted his experience with the plane. He lost his plane when he tried to exit a thermal. The wing let go. I should have remembered that. It was on the fourth test that I put the plane into too steep a dive. I can't recall hearing any flutter. No more than second after entering the dive, the wing exploded.

While I should have been more cautious in diving the plane, I also believe its wing construction was inadequate. The main spar was a carbon fiber tube. Its leading edge was a carbon fiber rod. The spar is not the problem as I have a REM motor glider that uses a similar tube. The problem is the leading edge. It is a carbon fiber rod that is about 1/8th inch in diameter. It doesn't afford much surface area for gluing the ribs to it. Additionally the ribs on this plane were spaced further apart than on my other glider. In addition, the covering was a soft covering like Oracover. All told, the wing was torsionally weak.

Since the Sunset's demise, I've read what the designer of the Chrysalis said about using a built-up wing on a full-house sailplane. He wrote that control surfaces stress the wing more than one without ailerons and flaps. He sells a popular built-up 2-meter RES motor-glider. When asked about putting out a full-house version, he commented that the wing leading edge on his plane would have to be changed to make it stiffer.

There are other full-house motor gliders on the market with wing construction similar to the Sunset. It is something to be wary of. - A.W.



The remains after the wing exploded. The left center panel had disintegrated leaving only the spar and part of the flap. The flap panel and the left aileron panel with the aileron servo were hanging by their wires. The right outer panel with the aileron servo is still missing somewhere on or around the Lincoln Sky Knights field. It may have landed and sunk in the pond.