GREAT SPECKLED BIRD

By GEORGE PERRYMAN . . . Any keen observer of rubber powered competition aircraft could tell you this plane's designer without a second glance, but this one has a little more . . . the coveted Mulvihil Trophy!

PHOTOS BY JOEL RIEMAN

• The "Great Speckled Bird", with its gull wing, isn't exactly a new idea, since seagulls have flown pretty well with this configuration for several hundred million years. In the contest region where I fly, Unlimited (now Mulvihill), rubber was flown with category II rules, with as many 3 min. flights as one could make, determining the winner. This method was followed at the Nats until recent years, when after making 3 each 3 min. flights, progressive 1 min. increments were added: 4 min., 5 min., etc. With this increased flight time, design philosophy had to change. Now, instead of making a durable and reasonably good model, it put a premium on lighter, large (300 sq. in.) wing ships. Large, light ships fly better and remain in sight longer, so this seems the way to go.

Some designers follow the old saying of a *little* bit is good, so naturally a *whole heap* is better, when deciding how much rubber to use. I have tried both extremes, between too much rubber, and not quite enough. About 20 years ago, I had a big 300 sq. in. job named the "Kluge", which turned out to be aptly named. The fuselage was a full 7 feet long, and carried 24 strands of 1/4 inch rubber, 64 inches long, which weighed over 8 oz. The *one* advantage I found with this great chunk of rubber was that I *never* broke a motor. My winding arm *gave out long* before the rubber expired. If I could have gotten AMA to let me use King Kong as proxy winder for me, I might have won the Mulvihill Trophy long ago!

On the other extreme, I built a lightweight 300 sq. in. ship, "Practically Nothing", with sliced, hollow, 1/32 ribs, condenser paper covering, and an all-up weight of 2-1/2 oz., including rubber. The prop would run about 7 min. and this looked like the way to go for calm air contests. There always seems to be a hooker in all our best laid plans. How do you D.T. one of those things down? Until a few years ago, AMA rules only permitted one model, and when you lost your gum band ship, the contest was over for you, so this effort was not successful either.

Frank Zaic included both these models in his yearbooks, since he was probably hard up for material at the time.

I have tried many design approaches during the past 40 years, and am *still* searching for the "optimum" ship. Due to variability of weather and available rubber, there may not be such a thing as "optimum". The long, skinny, light model is probably best in light wind flying conditions, but in windy weather flying, with perhaps rain (and dust devils) a more durable ship is required. A case in point is my old 1940 Lanzo stick which I've flown for the past 2 contest seasons, as old-timer rubber and in Unlimited events. Some models are just "luckier" than others, this I believe. The Lanzo won 14 straight contests, 8 in O.T. and 6 in Unlimited. This was against some pretty tough competition, including Jim Lewis, and any of you who have flown against Jim, know what I've been up against. Jim is an amazing flier, and when you beat him, you've usually won the contest. I feel as though he's one of my sons, but we would rather *beat* each other than *anyone*. A shorter fuselage model, with firmer wood all over, is certainly easier to keep intact in rough weather, and bad retrieval terrain. Anyway, I'd rather have a clunker in a *thermal* than the "optimum" ship in a *downer*.

After all this rambling, I will say a few words about "Great Speckled Bird". In 1976, I built two of them; one for average contest days we have around here, with maybe some wind and rain, and one a bit lighter for fly-off flights, since it would fly longer in so-called "dead air". I took both models to the 1976 Springfield Nats to try *once again* to win the Mulvihill Trophy, which had eluded me for 35 years. Jim Lewis and I were going to fly alternately, so we might help each other chase if things got bad.

You remember me saying how some models are luckier than others? On my first official, using the calm-air ship, it promptly maxed, but went into the great beyond. A giant cornfield swallowed it up, and it was never to be heard from again (bet the corn picker had some interesting shades of tissue hanging from the inside gears). Jim's model landed near mine in corn too, but we found it this flight. We were flying Cat II rules and my No. 2 "G.S.B." made its 3 ea. 3 min. flights easily, despite wind increasing. It made the 4 and 5 min. flights, and while flying for the 6 min. max., a "sinking feeling" hit me. A "sinking feeling" hit "G.S.B." also, since I pulled a dumb and launched into a giant downer. Neither Jim Lewis nor I could believe it was sinking so fast. We thought at first it had dethermalized, and 2:39 later, it was sitting on the ground like an old mother hen on her nest.

I had told Jim years before that a 6 min. ship would not make 2-1/2 minutes in a downer and now he was a believer. In fact, the air was coming down *so fast*, it pushed a Dempster Dumpster straight down 3 ft. *deep* into the dirt. You may not choose to believe the last sentence, as I may exaggerate occasionally.

Jim went on in his usual fine style to win his second Mulvihill victory and set a new National Record to boot. He had to resort to using his old "Little Daddy" design of mine which he flew to the 1974 Mulvihill win, since his new long job fell again in the cornfield to join my No. 1 "G.S.B.", and was lost forever. At least two Southern models stayed together and wouldn't get so lonesome with all those Yankee models enscounced in the same cornfield.

Mike Bailey, another flying buddy from Smyrna, Georgia, and 1969 Mulvihill winner, flew his gull wing "Gully Washer" to second place just behind Jim, I was disappointed that the Mulvihill had slipped away from me again, but was tickled pink that the Georgia boys did great.

The day after the Mulvihill episode, the Canadian boys from Toronto sponsored the unlimited-unlimited rubber event for the Canadian Cup. This event was run the way contests were run back in the 20's and 30's, with a single flight, and the timer chasing the model by auto, motorcycle, camel, covered wagon, etc. The timers back then were hardy souls.

Those of us who still had a model that wasn't in the corn, gave it a try. We all flew just after dawn, within a 5-minute period, into a breezy drizzle. Kathy (Monts) Learoyd was my timer, and with Rod Schneider, my 18-year-old flying buddy helping me, we set off cross-country by auto, just after launch. "Great Speckled

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Bird" won with 6:02, with Jim Lewis only 12 sec. behind, flying his "Little Daddy". Jim would have won easily, but had bad luck of landing in the top of an 80 ft. tree, and the only one in a 100 acre field. Mike Bailey, with his "Gully Washer" made 4th, not far behind.

At the 1977 Riverside Nats, the weather was great, and I set about to *once again* try to win the Mulvihill Trophy. I had *only* been trying for *36 years*, so fully expected to be bridesmaid again, since this had been my fortune many times before. Lady Luck smiled on me, finally, and with help from my friends, won this elusive prize with a 34:22. Bud Romak was barely a minute shorter, with Jim Quinn, Bob White, and Andy Faykun close behind. I was very thrilled until that night at the Old Timers banquet, when John Pond and Carl Hatrak "framed-up" on me and announced that they had planned to present the Mulvihill Trophy to me, but AMA had decided to retire it. After my having a couple of "fits", they went ahead and gave it to me (I'm giving them both a gift certificate for a 20-year stay on Devils Island). At the 1977 King Orange Internats, "G.S.B." barely beat Jim Lewis and Phil Hartman, among others, in unlim.-unlim. on a foggy, misty morning. "G.S.B." landed in a tree at 5:31, with Jim only 7 sec. down and Phil 7 sec. below Jim. After watching a couple of models, that flew just ahead of me, climb nearly out of sight in the fog, I decided to wind only about 75% max. turns and this proved to be barely enough.

I felt honored indeed that the NFFS selected "G.S.B." as Model Of The Year for 1978 in the Mulvihill rubber category, even though the design hasn't been around but a couple of years.

Mulvihill rubber models require a bit more care in handling and flying than any other outdoor type, due to their relatively fragile nature and size. With caution and luck they will outfly most any F/F type, however.

Since "G.S.B." is intended to be a competition model, and not designed for a beginner, I won't go into how to glue stick A to stick B; most experienced fliers can build as well as me, anyway. I will give the method I have used for 32 years to make prop blades. I've tried many different kinds of props over the years; some have done O.K. and some not so good.

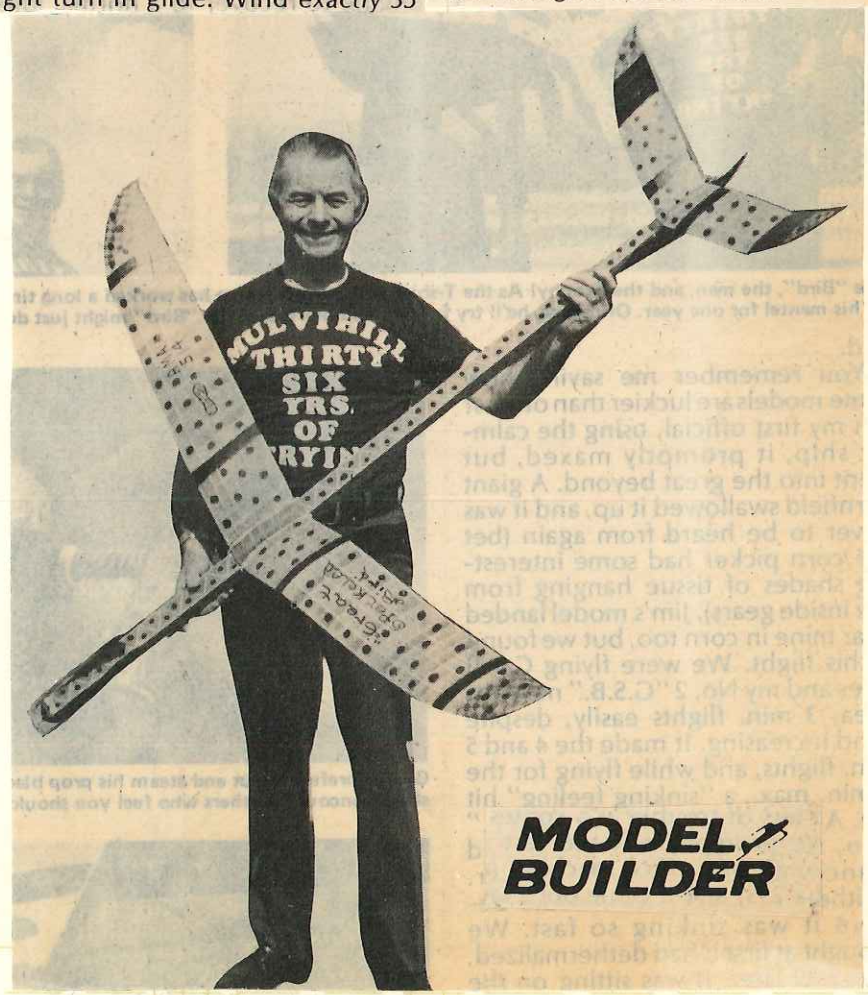
Use the plan to mark for cutting full size blades from 1/8 inch sheet balsa. Sand airfoil shape just like a H.L.G. wing. Hold under hot water faucet a couple of minutes. Hold blade over electric stove eye, set on medium heat, and twist prop about 15° from root to tip until it feels dry. Let blade finish drying overnight at normal room temperature. Sand a bit, and give it a couple of coats of thin dope, then cover with Japanese tissue. Dope tissue 4 or 5 thin coats. This method is easy, and you can get both blades exactly alike in airfoil, shape and twist. I haven't carved a prop in so long that I doubt if I could, since using this easy method.

One word on construction of "G.S.B.", is to choose your wood carefully, since with "all them sticks" it is easy to end up with a model heavier than need be. The glide won't suffer much, but climb will be reduced. Weights shown on plans were made after 2 contest seasons of flying, and "G.S.B." was a bit lighter when first built (Models and Modelers both seem to pick up a *little weight* with time). If your "G.S.B." should end up heavier, it should still do O.K., maybe better, by adding a couple more strands of rubber than shown on plans.

Building is important, but flying is what *makes* or *breaks* a model. Balance at wing T.E., complete with motor, before gluing in wing dowels. Hand glide over grass and if model stalls, cut a bit off top of fuselage under the stab T.E. If it has a nose-down attitude, shim under stab. T.E. Adjust rudder for gentle right turn in glide. Wind *exactly* 35 winder turns for the first flight. I'm superstitious and 35 is a *lucky* number. G.S.B. should nose up slightly and into a right turn on this many. If it tries to stall in the climb, add a bit of downthrust. I build in about 1° down and 3° right thrust in the nose block, and this is usually pretty close. Increase winder turns when climb and glide looks O.K. I increase winder turns to 65, and if all looks well, 100, 150, and 200. I have never flown "G.S.B." on more than 900 prop turns, which is 85% of max. Have never flown full power in so-called "Dead Air", so don't know exactly what it will do, maybe 8 or 9 minutes. I remember many times *laying* on the crank and *laying* little pieces of rubber and tissue-covered sticks all over the landscape. Since I don't use a winding tube, I can't get "rank with a crank" as "G.S.B." with a blown motor would be about like the Hindenburg at Lakehurst.

Have had good luck with F.A.I. rubber, as it is durable, relatively inexpensive, and best of all, available.

Rubber power is rapidly gaining in popularity, so why not give one a try. You can get more hours flying per dollar than most any type. Would be glad to hear from you if good fortune is yours with the "Great Speckled Bird". Drop me a line and give me the word. ●



MODEL BUILDER

MONTH/YEAR

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