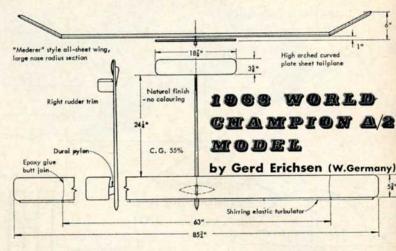


EXTRA

World Championships
Digest on Radio
Control, Free-flight,
& Criterium of Aces
C/L events





World Championships for free-flight models

WIENER-NEUSTADT, AUSTRIA

August 13th-15th

BYANY STANDARD of comparison, the 1963 BYANY STANDARD of comparison, the 1963 World Championships for free flight models, organised by the Osterreichischer Aero-Club at Wiener Neustadt, about 25 miles south west of Vienna, were bigger than any previous meeting. Thirty Nations, including first time entries from Brazil and Turkey, were represented in the three days of concentrated model flying on the largest artifield. centrated model flying on the largest airfield we have ever seen. London Airport (Heathrow) would comfortably fit on the billiard table flat area, with room to spare for most of Gatwick as well. Someone told us he drove around the edge just to see how far it was, and fifteen miles had gone on the clock by the time he returned to base. The surface was grass, full of stone outcrop, and teeming with grasshoppers. These hungry insects made it hazardous to leave a model unattended. Attracted by the paste, they gnawed at trailing edges to the extent that at least one model had to have replace-mentstrips added. Some were big beasts too, so that one had to be sure to shake them off before a flight!

As for the weather, well we now know that the so-called "Mid-European calm" is a myth. Granted, for most of the time, conditions were idyllic by British standards. Wind, even when gusting enough to make the dry grass whistle, was never more than 20 m.p.h. according to our reliable Dwyer Wind Meter, and for most of the time a 10 m.p.h gust from 5 m.p.h. average windspeed was a rare exception. Light patter of rain, many fluctuations of wind direction causing several moves of main control, and an abundance of thermal activity added variety to test the tactics of competitors.

For make no mistake, all three events were won by tacticians and the team victories

which went to the USSR, Italy and Hungary which went to the USSR, Italy and Hungary were most deserved for consistency in teamwork and show a skill of thermal selection as well as with model performance. In a way we were disappointed by some who completely discarded their chances. It is easy to have hindsight, especially as an onlooker; but when the entry is distributed over a patch the size of Halton and one could choose a launch point anywhere in could choose a launch point anywhere in these acres, then the game of waiting to see what the other man gets was all too easy to play. Thermal detectors, now referred to as "neddy boxes", feeler flights and lift seeking bare torsos were all exploited, yet only on a few occasions were we able to see a mad scatter to place a model in certain lift as a fortunate entry wheeled overhead, soaring at a climb rate of many feet per second. Perhaps the key to this situation was the difficulty that beset any person endeavouring to obtain the status quo of the event. With a scoreboard operating two hours behind flight time, and teams distributed in benind light time, and teams distributed in Gala day fashion over such an area of the field, one tended to lose all sense of competition. Not until the fly-off stage did the reality of the occasion strike home and create excitement. Little groups operating against the clock instead of against each other do not convey the atmosphere of a World the clock instead of against each other do not convey the atmosphere of a World Championships. To give an example of the field situation, we searched throughout the whole day of the Power event to locate the French team—and never did find them! We went to the 5th round in Wakefield before finding the Japanese and Australian proxies. Add to this an inadequate and time consum-Add to this an inadequate and time consuming system of returning flight cards whereby each had to go back to main control (instead of an interim collection point as used at

Cranfield) and the picture of confusion becomes plain. We fancy that too much was attempted by too few, and the vastness of the field itself led to a disjointed situation.

As for the social occasion—here was the true Austrian hospitality with meals, lodging and two banquets to remember. For those on their first visit, Austria must have created a most pleasant impression of a country anxious to please and look after its guests. Under the new system, all member Nations

of the F.A.I. are responsible for verification of their representative models, and processing of their representative models, and processing is thus reduced to a weight check and examination of Certificate and stickers on the model. Surprisingly, the teams from the U.S.A. and France were not so prepared, and had to organise their own processing on the spot. More surprising was the acceptance of a large number of models (including a few of the subsequent leaders) without the required National identification marking on components. We wonder if, had anyone been so caddishly inclined as to protest, whether rule 2.7 (d) would have led to some disqualifications?

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Above left: West German team-mates chair Above left: West German team-mates chair Gerd Erichsen after his victory. Opposite I. Solid sheet wing and long centre panel is emphasised in this view of the winner. 2. Ernie Avory, all the way from Yancouver with "Thermalnose", a development of the A.P.S. "Migrator", in close 2nd place. 3. Bo Modeer of Sweden with beautifully constructed 3rd place models, "Spinella" and "Esmaragda", only 12 seconds short of full max. time. 4. Egg-box structure on Italian Paolo Soave's design in 9th place. 5. Manuel Da Silva Amado from Portugal, unfortunate with downdesign in 9th place. 5. Manuel Da Silva Amado from Portugal, unfortunate with downdraughts. 6. Boris Roschin, U.S.S.R., placed 6th with Sokolov design using dural wing pylon. 7. Stjepan Paulin of Yugoslavia had intricate wing bracing and one of many using broad trailing edge, was 36th. 8. Gilbert Foucart, Belgium, using Jedelsky solid wing, unlucky on last flight, dropped to 18th place. 9. In fly-off 1961, Theo Van't Rood, Holland, has high wing pylon, was 15th with only

15. U.S.A Team Results A/2 Glider Austria 2235 2231 2195 2194 Sweden 17. Belgium U.S.S.R. 18. New Zealand Denmark Netherlands 2507 Finland ... W. Germany 2447 Yugoslavia Switzerland 2421 11. Israel ... 12. G. Britain Canada 2188 2151 2121 5. Italy Czechoslovakia
 Bulgaria... 2286

France ...

14. E. Germany

1987 1916 1875 21. Ireland ... 22. Portugal 23. Luxembourg 1806

2097

2071

1994

continued opposite



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Name G. Erichsen

E. Avory B. Modeer E. Nicolaas

B. Roschin V. Simonov

P. Soave A. Riflawi I. Zlatev F. Polak

A. Koval

M. Benedik

F. Gaensli G. Foucart

S. Maupetit

B. Hansen

A.Franke O. Prochazka

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Name Nation 2 3 5 Total A/2 Glider Results Nation W. Germany S. Paulin Yugoslavia 129 180 Total 180 732 C. Jackson J. Baguley M. Hlubocky 728 726 723 721 180 180 180 180 900 37. 180 180 152 174 136 180 180 180 180 171 891 38. G.B. 180 180 Czechoslovakia 168 180 180 888 39. 58 180 Sweden 180 180 180 Netherlands 171 180 180 180 866 D. Ducklauss E. Germany 157 163 719 719 717 Canada U.S.S.R. 177 145 180 180 180 180 J. Waanaen O. Zitkon 124 95 180 180 65 170 180 84 180 180 862 41. Finland 180 180 856 180 Austria 136 110 87 180 120 137 118 U.S.S.R. 180 180 180 168 850 43. M. Doyle Ireland 160 180 180 44. P. Lauridsen 45. M. Koller Bulgaria 147 162 180 180 180 849 Denmark 77 108 180 148 180 154 705 180 180 180 846 Austria 126 180 Italy A. Gogorcena W. McGarvey W. Thomson 178 831 112 Israel 173 120 180 180 46. Spain New Zealand 161 180 161 149 93 676 113 180 668 Bulgaria 168 180 180 180 123 831 47. 180 180 180 180 130 65 180 Netherlands 110 180 180 830 Canada 180 94 664 89 139 656 180 89 655 49. F. Solakovic J. Jauquemart U.S.S.R. 180 180 180 177 821 Yugoslavia 105 180 105 180 180 127 142 A. Schlosberg T. Van't Rood Luxembourg 179 Israel 92 180 180 180 180 812 69 116 811 180 799 R. Blacher M. Da Silva 179 156 139 180 89 85 Netherlands 180 Austria 180 Yugoslavia 180 180 88 Portugal Switzerland 180 165 91 180 791 Amado Costa 157 789 180 180 180 Portugal 143 71 180 Belgium 87 180 180 180 162 180 123 123 180 789 Switzerland 159 180 103 115 628 France

J. Michalek F. Weyrauther F-J. Meister W. Germany W. Germany 25. 26. I. Alm Sweden 45 A. Hietanen N. Hopley M. Lesobre 27. Finland 106 New Zealand 180 107 France 29. M. Lesobre (proxy Bourgeouis) 29. U. Acuto 31. E. Hopper 32. J. Larsen Italy U.S.A.

E. Germany Czechoslovakia

Denmark Czechoslovakia

180 180 180 151 756 144 180 180 80 743 743 739 180 140 98 180 145 Denmark C. Boscarol N. Ingersoll Italy U.S.A. 180 106 180 19 180 115 162 180 180 180 35. M. Burrows G.B. 142 180 54 180 178

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W. Haller R. Verdren K. J. Butz 54. A. Frost L. Braire 56. 58. 59. Feron P. Thompson R. Skold 60 61. O'Sullivan 63. Abadjiev Malkin E. 65. G. Herzberg 66. B. Pereira F. Meyer W. Bjorn 69. M. Thies 70. N. Mertes

P. G. Lengomin

Belglum

U.S.A.

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56 115 126 180 108 585 113 50 113 180 126 582 Sweden Ireland 65 180 134 105 150 70 81 93 27 69 140 44 568 180 136 128 552 Bulgaria 165 136 128 180 36 141 176 156 21 42 180 130 57 69 141 42 161 New Zealand 38 551 540 497 Israel 113 Portugal 94 118 Switzerland 462 452 400 87 Finland 43 26 60 58 161 146 Luxembourg 180 Luxembourg 112 95 24 46 119 396

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Glider

Tuesday August 13th dawned with solid overcast and occasional light rainfall which made for a hesitant start to the A/2 glider event. The scheduled time of 8.30 a.m. and went without a rush to fly, in fact it seemed that half the competitors were still snipping and tying their over-length lines. The British team had very stretchy lines, making up 10 to 15 feet in length when under tension. This was in direct contrast to the Canadians who clipped their nylon covered steel wire (sold for shark fishing) on to the weight and were passed without stretch, at exact length. They also did this with nylon monofilament line. Many modellers had special still-air designs along with an "Old reliable". Among them was Mike Burrows who went away early after

watching two other models in lift. Though the high aspect ratio wings flexed on tow, his flight was typical of a steady stream of launchings and made 2:22. Throughout the first round, it was difficult to discern any particular model as being in lift under overcast, except on one occasion, Bill McGarvey's from New Zealand. This was a test flight, all three of the New Zealanders who were attending in person were making repeated air tests, tweeking rudder and warping wing panels to achieve an ultimate. warping wing panels to achieve an ultimate. All they succeeded in doing was to create a rush for their part of the field whenever a slight bump showed itself, and when their official flights were made only Nev. Hopley's maxed. He was one of 14 in the 1st round. Dutchman Van't Rood, a finalist in 1961 being specially unfortunate to have one of the two watches show .7 sec. under time

and so lose him the opportunity of a repeat performance. No sooner had the second round been

called, than a light breeze, no more than 4-5 m.p.h., changed conditions with a clearing sky and thermals clearly apparent. In one mighty bumper, no less than seventeen models were wheeling around in gigantic carousel; but some were soon to find that Wiener-Neustadt thermals are quite different to those at home. One could feel safe, home and secure for a certain 3-minute maximum and secure for a certain 3-minute maximum at one moment, only to have the model kicked out and sinking at tremendous rate the next. After the frustration of not finding anything in the first round, all three of the British team max'd happily along with no less than 36 others! Not so fortunate was Norm. Ingersoll of the U.S. team. After a premature launch for a first attempt, his second release was with the autorudder jammed. This was to spoil his run of max's in all other rounds. Similarly, Hopley of New Zealand was down for a mere 39 secs. to ruin his chances.

to ruin his chances.

After a long lunch break, round three opened with 10 m.p.h. breeze and slight

At left: victorious U.S.S.R. glider team Roschin, Sokolov (trainer), Simonov, Koval and Golubkov (manager). Opposite I. Maestro of the Power contest and now twice a winner, Golubkov (manager). Opposite I. Maestro of the Power contest and now twice a winner, once an equal first and once second, Erno Frigyes of Hungary, prior to last deciding flight. 2. Close rival to Frigyes for rate of climb, Doug Galbreath of U.S.A. and shallow pylon "jai-fai". 3. Also in fly-off, Lasse Laxmann of Finland with all red "Zig-Zag" design. 4. Another all sheet wing in high place for Hans Keinrath of Austria (7th) using glow engine on vertical ply mount slotted through nose. 5. Unlucky in last flight was Karl Bajc of Austria, using Cox Special. 6. Most intricate structure, with egg-box tail, multi braced wing, Alberto Dall-Oglio of Italy, who was equal first, to qualify for fly-off. 7. F.A.I. Models Commission Secretary, Sandy Pimenoff of Finland with veteran "Number 18", unlucky to collide with 8, John Foley of Canada in the vital last flight, a million to one chance. 9. Unique two-piece fuselage, typical of Yugoslavian models, this one by Zlatko Merkez with dural tube front section, plug-in balsa rear cone, placed 18th. 10. One of three Continued opposite Continued opposite





cloud. Bo. Modeer, the Swedish ace admitted his tactical error in this round, conceding 12 secs. when models on either side were soaring high in lift. His were the most beautifully constructed examples of the art, especially his 87 in. Esmaragda which has a carved Aspen nosepiece, 2½ in. longer than the drawing in February '63 "Contest Designs". All Britishers were truly out of luck, Burrows hitting an all-time low of only 54 secs! There's no call to scoff at such a time, one simply had to see it to believe that downdraughts could be so powerful.

By this time, one could, by dashing hither and thither, using 360 deg. vision, pick out the successful tacticians. We elected to follow Gerd Erichsen from Leverkusen in West Germany who proved to be the most athletic personality on the field. First he booked his timers, then with line strung out, he waited no less than 40 minutes. Waited is a misnomer, for two or three times he would run full pelt to another patch of field, line paid out and helper trailing (along with panting photographer). The game of on-off launching terminated as he reeled in the line to return to base, to fly later! Such was his patience, eventually rewarded with a fourth max. In the fifth round a similar performance ended with snap decision to change to his straight dihedralled Jedelsky sectioned model, and again this returned a max. This was the only "Full-house" performance, and served as much to illustrate the skills of thermal seeking as the advantages of sheeted wings. Gerd's closest rival, Ernie Avory who had flown over along with all the Canadians at own expense to enter, was another to show similar traits. We followed Ernie for his vital 4th and 5th flights. Line out, arms and legs akimbo, Ernie waited with the patience of Job, Suddenly a call to the helper, and off went Ernie. The 4th was a cert; but the vital 4th and 5th flights. Line out, arms and legs akimbo, Ernie waited with the patience of Job. Suddenly a call to the helper, and off went Ernie. The 4th was a cert; but the 5th just held height, then sank with frantic Cannucks beating heck out of the air below to try and strike a bubble. It was just 9 seconds short. His Thermalnose is a direct development of Ernie's Migrator (Nov. '62 ARROMODELLER) using new fuselage proportions. Since he went to Vancouver, 6½ years ago, Ernie has specialised in the A/2 class after taking up the hobby again. In pre-war years, he was in the Victoria M.F.C. London, and served as an S.M.A.E. Council member. So it was a case of the lithe 21-pear-old (whose second hobby is hitch-hiking) trainee teacher beating the long (31 years of it) modelling experience of a devoted modelling enthusiast.

(31 years of it) modelling experience of a devoted modelling enthusiast.

Team results speak for themselves. Trained by Sokolov, and with Simonov's experience of several World Champs behind him, the Soviet team flew near identical models with an air of cohesion among teamsters and consistency that earned their place. But they were only twenty seconds ahead of the Netherlands team, winners in 61. In terms of practice, the Dutch lads

It was Dave Kneeland, many times a U.S.A. free flight team member who originated application of Thermistors and electronics as an aid to thermal detection. At Weiner Neustad. he employed a hydro-gen filled balloon to carry a Thermistor to approximately 200 ft. altitude. Dave is seen here paying out connecting wire with Carl Hermes holding the balloon and Arthur Frost holding ground based temperature change indicator, plus another ground based Thermistor unit. The detectors were not employed lack of fully through cohesive effort among team members



overcame their moral handicap with a most honourable close chase of the leaders.

With four timekeepers required to check engine run and duration of each flight, teams were coupled for the F.A.I. Power event and this, in addition to the widespread positioning of take-off points, led to frustrating delays between flights. Naturally each modeller wanted to select his time of launching but with six flights to make in a round and a quarter of a mile trot for the timekeepers between each flight, the sands of time were running out to the extent that at one stage protests were contemplated. The

timekeepers between each flight, the sands of time were running out to the extent that at one stage protests were contemplated. The organisers countered this by extending the round by fifteen minutes.

All three British flyers made maximum flights and their performance augured well for our chances. Admittedly they were not alone, but at the conclusion of the second round we are very happy to record Great Britain was firmly in the team lead. Hagel of Sweden was not up to his usual standard, having troubles with his pressure feed system, Spearman's Soarhead, which in theory had a great chance in these Austrian conditions, suffered wing flutter on the climb and to our amazement, there were crashes! One model folded its wings in the climb, model simply would itself right into the ground. Round 3 brought disappointment as Dave Posner was literally pulled right out of the sky on the wrong side of a thermal for a mere 1:52 and focus tended to centre

on the very high climbers, Frigyes of Hungary and Galbreath of the U.S.A. The sky was clear and with about a dozen triple maximums, chances still wide open, especially for our own George French, whose rate of climb was much admired. Round 4 seemed to do little more to confirm the position of the leaders, no less than 44 maximums being recorded! Regrettably, this did not include young Bekkeland of Norway, who had a perfect score up to that time then recorded a 1/10th sec. over-run and on his second attempt, had the D/T band break while on a climb. Just goes to show that one has to check everything. Round 5 was perhaps the most exciting of all. Lift was not so obvious and flights more spread over the 90 minutes period. George French flew in what might be termed "neutral" conditions for 2:46 to lose his chance in the fly-off and so too did Merkez of Yugoslavia and K-H Rieke of West Germany. But these personal tragedies were small occasions against the drama involving Canada and Finland. John Foley, who had been guided like the rest of his Canadian team-mates to thermals by Ernie Avory, had a 1/10th sec. over-run for his first attempt. Ernie found him another bumper for his second attempt and whilst the model was soaring, Sandy Pimenoff launched his 'Number 18' model into a searing climb, which had a chance for taking 9th place with a maximum. Sandy also caught lift and drifted into the same thermal with Foley, the two collided, taking Pimenoff's wings clean off the pylon, while the Canadian model soared on. It was a chance in a million, especially as the two models were virtually alone in the sky.

Meanwhile all timekeepers stopped their watches! After appeal, Foley's flight was allowed as a maximum and Pimenoff pulled out an even older model, the Ascender but now it was too late for him to do anything more than 2:41 with quick preparation.

As the round concluded, it was established

pulled out an even older model, the Ascender but now it was too late for him to do anything more than 2:41 with quick preparation.

As the round concluded, it was established that the old master, 40-year-old Erno Frigyes of Hungary, Lasse Laxmann, the 18-year-old twin of the brother who flew in the last World Championships for Finland, Alberto Dall'Oglio of Italy and Doug Galbreath of the U.S.A., were to fight it out for the individual honour of trophy bolder.

In the first fly-off round for 31 minutes, each qualified comfortably. Then in darkening skies, Dall'Oglio, flying the most intri-

FOUR POWER FINALISTS, Lasse Laxmann in foreground with Erno Frigyes kneeling, Doug Galbreath and Alberto Dall'Oglio at rear; three Super Tigre's and a Moki 53, all operating in the 19 to 20,000 r.p.m. range on the climb



cately constructed model on the field, bearing the general appearance of Guerra's famous model from the Cranfield meeting, suffered too tight a turn on the climb and faster sink, to fall out. In the final, deciding 3rd round, Frigyes was the only one to make 4½ minutes. His "Taltos" (Pegasus) is virtually the same as his earlier models, but with 15 sq. ins. transferred from the tail to the wing. Structure employs pine in all main wing members and ply compression ribs at mid span. Wing airfoil is Benedek B8.35.3/b, 8 per cent. thick with a 6 per cent. lifting tailplane tripped at two positions by the Hajek system, so that there is 2 degrees 45 minutes decalage for glide and 15 minutes for the climb. Laxmann was using a Reino Hyvarinen design "Rist-Rast" (Zig-Zag), which might have matched Frigyes had they been able to alter the turn. Third man Doug "Cassius" Galbreath, claims he lost out by virtue of an 8 sec. motor run. True, it was, he suffered timer trouble earlier by entertaining all and sundry with a "hole through the clouds" 30 sec. run flight in the practice periods. This more than emphasised the fantastically fast and stable climb of his "Jai-Fai" (pronounced Hi-Fi) model. He uses 460 sq. ins. of wing, 8 in. chord, 64-in. span with 133 sq. ins. tail. To control the climb 10 degrees downthrust and 4 degrees right thrust are used, there is no autor udder and no tail trip. It must be said of "Cassius" that he was undoubtedly the keenest power fiyer on the field, running his own private fly with doubtedly the keenest power flyer on the field, running his own private fly-off with challengers on the following day and making no bones of his opinions of what was right and what was wrong, on anything connected with power modelling.

With the tremendous achievement of first

With the tremendous achievement of first in World Championships in 1958 and 1953, second place in 1961 and a technical 8th place in the massive fly-off for equal winners of the 1960 event, Frigyes must surely now go down in modelling history as a maestro of Power modelling. The significant thing, is that there is so little design change over the last five years in his model, apart from trim and gadgetry to accept the increasing power of 2.5 c.c. engines.

Third and final day, Thursday August 15th, started as the others, overcast and unpromising. This Wakefield contest was truly the finale of the Championships. One of the first flights we witnessed was a max by speed Champ Krizsma of Hungary, the model climbing so high in 40 secs. run that it really could not miss. Dave Kneeland, Power winner in '53, and member of other U.S. Wakefield and Power teams, had the most "engineered" model on the field, also one of the fastest climbers. "Melvus Govinda" has a 24st Dural fuselage tube, machined by Dave to .0045 in. thickness! Tee bar shaped end plugs take the prop gear and motor end, the whole being made to a standard of perfection, and Dave has five of 'em! "Go-Melvus-Go" was his cry after each launch. It became a focal point of the event for the rate of climb was only rivalled by Alinari of Italy. Only Dennis Latter managed a max for Britain in the first round; but we were not alone. Sal Cannizzo for the U.S.A. had his model loop in, then bust a motor on a second wind, then power stalled at 2nd attempt! Third and final day, Thursday August 15th, at 2nd attempt!

at 2nd attempt!

There were numerous broken motors, John O'D managed it for the 2nd round, then got away for a max, while the unfortunate Bruce Rowe, who really does not deserve what happened throughout the meeting, never went higher than 100 ft. and had the prop fold at 10 ft. Those downdraughts! Emil Fresl was going well, plenty of height in hand when wham! Down he came as though sucked from the sky by those greedy grasshoppers for 2:45. Ernie Avory was sensing the thermals well for Canada, and for a while they took the lead in spite of Mike Segrave repeating the Fresl performance.

performance.

As the third round started, the wind gusted

F.A.I. Power Results

HZH. H. A O.	-	1000000							WHY.	
Name		Nation		1	2	3	4	5 T		
1. E. Frigyes				180	180	180	180	180 9	900	Moki S-3
I. E. Fligyes	••••	11migury	•••	Flu-of	T_	210	240	270		
		T. 1 . 1		Fly-of	100	190	100	180 9	200	Super Tigre G20
L. Laxmann	***	Finland	•••	100	100	100	100		,,,,	Super Tigre C20
		200220-0		Fly-of	1+	210		233		C T' C20
D. Galbreath		U.S.A		180	180	180		180 9	900	Super Tigre G20
	-			Fly-of	7+	210		223		
A. Dall'Oglio		Italy		180	180	180	180	180	900	Super Tigre G20
A. Dan Ogno	***	Italy	***	Fly-of	T .	210	201		-	
				FIY-OL	100		100	100	900	Super Tigre G20
5. A. C. Sereno		Portugal		180	180		180	180		Super Tigre G20
5. A. C. Sereno 6. G. R. French		G.B		180			180		886	Cox 15 Spl.
7. K. Keinrath				164	180	180	180	180	884	Bugl 15.
9 V Dennech		East Germany	1100	162	180	180	180	180	882	Oliver Tiger
8. K. Braasch	***			180	161			180		Cox 15 Spl.
9. M. H. Green			•••	160	101			180		Super Tigre G20 Moki S-2
10. B. Bulukin		Norway		160	180		180	100	000	Super Tigre G20
11. A. Meczner		Hungary New Zealand		180				180		Moki 5-2
12 I Henry		New Zealand		180	180	156	180	180	876	Cox TD Spl.
12. I. Henry (proxy V. Jays) 13. V. Hajek	***		35							
(proxy v. Jays)		Casabaslavalda		176	180	159	180	180	275	MVVS 58/G
13. V. Hajek	***	Czechoslovakia					153		873	Super Tigre G20
14. F. Grifoni		Italy			180	180				
15. Y. Joostens		Belgium			180	155			867	Cox Spl.
16. S. Pimenoff		Finland		161	180	180	180	161	862	Super Tigre G20
16 7 Malina		Czechoslovakia			180	180		180	862	Super Tigre G20 MVVS 58/G
16. Z. Malina 18. Z. Merkez	***				180	180			855	Super Tiere G20
18. Z. Merkez	***	Yugoslavla	•••					130		Super Tigre G20
19. K-H Ricke		West Germany			180	180				Super Tigre O20
19. T. Van Dijk		Netherlands		130	180	180		180		Super Tigre G20 Super Tigre G20 Super Tigre/Rossi Super Tigre/Rossi
19. P. Broerse		Netherlands			180	130	180		850	Super Tigre/Rossi
		East Germany		180	126	180	180	180	846	
22. R. Kammer	***			120	180		180	180	840	Super Tigre G20 Super Tigre G20 Super Tigre G20
23. D. Surry 24. J. Warnock	***	Canada								Super Tigre G20
24. J. Warnock	***	U.S.A U.S.S.R.		130	180				833	Super Tigre G20
25. B. Filimonov		U.S.S.R.		180	111	180			831	Super Tigre G20
26. V. Pecorari		Italy			133	180	180	152	825	
27 M Pourageie	***	France			136			180	824	Super Tigre G20/D Super Tigre G20 Super Tigre G20 Moki S-3
27. M. Bourgeois	***	Trance						180	823	Super Tigre G20
28. F. Spearman		U.S.A			147					Super Tigre C20
29. A. Gorgocena		Spain		180	163				821	Super Tigre G20
30. G. Simon		Hungary			180	129	180	151	820	Moki S-3
21 V Paic		Austria			180	180	180	94	814	Cox Spl.
31. K. Bajc 32. D. S. Posner	***	G.B		100	180				812	Cox Spl. Cox Spl. MVVS 58/G
32. D. S. Posner	***	G.D	•••		123				807	MVVS 58/G
33. J. Cerny	***	Czechoslovakie	Z	144		100				W V V 3 30 C
34. R. Hagel	***	Sweden		147	112				799	Super Tigre G20 Super Tigre G20
35. H. Beck		West Germany		180	165	148	180	116	789	Super Tigre G20
36. A. C. Leite		Portugal	-	180	180	180	162	86	788	Super Tigre/Rossi
or P Pudalah	***	West Germany		175	125	124	180	178	782	Cox Spl.
37. R. Rudolph	***			100	146	87	180		773	Cox Spl.
38. R. Zimmer	***	France Finland								Cox Spr.
39. H. Raulio	***	Finland		144	180		180		769	Super Tigre G20
40. P. Lagan		New Zealand			180	180	111	158	764	Cox TD 15
(proxy P. Busk	eID	A STATE OF THE STA								
41 T Winner		Netherlands		. 180	119	157	128	172	756	Enya 15D
41. T. Wiegers	***		**	122					751	Super Tigre G20
42. V. Kmoch	***	Yugoslavia	•••		117		180	100	720	Eta ISD
43. R. Bekkelund		Norway	***				-			Eta 15D
44. J. Foley		Canada		136	115	101		180	712	OS Max Spl.
45. R. Schenker		Switzerland		-	79	179	180	180	696	Own engine Cox TD 09 Cox TD 15
46 E Vanamar		Luxembourg		100	62	180	180	85	687	Cox TD 09
46. F. Kraemer	***		***	100	180				675	Cox TD 15
47. S. Agner 48. J. O'Sullivan	***	Denmark		0.0	100				666	Cox TD 09
48. J. O'Sullivan	***	Ireland		. 85	85	180				COX ID UY
49. U. Carlsson		Sweden		. 180	180		124	25	643	Super Tigre G20
50. M. Doyle		Ireland			124	90	180	132	637	Super Tigre G20 Cox TD 15
St. A Lundin		Sweden		100	85	59	126	180	630	Super Tigre G20
51. A. Lundin	***			20	180	156	80	180	622	Cox Sol
52. I. Sverdrup	***	Norway			180	130				Cox Spl. Cox TD 15
53. N. Christensen 54. M. Zupanski		Denmark		. 107	28		180	180	611	COX ID IS
54. M. Zupanski		Yugoslavia			180		105	154	610	Super Tigre G20 Cox TD 09
55. E. Eng		Switzerland			157		131	86	593	Cox TD 09
	***	Fact Germany	Vi.	100				144	586	Schlosser 2.5
56. H. J. Benthin	•••	East Germany		40	180			46	563	Super Tigre G20
57. A. Schlosberg	***	Israel	**	. 40	100					Oliver Tiers
58. J. Scott		Canada		. 76	169	180	103	31	559	Oliver Tiger
(provy I McG	illiv	ray)			100710	W NO	- www	Taraban .		Control Value Parisons
59. M. Scott	0.00	New Zealand		. 161	180	37	50	120	548	Cox TD 15 & Spl.
(necessity City	nn)									
(proxy K. Gly		Continuation		. 180	124	180	9	1	493	Cox TD 15 & Spl.
60. A. Schiller	***	Switzerland	**							Super Tierre C20
61. M. J. Soares	•••	Portugal		. 93	180			04	490	Super Tigre G20/D
61. C. Guilloteau		France		. 107	81		76	140	490	Super Tigre G20/D
61. C. Guilloteau 63. O. Ebner		Austria		. 127	147	76	9	-	359	Cox TD 15
WALL PROPERTY.										
64 F Nienstandt	•••				93		-	_	231	Cox TD 15
64. E. Nienstaedt		Denmark	.,		93	8	-	-	231	Cox TD 15 Cox TD 15

F.A. Tean

3. Great 4. U.S.

F.A.I. Power Team Placing		5. Czechoslovakia 6. Finland 7. Netherlands 8. West Germany	2544 2531 2456 2421	13. Portugal 14. Canada 15. France 16. Sweden	::	2176 2111 2087 2072
1. Hungary 3. Great Britain	2598 2598 2579 2556	9. East Germany 10. Norway 11. Yugoslavia 12. New Zealand	2314 2222 2216 2188	17. Austria 18. Switzerland 19. Denmark		2057 1782 1517

to near British conditions. We expected many of the fair weather types to tumble; but they did no such thing. O'Donnell made sure, but Latter was down at less than a minute, so too was Gerry McGlashan of Canada as he was looped by turbulence and stalled down at 52 secs. Kneeland plastered Melvus with chrome tape for reflection, which helped enormously for some models were being reported O.O.S. against the deep blue mountain shadows. We saw Krizzma's 3rd flight, a true eye strainer, also his team mate Galgoczi wreck his "A" model as he launched in turbulence. The reserve max'd perfectly. Hungary was running for the team trophy with eight max's out of nine, then Purgai really "bought it" with another incredible downdraught at 64 secs.

	Wakefield	Results						Name	Nation	1	2	3	4	5 7	otal
	The same of the sa		2			Foto		W. McGarvey	New Zealand	180					788
Name	Nation	1 2	3	4	3 1	Tota	34.	L. Purgai	Hungary	180	180			180	
1. J. Loffler	E. Germany	180 180	180	180	180	900	35.	L. P. Riffaud	France			150			
1. J. Lomer	21 001111110	Fly-off +	210	240	243		35.	E. Nienstaedt	Denmark		180			180	
A. Hakanson	Sweden	180 180		130	180	900	37.	L. Tlapak	Austria	180				180	
A. Hakanson	Sittation	Fly-off +		240		1000	38.	A. McCauley	New Zealand	180	180	75	180	164	779
B. Murari	Italy		180			900		(proxy R.Magill)							
D. Mulati	21111.5		210				39.	R. G. McGlashan	Canada	180	180			180	
H. Wagner	Austria		180			900		E. Kaslev	Bulgaria	115	180	180	113	180	768
H. Wagner	Austria	Fly-off +	185	100	100	200		K-E. Widell	Denmark	147	171	82	180	180	760
5. R. Sundin	Sweden	180 162		180	180	882		M. Rohlena	Czechoslovakia		180	94	128	180	757
	U.S.S.R.			180				C. Hermes	U.S.A.	180	91	180	105	180	736
6. E. Melentiev	France	156 180						J. Gabris	Czechslovakia	158	180	134	98	161	731
7. A. Petiot	Canada			180				L. Muzny	Czechoslovakia	137				165	730
7.J. McGillivray			180					A. Rodrigues	Portugal				180		706
9. S. Galgoczi	Hungary		180					C. Rothenberger	Switzerland			180			699
10. A. Mabille	Belgium	161 180						N. E. Hollander	Sweden		154		139		698
11. J. O'Donnell	G.B.							E. Hamaleinen	Finland	180	98		111		697
12. V. Zapachni	U.S.S.R.		142					F. Strzys	E. Germany		180			180	
13. E. Fresl	Yugoslavia		180						G.B.	180	180	59		180	
14. G. Cassi	Italy	158 180			180			D. Latter	France					155	
14. R. Koen	Turkey	180 180						M. Carlos	W. Germany	170	180			122	
16. J. Schulten	Netherlands		142					M. Reichenbach	Austria			180		180	
17. P. Aalto	Finland		180					F. Breith	Bulgaria	109		180		180	
18. J. Meyer	Switzerland	121 180						S. Nevenkin					149		635
19. W. Pulik	E. Germany	180 180		118				S. Cannizzo	U.S.A.	135	91			162	
20. J. Merory	Yugoslavia	116 180						C. Merseburger	Spain			105			623
21. C. Hewel	W. Germany	180 154					58.	K. Omura	Japan	138	190	103	103	"	023
22. K. Kongsberg			113				-	(proxy Hlavka)		120	100		110	119	621
23. A. Alinari	Italy	125 180		180			59.	T. Owada	Japan	139	180	62	119	119	021
24. V. Kmoch	Yugoslavia	180 121		169			SEL	(proxy Schneck)		***	00	10/		134	***
25. P. Den Oden	Netherlands	125 180						L. Serrano	Brazil	149	95				
26. G. Krizsma	Hungary	180 180		105				N. Burger	Netherlands		141			117	
27. R. Eisen	W. Germany	167 180						B. Rowe	G.B.	116		116			
28. R. Liechti	Switzerland	180 171	180	120	162	813		B. Storgards	Finland	88	92			180	
29. D. Kneeland	U.S.A.	180 180	180	89	180	809	64.	J. Malkin	New Zealand	78	121	180	63	116	558
30, S. O'Connor	Australia	180 180	144	141	160	805		(proxy E. Malkin)	FED. 1/2	1					
(proxy Eigner								A. G. Martinez	Spain	87		180			
31. M. Segrave	Canada	180 125	180	180	133	798	66.	M. F. Sousa	Portugal			180			532
31. Ono A.	Japan	94 160						A. Mirtschev	Bulgaria	173	74	6			490
(proxy Haide		7-7-1-7-7-7	MEG.C.	2.47.610			68.	A. C. Sereno	Portugal	80	180	180	-	-	440



loachim Loffler from Eberswald, East Germany, who has been a Wakefield enthusiast for four of his 23 years, with the much coveted Wakefield trophy

Italian and U.S. teams staged their timekeepers in a mid-field position so that chance of going O.O.S. was minimised. In Alinari's case he managed to leave the enormous field, d/t'd into the town for a landing in a walled yard. Only occupant was a ferocious dog. Italian Picadors were called into action to deter the brute from inquisitive destruction of either model or owner and reported success with glee on the delayed return. At this stage in the fourth round, the number of quadruple max's included Rone Koen of Turkey. It needs to be said that Rone's effort in getting to the Champs was great in tiself, for he overcame many difficulties, not the least of which was having his materials delayed until four days before departure. His model was the only one with a one blade propeller, it lacked the refinements of many others; but here it was in the running, many others; but here it was in the running, and with everyone hoping that he could make the 5th max. Alas, a bunched motor destroyed the glide. Eventual 14th place was no disgrace and Rone was awarded the "Man of the Day" Trophy for his trojan effort. Meanwhile, Kneeland was out by virtue of a spinning motor plug, and Galgoczi had lost 30 secs., leaving four other possible finalists.

Galgoczi had lost 30 secs., leaving four other possible finalists.

These were the "Old Fox" Hakanson of Sweden, Murari of Italy, Wagner of Austria and, competing for the first time, Loffler of East Germany. It was a complete mixture of designs, and both Murari and Hakansson were operating repaired models. Rain swept through, then in dusky conditions, the fly-off commenced. Wagner failed at the first round then Murari at the

failed at the first round, then Murari at the second. In each case they were O.O.S. in the gloom. In the third and final round, Joachim Loffler was clearly the better, and

12 HEED

so to this 23-year-old East Berliner, one of so to this 25-year-old east berniner, one of the few to use 3/16ths Pirelli rubber (18 strands for calm, 20 for wind) goes the blue riband of Aeromodelling. The Italian team, one of the strongest yet, were justifiable leaders, showing an intense enthusiasm and encouragement for one another that was so obviously lacking among less demonstrative

More details next month on the three events.

1. In the fly-off, Bruno Murari of Italy used 16 strands of ‡ Pirelli, 495 turns, driving 23 by 26 in. twin folder prop. Had extraordinary long tail moment. 2. Horst Wagner of Austria had sheeted wing design, fell out in first round of fly-off. 3. Old Swedish "Fox" Anders Hakanson fits 16 strands & Pirelli in his much repaired Wakefield for fly-off. 23½ by 26½ in. variable pitch prop took 425 turns. Was eventual 2nd place man in fly-off. 4. Alessandro eventual Ind place man in iny-on. A. Alessandro Alinari's fast climb rate was outstanding. A finalist in 1961, this Italian flyer collected only three maxes in '63, but made useful times for Italian team victory. 7. Pentii Aalto of Finland had a most elegant model with curved the control of dihedral at wing tips, formed by laminated leading and trailing edges. 8. Body stretch by Vladimir Zapachni (U.S.S.R.) as he puts all effort into a first round launch, placed 12th. Only two Soviet modellers flew but they still Only two Soviet modellers flew but they still managed to beat full three men teams, including U.S.A. and Great Britain! 9. Detail of Murari's propeller with flexible blades, Perspex nose block, diagonally wound balsal glass fibre/balsa tube fuselage and egg-box wing on thin sheet pylon. A model to admire for intricate detail (see also pic 1). 10. Alf Haiden flew one of the Japanese proxy models for Akira Ono. Gained 32nd place after slow start. II. Power Champ Frigyes holds for Hungarian team-mate Lajos Purai, who suffered downdraught in third flight to ruin his score. Purai is also a champion team race suffered downdraught in third flight to ruin his score. Pural is also a champion team race man. 12. From U.S.A. Carl Hermes with attractive taper wing "Olympia" finished in unusual blue. 23 by 29 in. prop gives fast climb on 35 secs. power. 13. All the way from Brazil, Luiz Serrano had unlucky wing fold despite sheet covering. 14. Australian, Sean O'Connor's model was proxy flown by Eigner to an honourable 30th place.

**	akenela	, E. K	eam	ne	suits				U.S.A		2180
1.	Italy		2576	7.	Denmark		2376		G. Britain	***	2152
	Yugoslavia		2513	8.	Switzerland		2353		New Zealand		2125
73.	Sweden		2480		Austria	***	2318		Finland	***	2105
4.	Hungary	***	2479		France	***	2313		Japan	***	2038
	Canada	***	2445		W. Germany	***	2294		Bulgaria	***	1893
6.	E. Germany	***	2435	12.	Netherlands	***	2279	20.	Portugal	255	1678

