



SANDERSON FIELD R.C. NEWS

Best wishes for the new year



CHARTER NO. 3079

CLUB MEETING

*This months meeting will be held
on Thursday January 8th from
7:00 p.m. to 9:00 p.m.*

at PUD #3

At 3rd & Cota

Last month's Christmas party marked the end of another year and the beginning of a new year. The party was pretty well attended but I would have liked to see more of you there.

On January 1st a new lock will be put on the gate(s) and the shed and port-a-potty combinations will be changed so if you are renewing by mail, don't forget to send in last year's key with your self addressed, stamped envelope.

On the agenda this month will be getting some event dates set so we can get on the Port's calendar before they fill up the weekends we want.

We also welcome Eric Oberg as our new president. The first one in 10 years, where does the time go! Thanks to Jody Diaz for all his time and work.



Cubic Wing loading

By Richard Robb

You have decided. It is time for a new aircraft. You want something a little different from what everyone else is flying. In the new issue of Weird R/C World you spot an add for the 'Wiz Bang Special'. While you have never heard of the company selling it and the fact sheet says "made by Yak Farms L.L.d. Tibet" which is a bit unusual, the aircraft has really great lines, comes in two sizes, and the Mongol Red and Yak Butter Cream color scheme is a Killer! Because of the unusual manufacturer however, perhaps a little investigation is in order. You decide to figure out the wing loading for each plane. The fact sheet says the large 'Wiz Bang Special' has a wing area of 1245 square inches and an all up flying weight of 16 pounds while the small 'Wiz Bang Special' has 250 square inches of wing area and an all up flying weight of 2 pounds 3 ounces. Figuring out the wing loading for each aircraft

gives 29.6 oz. per sq. ft. for the large aircraft and 20.2 oz. per sq. ft. for the smaller one. Since both these wing loadings are under the 30 oz. per sq. ft. limit you are comfortable with you decide either model will be O.K. In fact, as any long term experienced modeler will tell you, while the large 'Wiz Bang Special' will be a delight to fly, the smaller model will be a handful! The above illustration shows the basic problem with using standard wing loading information to judge the flyability of a model. The wing loading information is not universally usable but requires adjustments with model size. There is however a better way.

from 1 to 20) to determine its flyability regardless of size. In the September 1989 issue of Model Builder magazine retired Boeing engineer Francis Reynolds wrote a column on cubic wing loading. While others had written on this subject before, his formula made cubic wing loading simple to use and easy to calculate using a cheap calculator. The only information that was needed was the models wing area in square feet and the weight of the aircraft in ounces. To compute the Cubic loading of a model do the following:
 Divide the models weight in ounces by the wing area in square feet.
 Divide the result by the square root of the wing area in square feet.
 The answer is the cubic loading for that aircraft.

CUBIC WING LOADING

Cubic wing loading is the tool you have been looking for. With this tool any aircraft can be compared to a standard cubic loading chart (which spans roughly

EXAMPLES:

In our previous examples the large 'Wiz Bang Special' weighed 16 pounds and had a wing area of 1245 square inches. Converting the weight to ounces and the square

DUES ARE \$100.

IF YOU PAY BY MAIL SEND YOUR DUES, YOUR OLD KEY, PROOF OF 2009 AMA MEMBERSHIP AND A SELF ADDRESSED STAMPED ENVELOPE TO THE TREASURER:

**CHUCK KENTFIELD
 3122 Madrona Beach Rd.
 Olympia WA 98502**

Make checks payable to SFRCF

CLUB OFFICERS

President	Eric Oberg	(360)426-8777
Vice President	Dick Robb	(360)427-4521
Treasurer	Charles Kentfield	(360)866-9473
Secretary	Bob Beatty	(360)426-5601
Safety Officer.....	John Tupper.....	(360)426-6383

BOARD MEMBERS

Board Member.....	Eric Oberg	(360)426-8777
Board Member.....	Dick Robb	(360)427-4521
Board Member.....	Stacy Myers.....	(360)426-9367
Board Member.....	Bob Beatty	(360)426-5601
Board Member.....	Dave Fisher	(360)490-2338
Alt Board Member	Bob Mason	(360)426-9256
Alt Board Member	Chuck Kentfield	(360)866-9473

Cubic Wing loading (cont.)

inches to square feet you get the following:

256 oz. divided by 8.646 sq. ft. = 29.61 oz. per sq. ft.

29.91 oz. per sq. ft. divided by the square root of 8.646 (2.940) =

A cubic wing loading of: 10.1

The small 'Wiz Bang Special' weighed 35 ounces and had 1.736 sq. feet of wing area.

35 oz. divided by 1.736 sq. ft. = 20.16 oz. per sq. ft.

20.16 oz. per sq. ft. divided by the square root of 1.736 (1.318) =

A cubic wing loading of 15.3

As you see in these examples,

although the small 'Wiz Bang Special' has a lower wing loading than the larger model, when compared using cubic wing loading the smaller model in more heavily loaded and in the real world will be much more difficult to fly. To use cubic loading successfully however a comparison chart is needed. The following chart was compiled by Nelson Whitman in the 70's by comparing 80 published model designs and computing their cubic loading numbers. Francis Reynolds is his column updated this information to better reflect

the current equipment and design changes. These numbers are considered to be the average range for the types of models listed.

Remember that the loading chart is just a guideline. Your personal preferences may span from one area to another. Try using this information on the airplanes you are currently flying. Where your airplanes fall within the cubic loading chart and how comfortable you are with the way they fly will customize the loading chart for your flying style and help you determine what aircraft you build or buy in the future.

$$WCL = \frac{W / A}{\sqrt{A}}$$

CUBIC LOADING CHART

1 to 4: indoor models, ultralights, gliders

4 to 6: most trainers

6 to 9: sport and aerobatic aircraft

9 to 12: contest aerobatic aircraft and most racers

10 to 15: most scale models

15 to 20: turbine jets and aircraft for very experienced modelers

20 and over: Good luck with that!

A NEW MEMBERS RETROSPECTIVE

<http://www.selectdigitals.com/articles/retrospective.html>

2008 With the Sanderson Field RC Flyers

A New Member's Retrospective

In July, 2008, and after waiting 60 years, I decided to join a local Radio Control(RC) club and learn how to fly. I joined the Sanderson Field RC Flyers(SFRCF) of Shelton, Washington. The club has two fields. One field is at an inactive Sanderson-Field runway in Shelton. The other field is a grass field located further north in Washington's picturesque Skokomish River Valley. The grass field is at Hunter Farms, a working farm that is open to the public.

THE FLIGHT LINE

=====

Since joining the club, and aside from my flight instruction, I have had the privilege of being able to participate in numerous flight-line discussions with club pilots and of observing a wide variety of aircraft in flight. Much of my time on the flight-line has been spent with a small group of pilots who fly as often as the weather permits. The pilots I usually fly with typically arrive at the field in the morning, when the air is most likely to be calm.

CLUB EVENTS

=====

The club events included several fly-ins. Some of the events were not open to the public; other events drew a large public attendance. Barbeques at some of the events I attended were an added bonus.

For a new "wannabe" pilot, the fly-ins were very helpful in learning about various types of airplanes and RC equipment.

The advice and suggestions I received during the events helped me to select the plane and RC equipment I now use for my flight training.

Several of the fly-ins occurred at the club's flying fields. In addition, I attended two float-flys that were held at scenic lakes nearby.

Perhaps the two most memorable public events I attended were the Port of Shelton Autumn Festival and an Academy of Model Aeronautics(AMA) sanctioned pylon-racing competition. The Shelton event was especially notable because many individuals, both young and old, were able to fly a trainer aircraft for the first time: the club provided both the aircraft and the flight instructors.

Another public event was an October fly-in at Hunter Farms. The day of the fly-in was perfect for flying. It also took place at the same time the pumpkin patch was opened to the public. It was great fun watching the children race into the patch in order to find their Halloween pumpkins. The public enjoyed their trips to and from the patch all the more as they watched the club's aircraft flying overhead.

MAIDEN FLIGHTS

=====

From time to time, pilots brought their aircraft to Sanderson Field to fly them for the first time. Two of

these maiden flights were Shayne Waterbly's F7F Tiger Cat and Eric Oberg's SU-26 Sukhoi(with Honda-sponsored trim). Both aircraft were awesome in the air and the sound of the Tiger Cat's twin engines was music to my ears. Shayne's model was the result of a three-year building project.

CHRISTMAS PARTY

=====

The year ended with a most enjoyable Christmas party. At the party, Eric Oberg was announced as the new club president. Jody Diaz received a well-deserved award for serving as president over the last 10 years.

The food at the party was fantastic. Although I tried my best, I was unable to sample all of the dishes before my "tank" was full.

The gift-giving ceremony was fun for everyone. Everyone chose a present, the men collected in one circle, and women in another. The gifts were then passed left or right within each circle. The gift passing was directed by a hilarious script read by Sharon Diaz.

THE NEW YEAR

=====

Most likely, by the time you read this, it will be 2009. If at all possible, the year will have begun with a New-Years-Day flight at Sanderson Field. At least, I am told that this is a club tradition.

As I write this, it is still December, the snow is flying outside, and I, too, am looking forward to the possibility of flying on the first day of 2009.

January 2009						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 9:00a Annual First Fly of the year	2	3
4	5	6 7:00p SFRCF Board Meeting	7	8 7:00p SFRCF Regular meeting	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

This month so far the calendar is clear...Be sure to check the Events page on the Web Site.

<http://sfrcf.quintex.com/Events.html>



Event dates in black or red are scheduled. Events in gray are proposed.

Club Scheduled Events for 2009

- January 1st.....First fly of the year
- February 8th.....Pylon Race - Come out and help officiate
- March 15thPylon Race - Come out and help officiate
- April 12thPylon Race - Come out and help officiate
- April 18thSanderson Field RC flyers annual swap meet 9:00 to 12:00 SHS Sub
- May 10th.....Pylon Race - Come out and help officiate
- May 16th.....Fly-In - 9:00 a.m. to ?????
- May 31stForest festival Parade float
- June 1st.....Public Fly-In 9:00 a.m. to ?????
- June 6th.....Open House Fly-in/work party - Hunter Farms
- June 20th or 27thPublic Fly-In 9:00 a.m. to ????
- July 18th.....Scale fly-in/ Public/potluck BBQ - 9:00 a.m. to ?????
- July 24th - 26th.....Pylon Race - Locked
- August 28th-30th.....Pylon Race - Locked
- September 12th.....Fly-In 9:00 a.m. to ????
- October 10th.....Fly-In 9:00 a.m. to ????
- December 10thChristmas Party 6:00 p.m. to 9:00 p.m. (potluck)

It's time for 2009 dues, dues are \$100.00

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