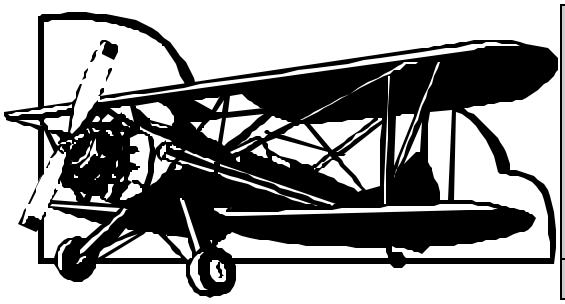

Propwash

Official newsletter of the Propnuts Radio Control Model Airplane Club
Highlands, Texas

www.propnuts.com

Editor: Paul Shaffer March 2007

Bill Parsons, good friend and long time member of the Propnuts, passed away unexpectedly Feb. 20 after a short illness. Bill was an avid modeler and as evidenced by the plans built Skybolt in the picture, an expert builder.
Bill was 78 years young.
We will miss you Bill.

Field passes have been mailed or passed out to all renewing members who have shown a 2007 AMA card. If you have not received yours please contact Tas Crowson.
281-474-9531
tcrowson@flash.net
Thanks,
Tas

Happy Birthday
To these members in
March
Charlie Brown
Michael Irwin
Bobby Kennedy
Carlos Medina
Blake Ramsey
Garrett Westenburg

Club Officers:

President:	**Allen Smith**
V. President:	**Bill Stevens**
Secretary:	**Tas Crowson**
Treasurer:	**Mike Irwin**
Safety Officer:	**Charlie Stevens**
Field Marshall:	**Charles Stevens**
Directors:	**David Peterson**
	Marty Mankinen

Coming Events

Club Meeting:
Tue. March 20, 2007
7:30 pm
Highlands Community Center

APR 07, 2007
Alvin RC Big Bird/Swap Meet
Alvin, TX

APR 21-22, 2007
Prop-Nuts Annual Flea Market & Fly-In
Crosby, TX

Apr 28-29
Annual Big Bird
Tri-County Barnstormers
New Waverly Tx

Apr 28-29
South East Texas IMAC Shootout
Jetero RC

Something you would like to see in the newsletter?
Send it to me.

Send newsletter correspondence to:
Paul Shaffer
5110 El Centro
Houston TX 77018
713-695-1820
E-mail pshaffer2@sbcglobal.net

PROP-NUTS R/C CLUB, INC.
Minutes of the Meeting Held
February 20, 2007
Highlands Community Center, Highlands, Texas

The meeting was called to order at 7:33PM.
Twenty members signed the attendance log.

Minutes: As published in the newsletter.
MOTION: By Tommy Curry to approve the November minutes as published, second by Marty Mankinen, Approved by a show of hands.
TREASURER'S REPORT: Mike Irwin read the Treasurer's Report.
MOTION: Upon motion by Charlie Stevens, seconded by Bill Blakeney, the Treasurer's Report was accepted by a show of hands.

OLD BUSINESS:
An election was conducted to replace Keith Hughes on the board. The election consisted of a runoff between the 2 candidates not elected in the general election who had the highest vote totals, Ron Etzel and Marty Mankinen. Marty was the winner.

Helicopter and Big Bird events, we will attempt to get the same weekends as last year..

Field improvements were discussed. The frequency board is in need of repair/ refurbishment. It was noted that we need to apply sand to the South end of the field. Allen indicated that the container is in need of a major cleanout and maybe some new shelving.
Mower replacement was discussed. We will try to get through the year with the existing mowers.

NEW BUSINESS:
The subject of a raffle for the Flea Market event was discussed.
MOTION: By Marty Mankinen to allo-

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cate $350 to purchase a Hangar 9 PTS Raptor as a raffle prize. Motion seconded by Charlie Stevens. Motion passed by a show of hands. Note: Marty stated that he would make up any difference in price.

Jessee Powell said that Exxon has invited us back to their company event again this year. It will be held the first Saturday in May. A raffle of a trainer was discussed, it was voted on to raffle the PTS Raptor as the Exxon event and raffle a Spectrum 7 radio at the April event.

Safety practices at the field were discussed, the question of how to accommodate Spectrum radios was addressed.

How to increase security at the field was discussed, a post and cable system was proposed, we will get cost estimates.

It was announced that former club member Bill Parsons passed away.

ENTERTAINMENT:
MODEL OF THE MONTH:
Marty Mankinen presented a Great Planes 27% Extra 330L powered with a 3W75 and Futaba radio for guidance.

AIRCRAFTUS FRAGMENTUM:
The Meeting was adjourned at 8:40 PM.
Respectfully submitted,

Taswall G. Crowson, Jr.
Secretary

"Model of the Month" goes to Marty Mankinen for his Great Planes 27% Extra 330L. 3W75 for power and Futaba 6 channel for guidance. Good job Marty. Paint ball targets are on bottom.

Model Math... part two

Cubic Wing Loading

Cubic wing loading (some call it "Wing Volume Loading") is another way to look at the wing loading of your model. I use the number as an indication of where I am in relation to other like aircraft. You cannot use this number to compare a Cessna to a P-51, or a Piper Cub to a Cap 232. Use the number to get an idea of how your plane will perform within its' category (ie war bird, aerobatics, trainer, etc). Values between 8 and 10 are considered good for aerobatic aircraft. Numbers between 10 and 11 are good sport models. Values between 11 and 13 are for "heavy warbird". Sailplanes are something like 4 to 6.

Formula for Cubic Wing Loading : **Weight (Oz.) / (SQRT(Sq.ft. wing area))^3**
If you are like me you will need a calculator for this one. Again, this looks a lot worse than it actually is. Let's take it one step at a time. Our model last month weighed 9.3 lbs or 148.8 oz. The wing had 816 sq. in. or 5.7 sq. ft. First we write down the **weight** which we know is **148.8 oz**. Next we find the square root of the wing area in sq. ft. The **square root of 5.7 sq. ft = 2.387**. Now cube the square root number. **2.387 cubed = 13.601.** Now all we have to do is divide the weight of 148.8 oz. by 13.601. **148.8 / 13.601 = 10.94**. The cubic wing loading of our practice plane is 10.94 and you can expect it to be a good flying sport model.

Power to weight ratio

Power to weight ratio is simply the relation of how much pull you engine is creating (thrust) to how much weight it has to pull (lbs.). The formula to calculate this is: **Thrust (lbs) / Weight (lbs)**
Use a good digital scale to weigh your plane and hook the same scale to the tail and measure the pull at full throttle. Divide the thrust (pull) by the weight (lbs). Ok, our plane we said **weighs 9.3 lbs**. Let's say we hooked the scale to the tail and it showed **a pull of 11.6 lbs**. Divide the thrust (11.6) by the weight (9.3). **11.6 / 9.3 = 1.25.** Your thrust to weight **ratio is 1.25:1**. You have 25% more pull than you have weight. Very few full scale planes have as much pull as weight so their ratio would be less than 1:1. That's ok because very few need to be able to fly straight up. A ratio of .75:1 to 1.25:1 is a good number for sport models. Full blown aerobatic models need at least 1.25:1. 1.5:1 is better, and 2:1 is to kill for. Right Randy? My Cap 232 has a power to weight ratio of 1.3:1 now and hopefully will increase to about 1.45:1 as the engine breaks in more.

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Cubic Inches or Cubic Centimeters

Ever wonder when someone says "I have a Brison 4.2." or "There is a G-62 in it." how the engines compare in size? Well it is easy if you know the magic number. In this case the MAGIC NUMBER is 16.387. There is 2.54 centimeters in one inch so that means there are 16.387 cubic centimeters in a cubic inch (2.54 x 2.54 x 2.54 = 16.387). If you know the engines displacement in CCs, divide by 16.387 to get Cubic inches. If you know the engines displacement in cubic inches, multiply by 16.384 to get CCs.

Formula to convert CCs to Cubic inches : **CC / 16.387**
Formula to convert Cubic inches to CCs: **Cubic inches x 16.387**
Ex:
Brison 4.2 cubic inches x 16.387 = 68.8 cc
G-62 CCs / 16.387 = 3.8 cubic inches
OS .61 Cubic inches x 16.387 = 10 CCs
Moki 1.8 Cubic inches = 29.5 CCs
3W-100 CCs = 6.1 Cubic inches

Prop change

Have you ever wanted to change the prop on your plane to a larger diameter to get a little more vertical performance? Or maybe just change the power band you engine is running in. After all, you do shift gears in your car you know. Let's see…..if I have an 11x7 and I want to go to a 12 inch prop…… What pitch should I get on the new prop? The way I have always been told to get very close is to multiply the current pitch by the current diameter, then divide this answer by the new diameter you want to switch to. This should give you the pitch which will keep the load on your engine about the same as it was before.

Formula for prop change: **(Current diameter x current pitch) / desired new diameter = New pitch**
So in our above example we have an 11 x 7 and want to go to a 12 inch prop. **Current diameter x current pitch (11 x 7) = 77. Divide this by the new desired diameter (77/12) = 6.42.** So I would probably buy a 12 x 6. The numbers that fall out of this equation are not perfect but they are better than a wild guess.

Lloyd Sullivan