

the natural human by-product of overindulgence in pepperoni pizza produces a level of toxicity in the Urtnowski shop that few mortals could survive. Believe me. . . I've been there. However, it does effect creative writing. Because he supplies me with so much good material, I promised Windy I would not put the slashing editor's pen to his 'New Year's Resolutions'. I only corrected spelling and punctuation, I swear. I proudly present it for you all to enjoy in it's unedited entirety.

Geodetic Construction

by Windy Urtnowski

When the AMA announced that the 1993 NATS would be held in Lubbock, Texas (at 3500 feet above sea level!) most competitors, as they did in 1984/Reno, got extremely concerned about building a super light ship. Now that the site has been changed to Lawrenceville, Illinois, we can all rest a little easier - but just a little! It's still a good idea to build light - in the right places.

Here's a few ways you can do this without sacrificing strength. Since 1968 I've been doing some of my fuselages with geodetic formers. Check out the old Sweeper plans - yes, we had that technology then, but it seems like a good time to re-invent 1968. Dave Midgley and I are both doing Cardinal type fuses but with all geodetic formers of 5/64" balsa with the grain going side to side. A bit more work, but very rigid. Tank floor and bottom are all grained at 30 degree angles or corner to corner, which ever is more practical for the individual parts. This also saves about 3/4 oz. weight in the final fuse. My fuse with cowl, canopy, rudder, and bottom block was 9 oz., about an ounce lighter than average for this size ship.

Many of the stabs and elevators I've done in the past used molded leading and trailing edges of 1/16" balsa. This year I'm combining the molded edges with geodetic ribs for a super light, super stiff stab almost an ounce lighter than foam. I'm using flat stabs, like the '68 Sweeper or Shark 45. These go together in a day and are as rigid as my toolbox, mainly because one piece of grain goes from tip to tip in a straight line.

In 1984 Bill Werwage and I each built a Geodetic wing ship. My Reno geodetic wing ship weighed 44 oz. with jap tissue covering, aluminum horns, and titanium gear. I cut up a foam wing core like a pie to get rib spacings (30 deg.) and put it together on rods. This super light wing was great, but the nose section vibration made this ship an inconsistent performer. Had I used 1/16" ply doublers this might have been a competitive ship???

Walker won Reno with the heavier of his two ships. Several ultra-light ships, including Casale's and Whitely's, folded that year. Bob Baron's was so flexible in the wind that it wasn't really competitive. The geodetic wing worked, but I went back to the D-tube method with molded edges for my next series of ships.

Bob Hunt has a neat way to do these wings now, and I'm sure he'll document it in his column. I think it's

worth trying either way if you're looking to save weight.

However, all this is nonsense, when most of us put five or more extra ounces of paint on a ship. I think the biggest gain is in putting on a thinner finish. My concours winning Cardinal 51 had ONE coat of acrylic lacquer clear and the whole finish was under seven oz. At 54 oz., it was the lightest Cardinal I ever built, but Midgley's ship at 60 oz. flew better especially in the wind. Paul Walker won with a 62 oz. ship of similar dimensions and airfoils.

What I'm saying is that the lightest ship doesn't always win, and leaving out adequate nose construction is still a big mistake. Geodetic fuses, tails and wings are great, but if you finish in linoleum, you'll have a "geodetic Buick".

Watch the paint. Always do the trim first to save paint, and sand until you drop.

You'll have a great ship if you "render unto the nose what is the noses, and render unto paint what is paints".

Shoot for 60 oz. on a 700 sq. in. ship and you'll probably be as competitive as your practice schedule allows! PRACTICE 'TILL YOU DROP, BUFF 'TILL YOU DROP, and let's hope we all have a great time in Lawrenceville.

1993 RESOLUTIONS

by Windy

The stunt pilots of the world have sent in their 1993 New Year's resolutions - so without further ado, here they are:

BOB LAMPIONE will wear only adult pants with no more than seven neon colors in them. He found another new accessory - SOX. Yes, Bob, we all wear them when we grow up. SOX, Bob, check them out.

"REBEL" RICK CAMPBELL promised not to paint his new planes in pea soup green anymore. Now that Rick's "on the pipe" look for him to move to Atlanta or Pennsylvania. Don't worry, Rick, you'll never get a lean run on a V-Max. I saw that in print. (I'm not worried, Windy. RANDY SMITH does MY motors. If you're nice I'll give you his phone number. -the editor.)

WALDO CARGIL promises to wear clothes this year - period. Say's his "naked gun" days are over.

CARLOS SERRA JR. says he promises to discover GIRLS this year so someone else can win Advanced. Carlos Sr. says if his son discovers girls he'll make him go back to the "tuned-a-pipe".

BOB HUNT promises not to lie about how much his wings weigh, or how much HE weighs. He's working on a geodetic girdle that will make him look as slender as Windy. Bob, send me one in Kawasaki green right away. His new finishing technique this year is "linoleum".

PEGGY ORTIZ promises to get driving lessons this year so she can make it to the end of Scott Smith's driveway.

STEVE BUSO promises to have his feet cut off so he's not so tall. Now that he's given up smoking, sex and ink lines we can finally respect him.