

R/C pattern

By Dean Pappas



PHOTOGRAPHY DEAN PAPPAS

Once again, Hanno Prettner (C) takes the King of Belgium Cup home as winner of the R/C Pattern World Champs. In second place was another familiar face, Wolfgang Matt (L). In third place, was Ivan Kristensen (R) of Canada.

Yes the World Championship is over, and for the sixth time, Hanno Prettner is the winner. Actually, it's only five times in a row now. This is almost getting boring! In second and third were Wolfgang Matt, and Ivan Kristensen. A look at both the flights and the numbers points out that this was Hanno's closest win ever, with Ivan finishing the preliminary rounds within a close shave of the incumbent Champ with 99.544% of his score. In any system of measurement, there is some statistical uncertainty; and the judges were exposed to all manner of wind and weather conditions in order to make just that measurement. Oh, yes, the pilots and planes were exposed to all the same as well, as conditions went from calm and oppressively hot and humid, to pleasantly cool with an unpleasant quartering wind.

For those who remember the Fentress Field site from either the Nat or Masters held there in the past, the preliminaries were held on the main runway toward the south end of the field. That put the 150 to 175 meter distant aerobatic zone in the low trees at the edge of the field. When the wind was up, the maneuver bottoms had to go up. This was not the case during the finals, as the Helicopter portion of the Aerolympics (as this was billed) finished up and finals moved to the north end of the runway, where flying could take place from the taxiway. The maneuvers ended up over the runway, and there was very little turbulence even though the wind

was quite fresh during the finals.

The team results worked out to be something of an upset. After three of four rounds of prelims, it looked like the Japanese team

were unassailable with the U.S. and Canadian Teams in tow. Yes, the Canadian Team ended up in third as a group, and this (along with Ivan's fine third in the individual standings) represents the first time that the Canadians have been up on the podium at the awards ceremony. Not bad, eh? The race between the U.S. and Japanese teams came down to the last flight between the six involved fliers, when Tony Frackowiak took off for his last qualifying flight. The blessing administered by Team Manager John Britt went something like, "Now Tony, we don't want to put any pressure on you but . . . we're gonna need a great big score to do this."

Now, people wish for all sorts of things for their birthday, and since this was in fact Tony's, and his wish was to bring the team trophy back to the U.S., you can guess the rest. Let me tell ya' it was one joyous party. As the man with the baffling biplane can tell you, some birthdays are better than others.

Going trendy

Always a big topic of discussion is the placement of maneuvers. I shall try to describe the trends without dwelling on the obvious "forgiven transgressions" that some people seem to attract. In general, the Europeans that were pushing the box in and wide at the Worlds in France were flying at 180 to 200 meters out, with the difference being determined by the wind conditions at the time. It is not this writer's position to use coverage of this contest as a forum for debating the rules—that is why I write a regular column—



It was down to the last flight by Tony Frackowiak before the U.S. Team managed to take home the World Championship Team trophy. Helping bring the trophy home were team members Chip Hyde and Dean Koger.

but I must say that if the main criterion for judging position is visibility and clarity of the maneuver shapes, then the very large maneuvers flown by say, the Germans, at the greater distances can present a beautiful picture. Still, the rules say that 175 meters is the outer boundary, and as the contest went on, both Judges and competitors became more mindful of it. Curiously enough, the Japanese were right in step with this trend, and proved capable of moving it in to the 175 mark when the wind went down at the end of the day. Most competitors from all over the World (like the Australians or South Americans) flew right on the 175 mark, and looked equally good in all conditions doing it.

The Canadians showed up prepared to fly right at 150, and suffered a bit when the wind was blowing. Personally, none of the 150 meter flights had that graceful "relaxed" feel, except when it was dead calm at the end of the day. The U.S. Team was set with one of each. Tony was locked into 150 meters with his slow biplane, which with a bit more power than at the Masters looked just fine in all but strong winds, where it went south in a hurry! Chip was right on program at 175 meters and maybe pulled it in a bit during the finals, while Dean Koger and the belt-driven *Vortex* fell somewhere between Chip and the Europeans. As has been the case at the last three W.C.'s that this writer has seen, the contest started out and worked its way to the rule book as the finals progressed.

The other big trend is the Four Strokes! They are here, they are here, and if you did not hear me the first two times, they are here! Five out of the top ten were flying them, and the quietest plane at the meet was equipped with one. Quique Somenzini (who finished in tenth) was running at 85 dB, and was nearly silent in the air. The performance of the fourstrokes was far beyond anything shown by a good twostroke set-up, with most of the flyers using partial throttle during all but vertical maneuvers. This is with airplanes that typically weighed between 9¼ and 9½ pounds! Somenzini even used partial power in his verticals, saving full throttle for the noise test, and a few verticals during the windier periods of the contest. His plane ran closer to 8½ pounds, though.

YS four strokes dominated, and were used to garner second, fifth, sixth, seventh, and tenth places. The planes were typically 875 square inches in wing area, which is actually rather small for that engine, even in the low performance hot muggy weather.

Going down the list

Let's take a closer look at the seventeen flyers in the finals and their equipment and flying styles.

Hanno Prettnner brought out the same EZ Built *Supra-Stars* that he used to win all the marbles in Avignon two years ago. It is re-engined, however, with the O.S. Long-stroke and turned a 12-11½ Asano DL propeller. Hanno started out at well over two-hundred



Just a heartbeat away from the team trophy were the Japanese team who led through much of the prelims. Team members included Giichi Naruke, Hajime Hata, and Yoichiro Akiba.

meters out and fast, eventually working it in to just inside of 200, and still flying fast and big. They say that the World Champion sets the World trends, and I guess that that is so. The plane he flew is apparently no different than the EZ kit that you can get nowadays, and weighed out at a little over 7½ pounds. In my opinion, Hanno flew inconsistently, especially during the third round of finals, when he already had the contest locked up. I would have sworn that the Three-turn Spin and the Avalanche both were zeroes, but only one of the ten judges agreed with me so who am I to pass judgement?

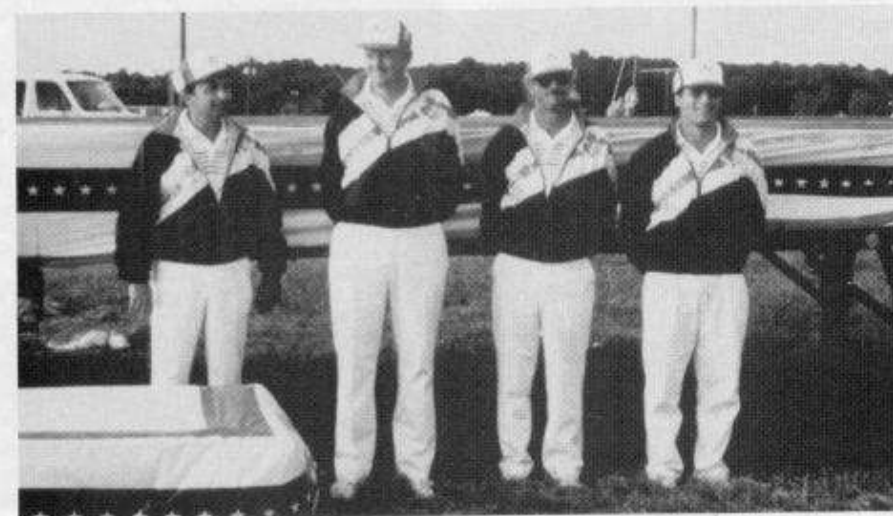
Mathematically the contest was over at this point, so I don't know that anything would have made a difference. I do have to say, that Hanno's good flights were quite impressive.

Wolfgang Matt is once again the Vice-World Champion, and with the exception of his last round qualifying flight, looked consistently good, using the horsepower of his YS four stroke to good advantage. He was flying a pair of beautifully built (apparently the same builder that Naruke and Akiba used) *Saphirs* that were modified for use with the four-banger. This is an 875 square inch plane, with a 72-inch span and 12 percent air-

foils. These foils were a bit thin at the 9¼ pound weight, and unless the throttle was pulled back, the plane was fast. In general, his maneuvers were big, and at about 180 meters. The presentation, with the airplane size considered, looked right. Full power was only used in the verticals, and in good air, Wolfgang set the radio to limit himself to about ¾ throttle no matter what he did with the stick.

In a placement overdue since Pensacola in '83, Ivan Kristensen found himself in a hard won third, after finishing second in the preliminaries, and becoming one of the few pilots to beat Hanno in a qualifying round. The new *Summit 3* was very light at under 7¼ pounds, with an old style YS. He was running a wide blade Asano 12-9½. In a contest in which it became apparent that no-one was "peaking" for the whole contest, Ivan had as many of those truly beautiful flights as anyone. He tended to fly as close to the 150 meter mark as possible, probably about 160 to 165 meters, and suffered any time the wind blew. Using the full "rule book" 175 just might have helped. The party in Canada is probably still going on.

Next month, we will continue from fourth on down . . .



It was their first time on the winners' podium in the World Champs for the Canadian team who took third—and it certainly won't be the last. Members included Ivan Kristensen, Dave Patrick, and Colin Campbell.

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PHOTOGRAPHY: DEAN PAPPAS

Team Prettner, Hanno and Hans, watch some of the action (above left) during the Worlds just before Hanno was due to go up. In a place that's very



familiar to him, Wolfgang Matt (above right) occupied runner-up position. He flew a pair of *Saphirs*, modified to accept the four stroke YS.

We left off at last month's end with a description of the trends in flying style at this recent World Championships, and of the equipment that the top three were flying.

Just out of the money, in fourth place, was Chip Hyde, flying his *Jekyll* which most of you have seen or heard about from the Nats. This ship is on the smallest side compared to most, with a very long tail. An old style YS and Futaba 1024 made it work.

Güichi Naruke was in fifth with his revised *Silent*, with a YS four stroke. The plane was 875 squares with 14% airfoils, and weighed 9¼ pounds. Naruke flew at a very consistent 180 meters. Naruke used a Futaba 1024: after all he had a hand in its design.

Close on his heels was teammate Hajime Hatta flying the four stroke version of the ship he used at the last Worlds called *Calm*. Vital stats are nearly identical to those of Naruke, except that Hajime uses JR radios.

Yoichiro Akiba rounded out this 5, 6, 7 finish of the Japanese team. The four stroke

Beetle is a whole lot better looking than the original, and once again the stats are identical to Naruke's ship. At this weight, power, and size, the generous side of 175 meters really works out well. Like the other two team members, he was using an MK glass-reinforced nylon 13¼-13.

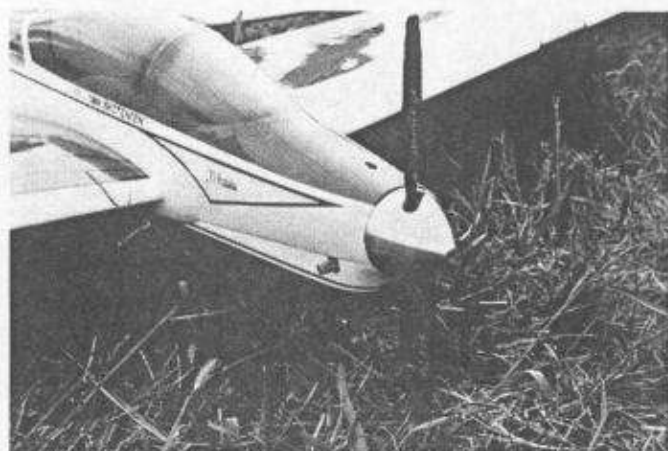
In eighth was Bertram Lossen, who must surely be disappointed as this is the first time that he has not been in the top three at the Worlds since he placed third at his first one in Acapulco in '81. Bert was flying an almost completely glass and composite version of the Schultz *Challenge* design. The hinge lines were beautiful, molded in "gapless" affairs as are seen in very high speed full size aircraft. An O.S. Long-stroke and Graupner JR provided go for the 850 square inch, 8¼ pound plane. An Asano 12-11½ prop gave him plenty of speed, and he flew big fast maneuvers at just over 180 meters.

In ninth was Tony Frackowiak who entered this Worlds having won the U.S. Team trials just two months earlier. The *FYG Leaf*

biplane designed and built by Ken Bonnema did its job powered with a very strong YS long stroke. The drag of the biplane was something of a hindrance when the winds came up, as the plane's maximum flight speed was just right for the inner rule book figure of 150 meters.

At this point, a word is necessary: this was the first Worlds after the rule change that puts the top twenty percent of the contestants into the finals as opposed to the earlier ten percent. At this contest this means 17 rather than 9 finalists. So, one of the topics of discussion was, "... but would he have made the old finals?" It's like the classic "would it still have been a home run with the older, less lively baseball?" Who cares, seventeen flyers makes for a much better final, and a lot of genuinely good fliers get recognition.

Mario Somenzini certainly qualifies as one of the above, and his presentation was most interesting from both a flying and technical viewpoint. His 8¼ pound, 850 square inch *Desafio* with its YS four-stroke was astound-



Firmly attached to the business end of Ivan Kristensen's *Summit III* (above left) is a wide-blade Asano 12-9½ turned by an old-style YS engine. Just out of



the top three was Chip Hyde, with his YS powered *Jekyll* (above right). A little on the small side, it does have a very long tail moment.



It would be no surprise that Giichi Naruke (holding his *Silent*, above left) used a Futaba 1024 in the plane. He had a hand in designing the radio. While no one



was watching, Dean snuck this picture in of Hajime Hatta's *Calm* (above right) which he admires quite a bit. Weighs in at 9 1/4 pounds.

ing. With a very modified Hattori Exhaust system, small after muffler, and APC 14-14 prop that was first tried a week before the contest, Quique (as he is called) had the quietest plane at the meet, with 85 and 86 dB sound readings on the ground, and was the only flyer to always get the in-flight noise bonus. It should be noticed that there were very few bonuses handed out. Quique flew "in" at an honest 165 meters or so, using a Futaba.

In eleventh was Dave Patrick of Canada with his *Conquest*, and old style YS with Futaba radio. He flew in very close to 150 meters, looking very good in good air, and suffering in the wind and turbulence like all those who flew slow and close in.

Dean Koger and his marvelous one-man support team, namely Wayne Ulery, took the innovative belt-driven *Vortex* as far as it would go. An engine cut in one of the preliminary rounds, and a failure to start that caused Dean to use the back-up during one of the finals rounds put a lot of pressure on. I think that Dean's wife Barbara took delivery on it, because Dean and Wayne just tended to business.

Tobias Schulz was in thirteenth with a biplane called *Shamrock*. A JR and O.S. four-stroke made everything work in this, Tobias' last F3A Worlds. He says that he is retiring because the intensity has faded; we'll see how long that lasts. So long, pal, I will always remember the time we threw the CD in the pool at the Worlds in France!

In fourteenth is good friend Colin Campbell of Canada, flying his 6-pound, 11-ounce *Nova*. An old style YS and Futaba made it work. Way to go Colin!

Peter Wessels flew his *Flashlight* with JR and O.S. long stroke to fifteenth place. I have seen the man fly better, but his fast combination using a 12-11 1/2 prop worked great in the strong wind, and harmonized well with his 180 meter distance.

The team of Peter and Caroline Goldsmith of Australia put their homeland into the finals for what I believe to be the first time

ever. His *Lotus* was largish at 840 square inches, with an O.S. long stroke, and 13-12 Asano. The plane weighed 7 pounds, 6 ounces with Futaba.

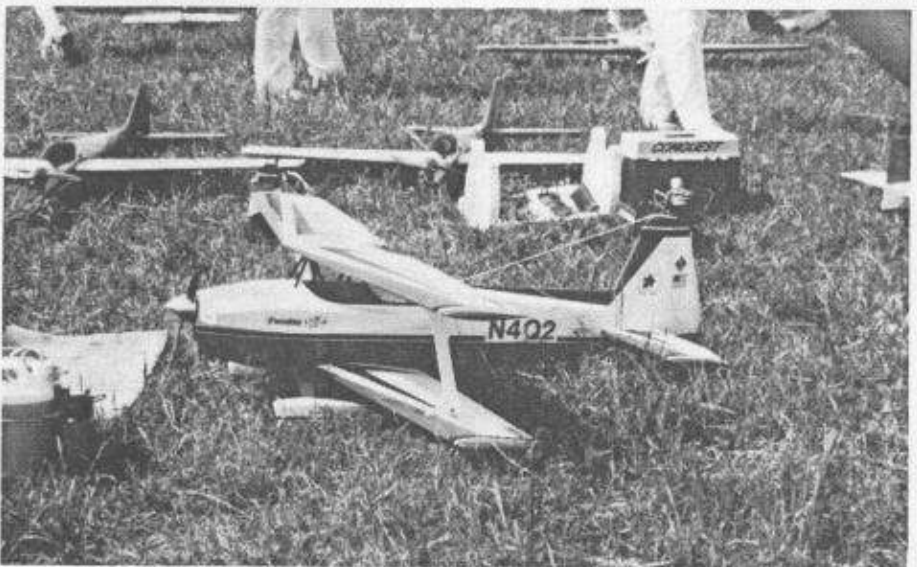
Ken Binks of the U.K. rounded the Finals out, with his rather pretty *Excalibur*. He used an old style YS with the standard Hat-

tori pipe that everyone is using. He's a Futaba man.

Well, that's about it. Next month will be something of a return to the usual for this column, although technical items seen at the Worlds will feature most prominently for a few months.



Holding his *Calm* for Dean's inquisitive camera, Hatta shows off the top planform view of the model (above left). For Canadians Colin and Sue Campbell (above right), it was a memorable first time trip to World competition. Designed and built by Ken Bonnema, Tony Frackowiak's *FYG Leaf* (below) was the only biplane.



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I'm actually writing this month's drivel in my own workshop, contrary to the warning on the back of the computer that says that dope fumes can cause the central processor to behave rather strangely, in a manner not unlike drunkenness.

At the Worlds this year, some new goodies cropped up, and among them, was an interesting prop made in Australia called the *supercool* 12-12. This is a relatively light load for the advertised size, with a very sharply raked tip. It is intended for the non long-stroke engines, and turned in the high ten thousand range on my old YS. Performance was just fine, and it was obvious that this prop was intended for light airframes. Since I don't know who will distribute this prop in North America, the above is probably useless, but the following is the neat part: Australian Team member Chris White used a version of this prop with a novel technical innovation that he had worked on with the manufacturer—a rubber mounted prop hub!

The hub was molded with a cut-out as shown in the pictures, so that the fibers of glass ran all the way through the hub, and an aluminum "spool" lined with $\frac{1}{16}$ inch thick hard urethane rubber passed through it. Did it help? Chris claimed that it was like soft mounts; the difference is hard to notice on the noise meter, but quite obvious in the air. If you try this sort of thing, Chris warns that you should not take a prop and cut a hole in it, but rather to mold a prop with a hole in it, and don't use very soft rubber! Some wild oscillations can happen if you do.

While on the subject of props, the Bolly props have always been fine items, although subject to inconvenient distribution in the past: Tom Dixon (who normally hangs around in control-line Stunt circles) used to do business by mail only, no phone. Well, this is all changed (404-973-0004) and I say hooray, 'cause I've got a pair of props, right off the top of my head, that you definitely want to try. For those not running a long-stroke, or

those who want to go very fast with one of the free-er revving long-strokes like the O.S., the Bolly 11 $\frac{1}{2}$ -11 $\frac{1}{2}$ is fabulous! It is a narrow blade, with thin airfoils, that will turn just about 11,000 RPM on a short-stroke YS, and ought to go close to 12,000 on an O.S. LS with an Hattori 650 at 14 inches. I would describe it as a fast FAI/slow AMA prop. The other prop is one that is beautifully suited for noise bonus territory on a long-stroke, a wide blade 12 $\frac{1}{4}$ -11. Mine was pitched up to 11 $\frac{1}{2}$ inches of pitch by no less than Les (get it) Bollenhagen. I met Les at the U.S. Nationals, and we had a marvelous time talking about props not only for Pattern, but for control-line Stunt as well: there is a lot of crossover technology going on here, just wait . . . The 12 $\frac{1}{4}$ -11 $\frac{1}{2}$ turns just at 10,000 on my YS long-stroke and had gobs of vertical and great constant speed characteristics. My best description of the speed is that it is perfect 165 meter deep speed.

Did he learn something?

Now that the Worlds is just about three months in the past, it is time for me to try to describe what I learned about the flying style(s) that are likely to be expected in the next few years. While some may deem it forward of me, I seem to remember predicting in print before the contest that 175 meters would be the dominant style . . . if anything, even a bit further out was accepted. At this contest, the World Champion came out flying at two-hundred meters (honest to for really) and moved it in to the far edge of 175 only under duress of those flyers who were scoring well in the calm between 165 and 175 meters. Those who flew close to 150 scored well until the wind blew, and then they suffered worse than those who were out at 180 in the wind and did not pull it in, in the calm.

What comes through for me from the experience, is that a great variety is being "bought", but that as the wind blows, closer than 175 is a liability, and as it gets calm, further than 165 is a lesser liability. This writer is pleased to finally say that the rule book represents a good battle plan. If it blows, I shall push 175 meters for all it is worth, with the airspeed to make it worthwhile, and when "dream air" comes, pull it in to about 160 or 165.

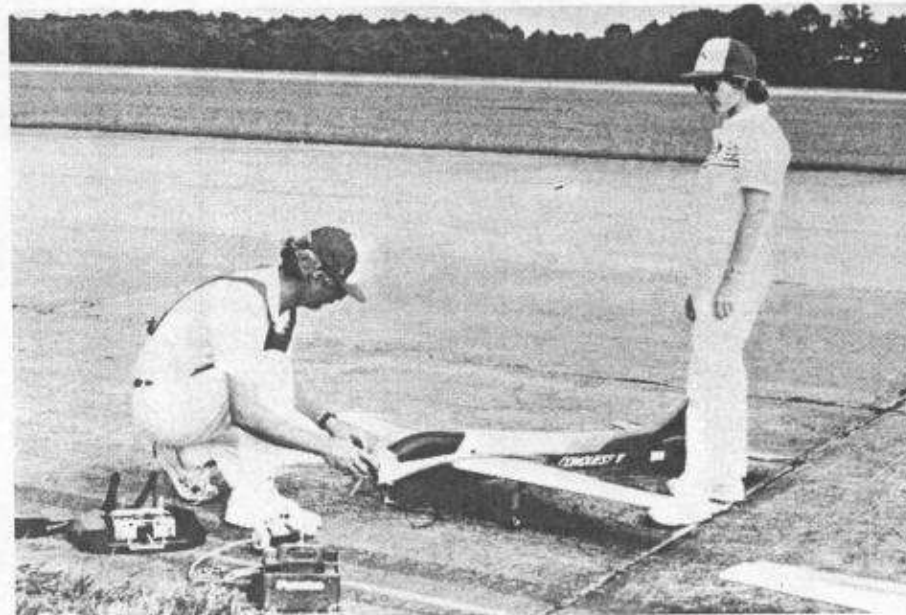
Why not 150? Watching the best "close in" flyers in the World confirmed something I have thought for a while now, but would not admit, because it would mean "wimping out" that being, that *NO ONE* looks smooth at 150 meters. The dividing line is somewhere around 165 meters, unless you are flying a very slow airplane. Also, this ten percent variation can be covered with one prop and pipe setting, used mid-throttle in the calm any time the nose is level, and leave your foot in it in the wind. Unless backed into a corner, I do not like the idea of scrambling between props and pipe settings during a contest: it demonstrates a lack of confidence in your preparation. Any comments? GD



PHOTOGRAPHY: DEAN PAPPAS

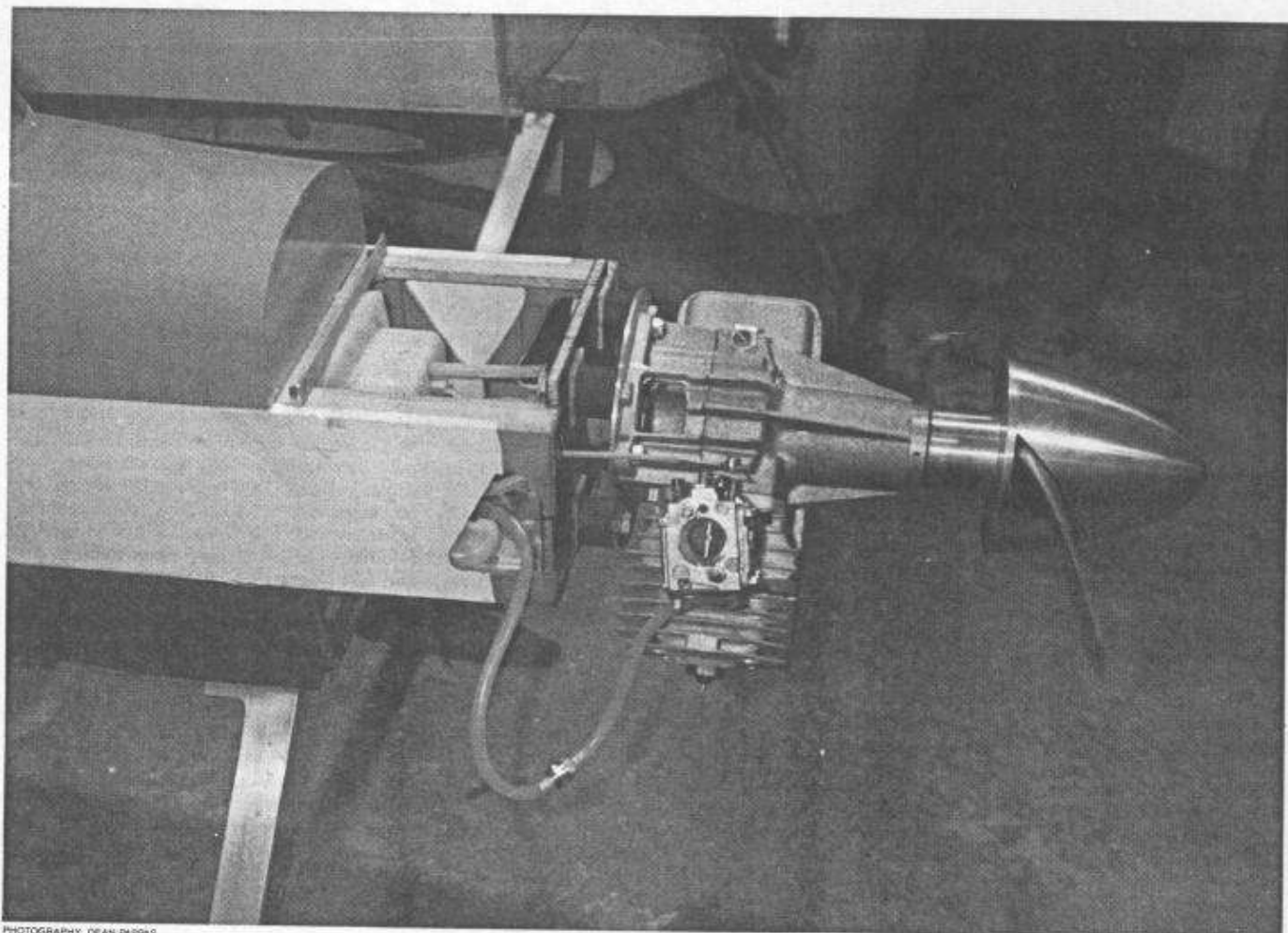


Oops, omigosh, uh oh, etc. We goofed last month. There were two pipes at the Worlds, not one as stated. You already saw Tony Frackowiak's FYG Leaf (above left). Here's Tobias Schulz' Shamrock (above right). The different aesthetics were also indicative of different flying abilities. The FYG Leaf spun well; the Shamrock flew like it had one wing. Dave and Sue Patrick ready his Conquest (below) for another round of the Worlds.



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PHOTOGRAPHY DEAN PAPPAS

What you see is Dean's 1/3 scale Laser 200 with a soft mounted 3.6 cubic inch engine. The soft mounts replaced hard mounts that supported a similar sized

engine. Why? Ask Dean about the diagonal splits in the fuselage covering that attest to the pounding it took with the hard mounts.

It has been several months now that this column has been devoted to coverage of the World Championship, and to trends in the Turnaround. It seemed perfectly natural at the time, even though there were plenty other things to talk about: well, here's one last item before talking about what kind of airplane we are likely to be building in the next few years.

I want to congratulate the U.S. Pylon Team. Like the Pattern Team, they took first as a Team, only these guys swept four out of the first five places, with defending Champ Dave Shadel of California retaining his title. This sounds like the Control Line Stunt Teams of yore! The reason that I mention this in tying up the loose ends of the Worlds coverage is that I would like for you all to feel the same sense of enthusiasm as those who were there: whether you see the relationship or not, you contributed to that team and to the programs that produced them. Har-rumph!

The trends in design seen in Virginia took

two tacks: to begin with, the large two-stroke ships from Europe, like the German *Challenge* were moving at genuine AMA speeds. This is not so much a trend in airplane design (it is the same 875 square inch plane with 12% airfoils) as it is that the engines have now caught up with this size plane. Both Lossen and Wessels were using O.S. long-strokes and 12-11 1/2 props with pipes similar to the Hattori #650. The props were Asanos, so once again it is time to call Don Nix at Powermaster (10103 Freeman Ave., Santa Fe Springs, CA 90670; phone 213-946-946-6554). My guess at pipe length, based on the pictures, would be 15 inches to the high point. These planes were fast enough to satisfy any old-style Pattern flyer, and what this means is that a lot of ships designed for Turnaround are now fair game. The *Joker* comes to mind as one such design, and come to think of it, Phillips Aircraft is coming out with a glass and foam kit of that plane.

The other trend is, of course, the four stroke engine. In the case of the Japanese

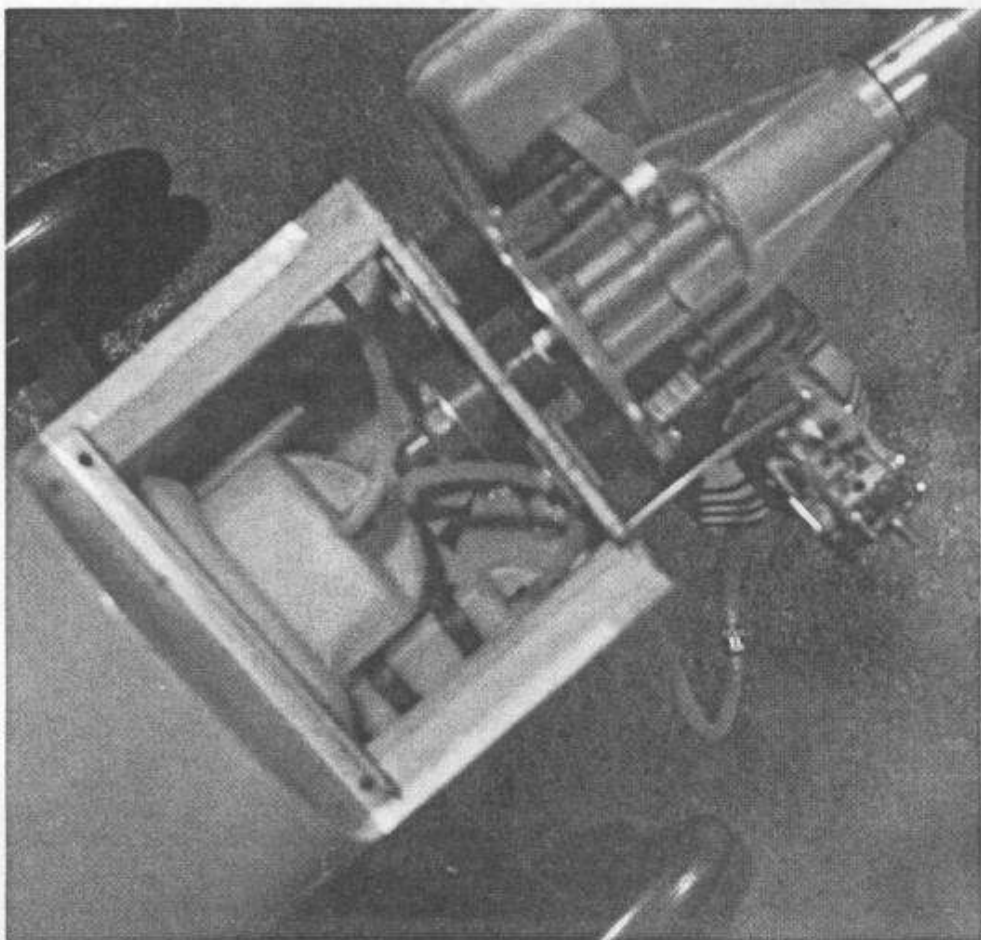
team, all three were flying 875 square inch designs in the 9 1/4 pound range with MK glass-nylon 13 1/4-13 props. This prop should be available through the same sources as the other MK props by the time you read this. These airplanes were *very, VERY* fast and had verticals that were mind blowing! Man, do I wish we had powerplants like this when I was flying "old" Masters. A lot of people, like Ron Chidgey and Wolfgang Matt are talking about building airplanes bigger than the 1000 square inch mark, with target weights of under 9 pounds. This would correspond to finished airframe weights ready for all the mechanics to be screwed in of 3 3/4 to 4 pounds. This is just doable while making an airframe that lasts more than one season. If you have to build your landing gear mounts to survive grass, it will be a struggle. My sketches are all running around 930 squares and 72 inches of span with 14% airfoils. Will you see it this year? Maybe not. One thing that I can tell you is that trying to sketch something that has some lines and still man-

ages to cover that big four-stroke convinces me what a styling coup Hatta's *Calmis*. Some other excellent and noise legal props for this size engine are the Bolly and DW 14-12's, as well as the ultra-quiet APC 14-14. This last prop, however is probably too great a load for anything over nine pounds.

As an example of what would constitute a good "fast" setup with the YS or OS four-strokes, the large winged *Hippo Tipo* or the *XLT* with the above mentioned 14-14 would move like the hammers of Hades. What about the EU-1A? The test bed that I have been flying the YS in for almost two whole years is a glass *Joker* that I had purchased in Europe. It is overweight at 9 3/4 pounds, but could be built down to 9 pounds even, easily. With a DW 14-12 this plane is so fast that I have had impromptu races with regular Pattern ships and kicked "you know what". To think that the Quarter Scale Pylon Racing Association illegalised this engine because it goes too fast—fer' cryin' out loud, whatta ya think this is, racing?

Speaking of engines, have I got a new toy to brag about. Eric's RC Products is distributing the 3W line of large engines in this country. This engine came to my attention at the last TOC, and the decision was made that at some time, I was going to try one of them. My 60cc engine arrived via "toy truck"—UPS that is—a few weeks before the snows, in the glow fuel version. If I had only thought to get one of these before the last Tournament . . . it has the table manners of a good Pattern engine, and turns a 20-12 prop at just over 7500 RPM. The upshot of this is that my 1/3 scale *Laser* will accelerate to level flight speed in a vertical climb from a hover at about 40% throttle. The airplane weighs 18 pounds. As notable as the engine's performance, however, is the soft mount that Eric Dern is selling with it. Hopefully, the pictures will illustrate the clever idea of using large Lord mounts for torsion, and a large bolt with bushing through the firewall to take up all thrust loads, and to limit the movement of the engine in the now famous "wobble" mode. It works like a charm, and similar set-ups just may end up on my regular Pattern equipment. Eric has promised me pictures and whatever information is available, as he is already selling a mount sized for the four stroke 120's. I will try to get some more information by next month, and maybe twist Eric's arm for those pictures.

Following the meandering stream of consciousness, A Press release recently arrived from the management of the Tournament of Champions contest in Las Vegas, Nevada. For those who have been hiding under a flat rock for the last fifteen or so years, the TOC is an invitational Precision Aerobatics contest that draws twenty contestants from around the World. All the aircraft are approximately 1/3 scale versions of planes that have been used in full scale competition, and the schedules flown and rules adhered to are straight out of the full scale book. If ever,



Note the firewall Lord mounts used to provide torsional spring, and the tension bolt through the firewall that takes all thrust loads and provides damping for unwanted wobbling with a vinyl rubber shoulder grommet.

Aeromodeling becomes a money sport like professional Golf or Bowling, the TOC will have been the beginning of that process: purse money at the last TOC was something like \$117,000, and first place was \$25,000! The contest is on for November of '90, despite doubts about where the flying site will be. Unlike any other contest in modeldom, this is a spectator event, with thousands of people present in the stands. That's the way it was in 88. Start saving your pennies now, and remember that Vegas is not all that expensive a Town to visit if you are not a gambler.

Okay, back to serious stuff. I think this is the March issue, that means that it is Trimming season. You know, of course that there are four seasons: Building, Trimming, Competing, and Sport Flying. While it is terribly "preachy", it bears saying that before we begin discussing trimming, the airplane has to be straight, the wings and tail warp free, the movable surfaces free of twists, the elevators lined up to each other carefully (if you

are using split linkages like virtually everyone else on the planet) and the plane must be balanced from side to side as well as fore and aft. Doing all these things takes a long time, a very long time, and can save much work and frustration afterward. Oh, yes, one more thing, if like many you have put an adjustable stab into your latest creation, before you even take it out of the basement, adjust it to the proper incidence (usually 0 degrees) with the utmost care. I have found that the single greatest value of the adjustable stab is that you can dial the incidence in to the zillionth of an inch with an adjustment screw, and that having done this, you'll never have to touch the thing again. Somehow, when gluing the stab in, you always seem to settle for two zillionths of an inch error when fixing it would mean breaking a few dots of Hot Stuff for the fourteenth time at 3:00 AM.

Next month, we're actually going to go flying, even if there is snow all over the place around here. Has anyone out there seriously tried retractable skis?

1989 FAI F3A WORLD CHAMPIONSHIPS, CHESAPEAKE, VIRGINIA U.S.A.

Tekst Tore Jemtegaard, bilder Erik Toft.

Erik Toft deler her bilder og inntrykk med oss fra sine opplevelser ved deltakelse i verdensmesterskapet, USA.

Det var et stort arrangement amerikanerne hadde satt i stand. Det ble konkurrert i hele tre klasser, nemlig kunstflyging, helikopter og pylon. Norge hadde opprinnelig påmeldt deltakere i alle disse klassene, men etter som tiden gikk, falt den ene fra etter den andre. Det ble etter hvert klart at det ville bli en meget kostbar tur.

Både svenskene og finnene hadde allikevel komplette lag og i tillegg deltok Danmark med en pilot, nemlig Erik Toft. Erik er ofte i Norge på jobb og på et møte i flyklubben sist, hadde med seg resultatlistene og noen bilder fra stevnet.

Det går fram av listene at Erik begynte meget godt, etter første omgang lå han på en 25 plass av ca 80 piloter. Dette er bra, men han falt noe ned utover i stevnet og havnet til slutt på en hederlig 47 plass foran kjente piloter som f.eks. A. Laffite fra Frankrike.

Som listen viser klarte Hanno Prettnér igjen og ta VM tittelen. Erik mente nok kanskje at Wolfgang Matt fløy noe bedre og hadde ønsket Matt som vinner. Prettnér fløy Supra Star som i fjor mens Wolfgang fløy Safir med YS 120 firetakter. Og det var ikke noe å utsette på kreftene eller hastigheten.

Noe overraskende er det at den beste Tyskeren, Bertram Lossen, kom "helt" nede på en 8. plass. Nytt fra denne karen er OS motor med "rør" fra innsuget til et kammer bak motoren. Nok en løsning for å få ned støyen.

Av andre spesialiteter nevner Erik amerikaneren Dean Koger. Han hadde 10 ccm totakt med rem-gear som drog en 16 x 12 propell. Det var også to todekkere med!!!



Japaneren Naruke hadde en ny utgave av sin SILENT med ny utgave av YS 120 firetakter.



SHAMROCK het denne modellen utstyrt med OS 120 firetakter. Denne todekkeren gikk mye bedre i luften enn todekkeren til Tony Frackowiack.

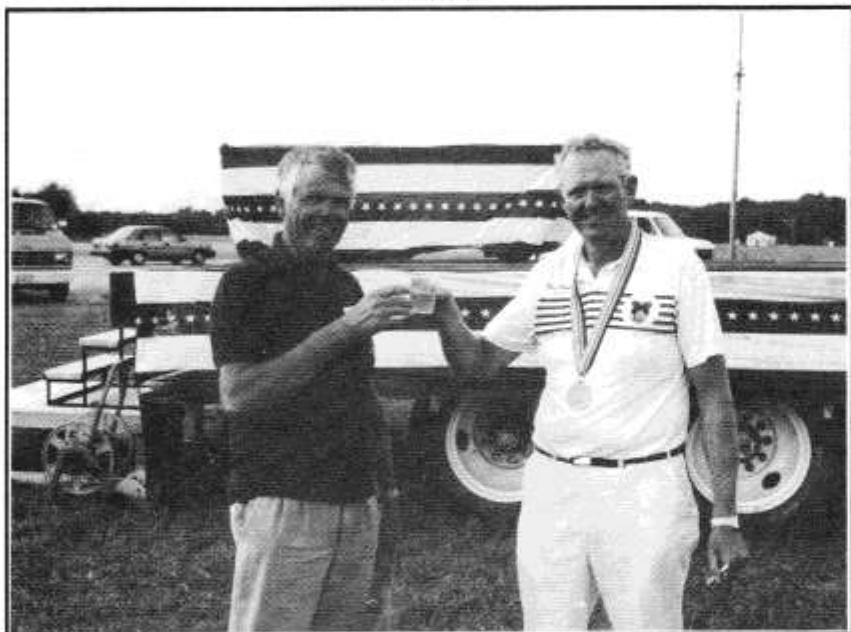
RESULTATLISTER FRA VM F3A I VIRGINIA, USA.

Rank	Final Score	# Contestant	Contestant	Country
1	3000.00000	1	HANNO PRETTNER AUSTRIA	ITALY
2	2989.32165	48	WOLFGANG MATT LIECHTENSTEIN	SWEDEN AUSTRIA UNITED KINGDOM BELGIUM LIECHTENSTEIN SWITZERLAND SWEDEN
3	2980.66001	18	IVAN KRISTENSEN CANADA	AUSTRALIA SWITZERLAND AUSTRALIA ITALY
4	2954.44336	80	CHIP HYDE USA	UNITED KINGDOM SOUTH KOREA BELGIUM SOUTH AFRICA
5	2923.23880	45	GIICHI NARUKE JAPAN	BELGIUM THE NETHERLANDS FRANCE THE NETHERLANDS
6	2903.45980	46	HAJIME HATTA JAPAN	THE NETHERLANDS FRANCE THE NETHERLANDS
7	2883.67595	47	YOICHIRO AKIBA JAPAN	ARGENTINA SOUTH AFRICA NEW ZEALAND
8	2875.85980	22	BERTRAM LOSSEN F.R. GERMANY	SOUTH KOREA SOUTH AFRICA IRELAND
9	2830.10082	79	TONY FRACKOWIAK USA	AUSTRIA ITALY DENMARK
10	2823.54948	2	QUIQUE SOMENZINI ARGENTINA	MEXICO SWEDEN CHILE FRANCE MEXICO
11	2806.79511	16	DAVE PATRICK CANADA	FRANCE MEXICO LUXEMBOURG NEW ZEALAND
12	2787.31079	81	DEAN KOGER USA	
13	2742.94202	23	TOBIAS SCHULZ F. R. GERMANY	
14	2701.40283	17	COLIN CAMPBELL CANADA	
15	2686.52295	24	PETER WESSELS F. R. GERMANY	
16	2651.32646	5	PETER GOLDSMITH AUSTRALIA	
17	2650.37919	76	KEN BINKS UNITED KINGDOM	

COUNTRY	TOTAL	PLACE	ANA	CONTESTANT
USA	2877.9604	1	742	CHIP HYDE
			741	TONY FRACKOWIAK
			743	DEAN KOGER
JAPAN	2869.4352	2	471	GIICHI NARUKE
			473	YOICHIRO AKIBA
			472	HAJIME HATTA
CANADA	2799.3026	3	193	IVAN KRISTENSEN
			191	DAVE PATRICK
			192	COLIN CAMPBELL



Ivan Kristensen tok tredje plass med denne nye utgaven av SUMMIT. Modellen har noe større kropp enn den forrige, men veier allikevel bare 3200 gram. Motor er YS 10 ccm.



Ivan og Erik skåler og er godt fornøyde med sine prestasjoner.



Vinner trioen. Bare vent.....

