

OLYMPIC

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of something, since others feel it quite important. So—Mark II, III and IV were similar with slight changes in construction, engine, and weight reductions (42, 44-oz) by Silkspan covering. The D tube wing resisted any originality recognition since the Nobler wing is a D, too. Performance of man and machine at the '60 Nats have been chronicled, where the Mark IV performed superbly, but the man couldn't. Besides, no one lets me forget. Maybe this was what prompted the big switch in wing construction for Mark V.

In eliminating the D tube I went with a 1/16" full depth web capped by 1/8 square, doubling the number of ribs and capping all with 1/16 x 1/8. It was strong and it was light, but it didn't work. Flexure at the root kept popping silk and I wasn't satisfied with its squaring due to an inherent softness caused by dihedral during high load turns.

This ship which caused "Wild Bill" to wax enthusiastic netted me a third at the '61 Nats. Mark V used Fox 35 power and continued to prove out the 3/8 square long engine mounts. We used teflon bushings in the control system and felt that the Olympic was approaching our goal of the ultimate model.

However, rewarding chats with Ed Kazmirski shifted our thinking toward fully planked wings, since proper wood didn't weigh any more than fabric covering. So Mark VI went into production. Airfoil shape was retained, area increase to 600 sq. in. and 1" added to nose and tail.

This beauty turned into a beast . . . hunting in level flight! Since we didn't solve it before the '62 Nats we flew the old one, losing a prop and a wheel pant, our composure and generally placing fifth before the best judges we've seen.

Came a period like unto Mark I only this time we whipped it, coming up with a very radical, but sound solution to stunt ship hunting. Many conversations turned up an oft-stated fact "Old stunt ships don't hunt, while the new ones do." We won't hold you in suspense: when I reamed out the elevator horn hole for the pushrod the hunting QUIT. With leadouts locked, flaps solidly centered, the elevator trailing edge moves about 3/16" up and 3/16" down. This forces some up control to maintain neutral elevator in flight which droops the flap slightly. Evidently, the slight aft center of pressure shift on the wing plus the stabilizing effect knocks the hunting phenomenon right on its little pointy head. Backup data includes Jim Silhavy's Nobler experience and fact that after Bill Werwage rebuilt the controls in his 5-year-old "Ares" she started to hunt. "Wild Bill" concurred via his AM test Stuka which settled down with elevator slop. OK, gang, we fell into it, but it's logical, so try it.

The Mark VI? She's presented here in plan form so build her.

Through the years of contest flying some facts of practice and procedure have been gleaned and learned the hard way. Since a good model is not enough let's quietly examine procedures that work well. Mixing sport and contest flying is difficult, if you expect to maintain a Nats-like trim. So make your choice and stay with it.

My pre-contest pattern includes several days of concentrated flying to bring myself up to a peak for those two big flights. The amount varies with individuals from 50 flights, to one flight just before you make an official. If possible, have someone watch your flights and elicit honest reporting since you can't see your own pattern as a judge does. Fly smoothly through the entire pattern including level laps since it is an integrated whole, not a series of disconnected squiggles. Practice individual maneuvers ONLY when rusty. Go-for-broke officially, but have the good sense to fly conservatively in practice.

A good night's rest before a meet is important, for good stunt flying demands a great deal of your reflexes and coordination abilities.

On contest day I always have tried to put in one practice flight in the morning to check out needle valve setting and wind conditions. Check with the weather folk for possible change in conditions. If at a strange field, ask some of the local talent for their normal wind conditions and note the location of the flying circle with relationship to obstructions that might cause extreme turbulence. These things can make or break a good flight.

After a practice flight, keep an eye on happenings and procedures as competition begins. Try to pace yourself with regard to competition for timing can be extremely

important. When you feel mentally ready, turn your name into the officials and check immediately the number of flights ahead of you.

If I am flying other events such as combat and rat-racing (which I do at most of the meets with the exception of the Nationals), I do not put my name in for combat until my first stunt flight is complete and my score posted. Stunt remains my favorite event and the others are fillers for the day. This might cost you a chance to compete in the other events, but that is a chance you have to take. Few people can fly a red-hot combat job such as the Equalizer which we fly for competition around here, then pick up and handle a stunt flight accurately. Reflexes are not built that way. I refuse to fly anything but my own stunt model for three days before I put in my first official flight for this reason.

After I have submitted my name, I wait until the previous flight has reached the three-quarter mark, then I begin loosening up my motor for if your engine does not prop freely it is not going to start immediately. Prime through the stack until it runs the entire prime out and you know that the front bearing is completely free of cold castor-oil.

After appearance judging and you have been notified to proceed, don't waste time, but rushing can be disastrous. Lines and connections are important, so treat them accordingly.

I would prefer to maintain one needle valve setting at all times so that an improper setting would be unlikely, even during starting. However, with the change from the Forster, which could be handled in that manner, I have found the Fox will not pull the fuel on a prime only; therefore, I open the needle valve a full turn. This is important and a mark should be filed on your needle valve; once a setting has been established during practice, do not deviate from that setting. If it changes for any reason, stop right there and find the cause. Many contests and airplanes have been lost due to the pilot not believing his needle valve setting and, therefore, playing it by ear. If up for an official flight take an attempt and then retire to your pit or practice circle to locate the cause. Too many fellows forget that 3 attempts are allowed and rush to re-tighten a loose prop that should have been tightened beforehand, anyway, and lose their starting points. They take a chance on running over the allotted eight minutes flight time.

While the rules do not list what many flyers term "impression points," nevertheless, they are always present. These points are the ones accumulated through your conduct around the stunt circle and after your flight. One of the subjects that Mr. Wooley and I have debated is the method employed in starting an engine. I have yet to find it necessary to turn my airplane upside down so the engine is in an upright position to start it. I feel this is one of those things that affects your impression points unfavorably. After all, if you keep a Piper at the local airport and find it necessary to prop it by hand, you don't turn it upside down, now do you, Mr. W.? Coining a phrase from Caper Cooker Netzeband: "Boy, am I ever going to get stomped by the upside-downers!"

Be prepared for a contest both mentally and equipment wise and know your engine. This applies to any event you fly. Above all, accept the good with the bad and help good sportsmanship prevail. I have been fortunate in meeting many, many stunt fliers and, as in many other hobbies, we all have something in common. They are all gentlemen. Begin flying competition and find out for yourself.

I have not listed all the trophies which have been won by Olympics. This, of course, is the primary purpose for building the airplane, but I find that the impression you leave behind, the friends you make and the reception you receive the following year at the same meet, are even more important. Nothing is more gratifying than the respect of your fellow competitor.

Construction. Everyone has his pet method of beginning construction after the wood has been selected. Remember that the one outlined is just one person's approach and not necessarily the proper method for everybody. I dislike certain building tasks and leave them to the very last if I can.

After the decision has been made as to the type of wing you will make—sheeted or fabric covered—and you have selected the wood accordingly, lay out the basic wing structure and pin together.

Our hobby shop stocks a complete line of Sig balsa wood from contest grade to R/C in all lengths. Five of my Olympics have been built from Sig wood and finished with Aero-Gloss dope. Proper wood selection helps make the