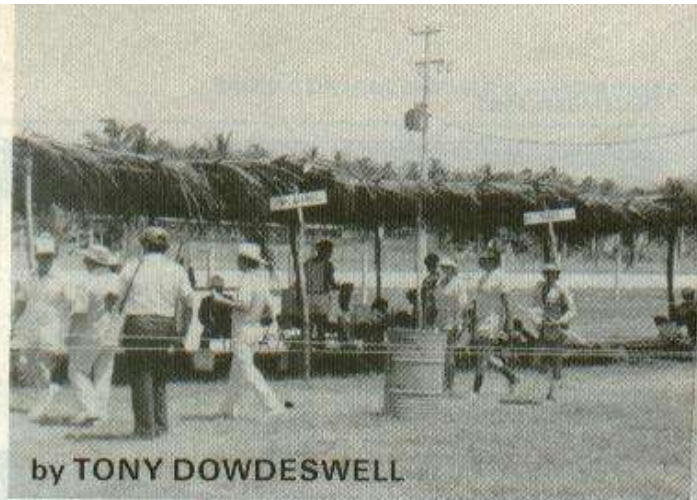




"AEROBATICS MEXICO 81"

# 12th WORLD RADIO CONTROL AEROBATICS CHAMPIONSHIPS

*Acapulco, Mexico  
September 21-27*



by TONY DOWDESWELL



*Top: pit area of the World Champs field and scenic mountain background. Seashore was just across the runway. Above: they seem to have something of a monopoly of first, second and third places - Wolfgang Matt, Hanno Prettnner and Dave Brown. Above right: top team again - USA. Steve Helms, Mark Radcliff and Dave Brown, with team manager Dean Koger accept MAP Ltd trophy at awards ceremony.*

*Left: the Prettnner magic does it again - quite literally. World Champion Hanno with father Hans Prettnner enjoy a photo call after the fly-off. Far right: Yoshioka of Japan checks model on flight line No. 2 prior to taking the noise test. Test instrument is the tripod mounted unit on the runway in the background.*

THE 12th WORLD R/C Aerobatics Championships at Acapulco, Mexico, was quite an experience as our tale will tell.

The first of the series ever held in Latin America, it attracted 62 competitors from 27 countries, including, for the first time, teams from Spain, Thailand, South Korea, Venezuela and Papua/New Guinea.

Acapulco, tropical playground on Mexico's west coast became host for the Championship when the original venue at Guadalajara became unavailable with resultant change of environment from 5,000ft. to sea level conditions.

For those used to temperate European environment, Acapulco proved hot, humid and — expensive — never come out of an airport after a 24 hour journey and fall into a taxi without first negotiating the fare, folks — yours truly's first act cost me 35 dollars for the 10 mile ride!

A welcoming experience of a different, but nevertheless 'different' kind, if you see what I mean, faced our own United Kingdom team (I'll strangle the next lot of championship organisers who label us 'England') when, having humped model boxes et al up to the 7th floor of the 20 storey headquarters hotel, the whole place began rattling in a minor earth tremor — minor we would emphasise, but then any new experience is, well, quite an experience.

Ken Binks, Phil Stevens, Brian Brotherton and team manager Trevor le Brevilly together with supporters were immediately faced with the problem of apparent non-arrival of entry fees (transferred in May and they had the paperwork to prove it!) and a number of other teams were in much the same boat. Fuel fees — £10 a gallon for 5% nitro mix folks, were likewise adrift, resulting in urgent telephone calls back to UK (48.5% Mexican federal tax on telephone calls).

Having arrived in good time to acclimatise to the local environment our team did just that, to a man suffering from the heat and humidity and the local bug. Phil Stevens at one point was down and out with heat exhaustion.

As is usual for this bi-annual summit of R/C aerobatics, many are called — 62 this year, but few,



judges were obliged to finance their own travel arrangements. Unfortunately two of the ten invitees did not stand the racket and with a team of only eight judges on hand, the normal World Championship judging system had to be abandoned.

Instead of two flight lines each manned by five judges and highest and lowest scores for each manoeuvre discarded, circumstances forced use of 4-man judging teams with all scores to count.

Official opening, which rounded off practice day, was certainly long on ceremony, with straggling parade of teams and motor cavalcade for the politicians and brass. The FAI and Mexican flags were delivered by Skydivers to be escorted by armed soldiers for the standard raising. It all dragged on for more than an hour as competitors stood and suffered in the heat.

### Round 1

Against a cloudless, deep blue sky background and a sea horizon, competition flying commenced at 7 a.m., necessitating a 4.30 a.m. turnout to be ready for breakfast at 5 a.m., bus transport at 6 a.m. and out to the airstrip.

UK's Phil Stevens, having suffered engine problems during practice was now getting a consistent motor run — too much of it in fact, and finished 10 seconds over time limit to lose the score for his last manoeuvre. Tom Prosser of Australia also had a slight problem pacing himself, but managed to complete just 0.1 sec. inside the maximum time.

Round one was punctuated by a number of motor cuts and it is interesting that the Italian team could actually show a level of water, separated in the bottom of their fuel bottle, resulting from absorption of water to the point of saturation.

Noise checks were applied through the rounds, with zero score penalties for those consistently 'over'. The test was certainly open to abuse, with many and varied methods of 'beating the system', such as carefully positioned knee between the nose of the model and test instrument as the pilot obligingly leaned over to tweak up the needle, or alternatively, demonstrative co-operation with the test instrument operator, as the pilot willingly peaked up the fuel needle — and over the top so that the motor dropped out of resonance. Flakey stuff, but it worked!

In fairness, many competitors had made a

genuine and effective effort to comply with noise limitations. Prettner had an exceptionally quiet power system; Matt also, Tom Prosser of Australia had a very effective system which involved bonded rubber motor mount insulator and a very neatly contrived carburettor noise damper, also used by other Australians. Ken Binks's model was exceptionally quiet.

The Japanese also provided an object lesson in noise suppression. However, it must be said that the noise levels now demanded are turning the aerobic event into something of an engine running contest.

First round of the contest proved relatively uneventful and in any case, since no true picture of performance is possible until competitors have performed once for each set of judges, the scores at the end of Round 1 are only half an answer.

However at round's end, Dave Brown of USA held top slot ahead of Hanno Prettner (Austria) and Wolfgang Matt (Lichtenstein), these three closely grouped contenders showing a slight advantage over their followers Ivan Kristensen (Canada) in 4th slot, Mark Radcliffe (USA) and Gunter Hoppe (West Germany).

Among the Brits, Brian Brotherton and Phil Stevens were in closest possible formation at 26th and 27th positions, with only a single point separating them, while Ken Binks, having suffered in this round, held 35th slot.

Surprises were the relative performances of the Japanese, with newcomer Akiba in 7th place, while veteran team-mate Yoshioka was down in 24th position, having suffered all sorts of trouble including almost missing the 2nd leg of his Figure M. Nicely positioned for someone with no previous World Champs track record was young Bertram Lossen of West Germany in 10th place, already the object of some speculative buzz among competitors.

### Round 2

With one of the four rounds now complete, pressure began to build. Being top of the heap is a nice feeling, but the pressure to hang on to the No. 1 position can generate its own brand of finger trouble and Dave Brown suffered, in particular with a far less than perfect Triangular Rolling Loop.

Our own Ken Binks was now much improved, but Phil Stevens failed the noise test and his model was removed to the 'last stop for naughty boys' impound



barring accidents, are real contenders. The big guns of the game included defending Champion Wolfgang Matt, who was flying well so the rumours had it — while Austria's Hanno Prettner, who missed the last championship was not quite the old Hanno they said.

From USA, last time's 2nd place Dave Brown was accompanied by Mark Radcliff and Steve Helms, while from West Germany came Gunter Hoppe, Werner Schweiker and a 20 year old high school student Bertram Lossen — an unknown — thus far.

Italy fielded the same trio of Benito Bertolani, Giuseppe Bertolozzi and Ruggero Pasqualini while Canadian ace Ivan Kristensen was accompanied by Jaques Gagnon and Greg Marsaen.

Japan, having missed the last championships, fielded former champion Tsugataka Yoshioka plus Giichi Naruke and newcomer Yoichiro Akiba. Also of interest was young Geoff Stowell representing Papua/New Guinea.

Availability of only a single flying site for preliminary practice produced something of a competitive sport in itself as teams sought flying time to acclimatise themselves to the environment. The flying site itself, to be used for the championship, was a military airstrip some ten miles out of town along a scenic cliffside coastal route. The runway was within 100 yards of the shoreline, with Pacific breakers visible and audible throughout the championships.

Practice day was an opportunity to observe performances and equipment, quite the most interesting revelation being the use of variable pitch props. However, despite usage by Wolfgang Matt to win the last championship, only Matt, Prettner, Naruke of Japan, and Steve Helms of USA were so equipped, Matt, Prettner and Naruke with prototypes of a new unit by M.K. in Japan.

Official practice time, originally time tabled over two days was in fact cut to a single day to allow a further day for competition, thus reducing the daily judging workload in the extreme heat.

Normal practice for World Championship events is for judges to be supplied with travel vouchers in advance, but with no such protocol observed,





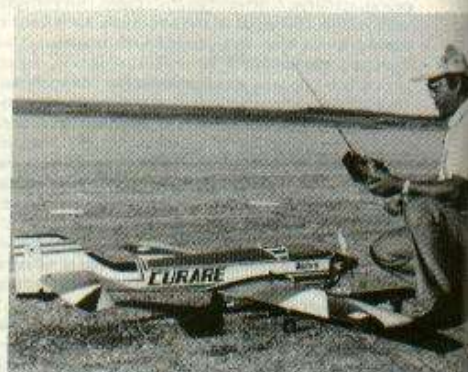
Above: Team UK ready for action - Phil Stevens (30th), Brian Brotherton (32nd) and Ken Binks (23rd) with team manager Trevor le Brevilly. If you meet them sometime, ask them to tell you the story of the minibus that lost its door! Right: the Canadians Ivan Kristensen (seventh), Greg Marsaen (15th) and J. Gagnon (17th).



Above: Dave Brown (second for the third time running) with Tiporare design. Intermittent aileron servo gave him a nasty moment and a zero score. Above right: Wolfgang Matt of Lichtenstein enjoyed a less than ideal championship this time and lost the World Champion's crown. Far right: Mark Radcliff of USA flew to fifth place with Phoenix design. Right: new star on the R/C aerobatics horizon - 20 year old Bertram Lossen of West Germany came from nowhere to place fourth. Great achievement in his first World Champs.



Above: top Japanese competitor this year was Yoichiro Akiba who placed ninth. Above right: using one of the quietest models flown in the championships Tom Prosser of Australia placed 28th. Combination of many noise damping features achieved the low noise levels. Above, second right: Geoff Stowell of Papua, New Guinea does much of his competition flying in Australia. Bolus design is superficially styled like control line Stunter, placed 31st.



Right: Surasak Bumphenboom and Peaphon Techaviersak represented Thailand for the first time ever in World Class R/C aerobatics. Seen here in the shade awaiting call for flight. Far right: another competitor from mainland Asia - J. V. An of South Korea.



area pending end-of-round re-test. Ireland's Jim Clarke stuck one in the sea and Marcial Davilla of the home team cranked his motor without result for the full three minutes start-up time, only to discover the dust seal on the tune pipe exhaust still in place. Pressure!

High scorer of Round 2 was Wolfgang Matt, whose determined effort brought him 1403 points and enough to lift him into the lead position at round's end, ahead of Hanno Prettner who also delivered a nice one at 1388 and enough to topple Dave Brown into 3rd slot.

However, the real performers of the round were certainly West Germany's Lossen, up from 10th to 4th position and two-time World Champ (1969 and '71) Bruno Giezendamer of Switzerland, catapulted from 17th to 6th place.

Those who really lost out included Ivan Kristensen of Canada, down from 4th to 11th on the strength of a flight widely criticised for being flown too high and too close. Manoeuvre positioning remains one of the make-or-break details of R/C aerobatic flying.

Perhaps the most surprising feature at this stage was the collective performance of the Japanese at 14th (Akiba), 15th (Naruke) and 23rd positions. Previously strong contenders, they missed the last championship in South Africa and this may have affected their form.

### Round 3

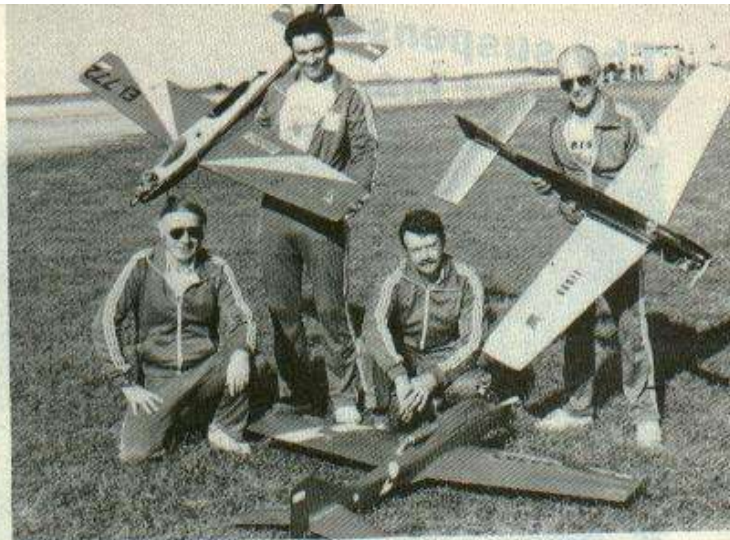
Judges were rotated between the flight lines in such a way that Round 3 became the chance to improve on performance of Round 1.

An early casualty in this round was leader Wolfgang Matt whose engine quit at start-up when Wolfgang opened the throttle. Following a swift re-start, his 'Arrow' (by far the most popular design of the championships) was smartly away and almost as quickly back on the ground again after the motor quit cold during his square eight manoeuvre for a total score of only 145 points.

Trouble also overtook Dave Brown, who returned a zero score when the aileron servo of his 'Tiporare' went intermittent after take-off. But he managed to put the model back on the ground safely.

Barnstormer of the Round was Hanno Prettner, whose 'Magic' design bored holes in the sky aided by MK variable pitch prop. Alone among the four V.P. prop users, Hanno's features reverse pitch, used in the downward movements of manoeuvres to retard model speed. Although a few questioned the value of the reverse pitch mode, ('why go slow downwards and fast upwards' was one question asked) there can be no denying the visual and audible effect. The slow downward movement transit imparts a deliberateness to the visual impact which is highlighted by the audible effect as the propeller pitch is cycled from reverse, through zero to fine, then coarse pitch and back again to fine — rather like a car going through the gears. It is fascinating to hear and watch!

High scorer among the UK team was Phil Stevens, pulling 1175 points for his best result of the championships. Brian Brotherton could not match his 1st round score, but Ken Binks did achieve a much needed improvement.



Above: Team Ireland - Trevor Hutchinson, Robert Kemp and Jim Clarke with Team Manager Shay Murphy. Those green track-suits must have been hot lads! Above left: the cheerful team from Italy, Benito Bertolani (12th) Ruggero Pasqualini (19th) and Giuseppe Bertolozzi (20th). Left: single entrant from New Zealand, Mike Lynch placed 45th.



Below: as usual, West Germany fielded a very strong team - Gunther Hoppe (sixth), Bertram Lossen (fourth) and Werner Schweiker (11th) - took second place in team competition and like US, had two in fly-off.



Right: Lucien Gerard was top Luxemburger placing 16th. Below: Gichi Naruke placed tenth for Japan using prototype of MK variable pitch prop. Below right: Jan van Vliet of Holland flew to 25th place.



# The suspense is killing me...



Jan van Vliet of Holland with team manager.



The Prettners, Hans and Hanno in serious mood.



Bruno Giezendamer of Switzerland ponders at the ready box.



Chris Olsen, FAI jury, telling it as he sees it!



Worried moment maybe, for Gunther Hoppe.



It can't be THAT noisy - Phil Stevens, UK!



Kiwi's do fly - Mike Lynch assisted by Joe Bridie.

Prettner's high pointer of the round now gave him top spot, squeezing out Wolfgang Matt, to 2nd place while that ever-improving young German Bertram Lossen hit 3rd slot, toppling Dave Brown to 4th, ahead of Gunter Hoppe.

Italy's Benito Bertolani made good this round too, rising from 12th in Round 1, through 9th place to hold 6th position.

The team standings were now very much a battle between USA and West Germany, both teams with all three members within the top ten places.

## Round 4

This final fling and last chance to make an impact on the score board produced some determined efforts, none more so than Dave Brown. Stung into action by his 3rd round zero score, Dave produced

an all out effort and was rewarded with the high point score of the round. Indeed, all the U.S. team produced their best performances at this last attempt. Brown's 1422 high pointer was a decided improvement over his Round 2 score while Radcliffe and Helms both exceeded their Round 2 scores by substantial margins.

In contrast, Wolfgang Matt could not match his round two performance and Bertram Lossen also failed to make good, although he came within a single point of his 2nd round score. Gunter Hoppe's 1305 was a distinct improvement and finally, Hanno Prettner delivered a 1410 point performance which ensured that he would lead the top six into the fly-off with a useful scoring advantage.

So, after four rounds the roll call for the six-man, two round fly-off was a galaxy of R/C establishment

names, with Hanno Prettner of Austria, Dave Brown and Mark Radcliff of U.S.A., Wolfgang Matt of Liechtenstein, plus Gunter Hoppe of West Germany and his youthful and now much discussed team mate, Bertram Lossen.

The battle of the team standings was now resolved in favour once again of USA, ahead of West Germany (2nd) and Japan in 3rd place.

## First pay the piper . . .

As we've already mentioned, normal protocol of World Championship events requires pre-paid travel arrangements for judges, although in this instance all eight attending adjudicators had financed their own passages on expectation of reimbursement on arrival.

Yet by Round 4 of the daily progressing competition our judges were still in a state of expectation. Now you can be as tactful as you like, but however much you wrap it up 'no cash, no judge fly-off' is a message about as diplomatic as a thousand bomber air raid — but all eight judges were in position for the fly-off!

## Fly-off

A World R/C aerobatics fly-off is a very tension-charged event and it is interesting to observe top competitors' approaches.

For example, the Prettners (Hanno and Hans — 'Team Prettner' really does mean just that) become virtually incommunicado at least half an hour before flight time as they prepare mentally for ten minutes of supreme concentration.

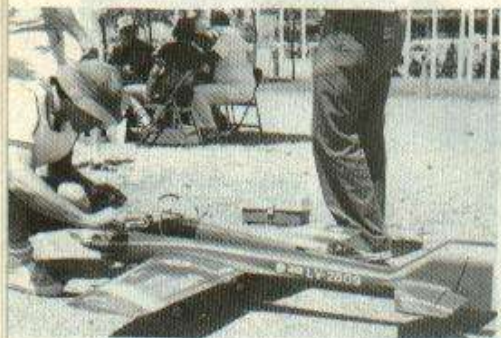
Wolfgang Matt is less of a loner during the nerve tingling waiting period before a competition flight but does keep himself to his own circle of team members and supporters — mostly family we would add.

Gunter Hoppe takes to quietly puffing his pipe, but in contrast, Dave Brown is very much the extrovert. Although the concentration is there, he is more conversational and even between rounds of the all important fly-off can be found chatting, beer can in hand, with just about anyone who cares to pass the time of day.

Dubious honour of opening the fly-off went to West Germany's Gunter Hoppe who completely ruined his Figure M when his model failed to stall over the second leg of the manoeuvre. In the fly-off you can't afford this sort of error.

Lossen also of West Germany followed up with a truly outstanding flight and score to match, followed by Wolfgang Matt, back in the groove after his Round 3 problem and not-so-hot Round 4 showing.

Radcliff suffered the 'order of the failed Figure M' and the first Round of the fly-off was rounded out but Prettner, variable pitching his 'Magic' design through the manoeuvres in convincing style, but



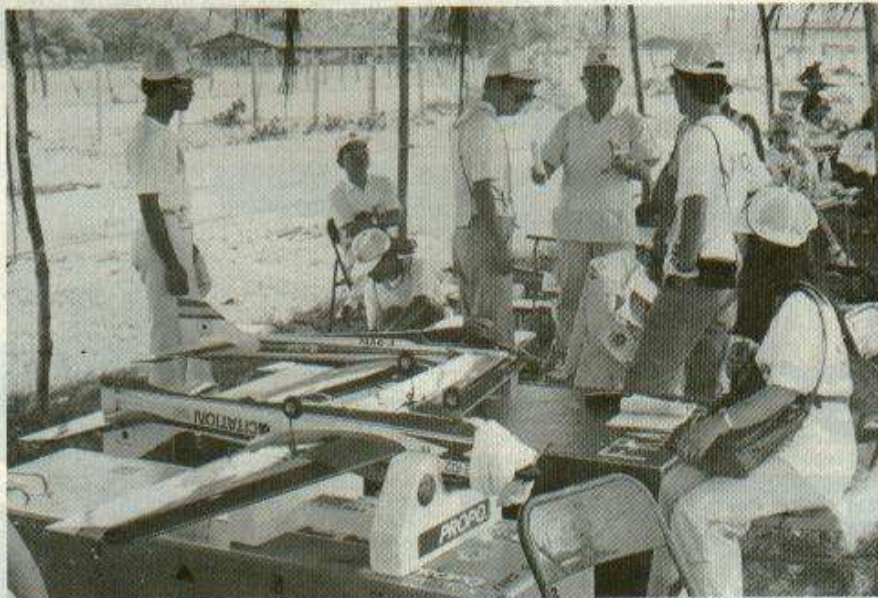
Above left: Argentinian Danny Falco flew Phoenix 8 to 48th place. Above: Marcial Davila of Mexico had an initial two rounds of pure misery, but finally got it all together to take 40th place. Left: Team Switzerland - Bruno and Emil Giezendamer together with Rene Schumacher are perennial national representatives - placed 13th, 21st and 22nd respectively.



Still worrying about earth tremors - Trevor Le Brevilly and Ken Binks.



Engine out blues... Gunther and Wolfgang Watt, Gunther Marxer, Lichenstein.



CAMP JAPAN! Japanese contingent came highly organised with their own air conditioned bus, professional linguist (right foreground) and works radio technicians (JR and Futaba). As usual, the fine finishes of the Japanese models were much admired.

not quite well enough to match the young Bertram Lossen who posted the best score of the round.

However, Hanno still had the overall edge and indeed total accumulated scores produced no revision of scoreboard order as the six aces prepared for their final flights.

Wolfgang Matt led off second time round only to find it was his turn to flop the Figure M and was unable to improve. Nor for that matter did Hanno Prettner, although Brown, Radcliffe and Hoppe all returned better scores.

Once again however it was Lossen who provided the real surprise, returning exactly the same score as his previous flight to completely dominate the fly-off.

Fly-offs are only part of the picture though and when final totals were complete it was Hanno Prettner of Austria in supreme position, World Champion for a second time, edging out Dave Brown of USA who placed 2nd. Dave's comment on it all: "I can't work out whether I'm 2nd or 3rd, 'cos I've been 2nd three times now." So the 12th World R/C Championships was all over, bar the prize giving ceremony and farewell banquet.

### Final act

Set to take place on the top (20th) floor of the headquarters hotel, the farewell banquet formed the final act of the Championships.

Timed to start at 8.30 p.m., the seated assembly were treated to speech making and minor presentations until, by 10.30 p.m. when no one had yet been fed, the place was in an uproar of slow hand clapping and tableware rattling.

Finally a sparse meal was interrupted by a request to clear the room in response to a bomb scare and all vacated to the ground floor where no real explanation was forthcoming and guests spent the next hours in aimless expectation. We've never seen so many lost looking souls in a single place together.

### The scoring system ...

All competitors fly a total of four flights rotating between two sets of judges so that they receive two scores from each judging panel. Their lowest score from each of the two sets is then discarded and the remaining two aggregated.

The highest scoring ten per cent of the total entry then qualify for a final two-round fly-off in which, again, the lowest of the two scores is discarded and the better score added to the result of the four-round qualifying aggregate to find the overall winner.

### Results

Name	Country	Rd1	Rd2	Rd3	Rd4	Total	Rd1	Rd2	Final total
1. H. Prettner	Austria	1399	1390	1431	1410	2841	2893	2860	5734
2. D. Brown	USA	1368	1286	1422	2790	2818	2820	5610	
3. W. Matt	Liechtenstein	1330	1403	145	1364	2733	2836	2763	5569
4. B. Lossen	W. Germany	1244	1348	1306	1347	2656	2911	2911	5581
5. M. Radcliffe	USA	1272	1199	1274	1355	2629	2618	2758	5381
6. G. Hoppe	W. Germany	1268	1246	1310	1305	2615	2580	2727	5342
7. I. Kristensen	Canada	1264	1167	1334	1268	2602			
8. S. L. Heims	USA	1222	1226	1269	1333	2602			
9. V. Akiba	Japan	1244	1096	1295	1286	2581			
10. G. Naruke	Japan	1188	1148	1248	1295	2533			
11. W. Schweiker	W. Germany	1188	1247	1212	1312	2524			
12. B. Bertolani	Italy	1167	1241	1270	1243	2511			
13. B. Giezendanner	Switzerland	1167	1320	1188	1226	2508			
14. T. Yoshioka	Japan	1127	1129	1198	1301	2499			
15. G. Marsen	Canada	1208	1141	1242	1224	2466			
16. G. Werrin	Belgium	1213	1068	1146	1252	2466			
17. J. Gagnon	Canada	1120	1022	1184	1225	2409			
18. H. Kowars	Austria	1132	1064	1175	1191	2366			
19. R. Pascualini	Italy	1048	1148	1168	1194	2362			
20. G. Bertolozzi	Italy	1140	1211	1198	1140	2351			
21. J. V. Beek	Holland	1140	1144	1170	1126	2314			
22. R. Schumacher	Switzerland	1076	1187	1123	1143	2310			
23. K. Binks	UK	1062	1199	1099	1100	2298			
24. E. Giezendanner	Switzerland	1100	1195	1074	1150	2295			
25. J. V. Vleit	Holland	1160	1150	1133	1147	2283			
26. P. Malfait	France	1204	1075	1166	1031	2279			
27. P. Ardenceau	France	1187	1047	1099	1169	2236			
28. T. Prosser	Australia	1196	1040	1026	1124	2230			
29. A. Degotte	Belgium	1156	1048	1134	1158	2234			
30. P. Stevens	UK	1177	1048	1175	1109	2284			
31. G. Stowell	Papua NG	1128	968	1087	1140	2265			
32. B. Brotherton	UK	1118	1137	1147	767	2256			
33. H. Deckers	Holland	1071	1040	1066	1171	2242			
34. D. Friz	Austria	1120	1028	1150	1195	2345			
35. G. Marxer	Liechtenstein	844	1100	1132	1099	2232			
36. A. Bonitez	Mexico	866	1185	1010	1189	2195			
37. T. Rivett	Australia	1080	874	1024	1067	2157			
38. F. Lenearts	Belgium	1087	844	1066	1041	2118			
39. E. Lumsden	Australia	958	926	1080	1021	2101			
40. M. Davila	Mexico	208	0	1019	1081	2100			
41. P. Behm	Luxemburg	1016	923	1089	987	2076			
42. L. Gerrard	Luxemburg	995	0	0	1071	2076			
43. J. Cerdan	Spain	928	945	997	1043	2040			
44. A. Kirnmann	France	1111	929	1062	868	2040			
45. M. Lynch	New Zealand	868	868	992	1019	2011			
46. P. Andreasen	Denmark	1008	868	1002	951	1963			
47. S. Pompei	Brazil	913	868	1047	1029	1942			
48. D. Falco	Argentina	913	868	787	1018	1929			
49. L. Casteneda	Mexico	894	868	902	1021	1915			
50. P. Romano	Brazil	790	1047	840	1032	1872			
51. A. Malonado	Argentina	892	844	889	1085	1833			
52. E. Dockendorf	Luxemburg	823	975	839	0	1814			
53. S. Bumphenboom	Thailand	850	950	764	828	1800			
54. T. Converse	Argentina	885	868	847	866	1751			
55. J. Clarke	Ireland	709	668	898	0	1566			
56. J. V. An	South Korea	454	822	638	859	1497			
57. T. Hutchinson	Ireland	580	647	744	725	1469			
58. R. Kemp	Ireland	739	580	827	585	1324			
59. D. Bruschi	San Marino	950	393	898	823	1773			
60. R. Gomez	Venezuela	724	340	824	846	1670			
61. P. Techavlerak	Thailand	780	0	868	820	1580			
62. P. Papispyrou	Greece	0	0	853	802	1455			

### Team results

1. USA	8023	15. Argentina	5513
2. West Germany	7795	16. Liechtenstein	4968
3. Japan	7813	17. Ireland	4359
4. Austria	7552	18. Brazil	3814
5. Canada	7477	19. Thailand	3380
6. Italy	7224	20. Papua/New Guinea	2268
7. Switzerland	7113	21. Spain	2040
8. Belgium	6907	22. New Zealand	2011
9. Holland	6839	23. Denmark	1963
10. United Kingdom	6837	24. San Marino	1773
11. France	6655	25. Venezuela	1670
12. Australia	6578	26. Korea	1497
13. Mexico	6210	27. Greece	1455
14. Luxemburg	5966		

