CIAM FLYER

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Editor: Jack Sile, 21 Bures Close, Stowmarket, Suffolk, IP14 2PL, England.
Telephone/Fax: UK 1449-675190.
E.mail Jack Sile 100307.522 @Compuserve. com.

Contributing Editors:
Horace Hagen — Guy Revell
Mike Colling — RC Soaring Digest
Bruno Delor — Emil Giezendanney
Dave Beck & Lee Murry
Aerosafa — Anton Sijanec
Joze Cudan — Narve Jensen
Lakis Prastitis — Brian Smith
Louis Parramon Sarrate

Special thanks to all those who contributed photos and articles. Also additional thanks to Suffolk Offset, Ipswich, UK, for their technical support and advice.

Front Cover Photo:
National Cypriot Champion in novice aerobatics Nicolas Georgiades with a little help from dad.

EDITORIAL

This could be one of the most exciting years in aeromodelling that we have yet experienced. The World Air Games are promising to be one of the most important milestones in modelling aviation history. As always, you are playing an important part in the promotion of our sport/hobby.

Those that have so generously supported the *Flyer* with written and photographic material once again demonstrate the continued growth of world wide interest in CIAM activities. Your individual and combined efforts are greatly appreciated. We continue to experiment with the Internet and hope to improve our communication links with all our members in 1997. A great deal of hard work has been put forth by Thierry Montigneaux in establishing our part of the FAI web page and we hope that even more help is forthcoming this year. We now better understand our needs and your technical skills are needed if we are to include in our web pages, everything we would like to see.

And once again my annual appeal for articles, photos and illustrations for the 1998 *Flyer.* Do keep using that fill-in flash, sending head and shoulders photos for author credit, and providing as much technical information about models as you can.

JACK

NOTE

to CIAM delegates, modelling editors, columnists, record holders, modelling instructors and other modellers.

CIAM FLYER is compiled from *YOUR* contributions. Closing date for the next issue is January 14th 1998.

Your help will be greatly appreciated.

PRESIDENT'S CORNER

THE WORLD AIR GAMES our biggest enterprise ever

Dear Friends
Having recently returned from a trip to Turkey, I am happy to state that the preparations for the aeromodelling events of the first World Air Games are on schedule, and progressing according to plan.

Our Turkish friends are working very hard indeed to make the WAG into a success, and the aeromodelling events certainly have a good site at Gölbasi, some 35 km south of Ankara.

As CIAM expert, I have visited Ankara several times to supervise WAG preparations and I consider it a privilege to co-operate with the representatives of the Turkish Aeronautical Association, who are sparing no effort to create a memorable meeting for us.

The WAG is the grandest enterprise ever created by the FAI, and I am convinced it will be a unique experience for all participants. But to make it into a real success we all have to join in and support it as competitors and supporters.

I therefore urge all our members to participate in the WAG, and so make it the greatest FAI event of all time.

Sandy Pimenoff
CIAM President

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DIPLOMA AND MEDALS

ALPHONSE PENAUD DIPLOMA

by Sandy Pimenoff

BORIS KRASNORUTSKY Ukraine

Boris Krasnorutsky is a retired senior aircraft designer from the Antonov Aircraft Works in Kiev. He now lives in Moscow and co-ordinates record activities of the National Aeroclub of Russia.

As well as being in the USSR National team many times he has also been the National Champion of the USSR Control Line Team racing F2C several times as well as being the World Champion in 1970 in F2C.

He has set a great number of USSR world records and currently holds the following world records.

F1B Free Flight Rubber Seaplane

No. 40	Duration	49mins45s	5.1987
No. 41	Distance in a straight line	12,88km	9.1987
No. 42	Height	1143m	5.1987
No. 43	Speed	113,24km/h	6.1989

F3A RC Piston Motor Seaplane

No. 48	Duration	14h50min23s	8.1993

In the next two years Boris plans to improve his own No. 48 record (that's the one I'm aiming at) and to beat Maynard Hill's absolute world duration record 33h 39mins 15s (no. 20, F3a).

I personally know Boris and he is a 61 year old man who has a wonderful sense of humour. He has a very generous personality and is an all round good guy.

PETER HALMAN

Peter Halman, the UK's most successful control line speed flier, was born in England in 1945. Like many young boys in the fifties he developed an interest in aeromodelling and built free flight models until, one day, he was given an ED Hornet engine as a present. That small gift was to start him on an odyssey that has seen him compete all over the world, produced world records, a world beating engine and - the fulfilment of a 36 year dream - a World Championship crown.

Peter joined the Royal Air Force as an Aircraft Apprentice in 1962 and specialised in Electrical & Instrument Systems. He served for 12 years and it was during this time that his interest in engines in general. and model aero engines in particular, developed. He had the opportunity to learn how to use machine tools, which, together with access to machinery, an ever increasing knowledge of engines and an interest in all types of control line flying, led to him building his first engines.

In 1966, and with a deep interest in F2C, he attended the World Championships at RAF Swinderby, England. Seeing Bill Wisniewski & the TWA in action in the speed circle changed forever whatever flying plans he might have had: he was hooked and speed flying became his life.

However, it was not until 1969, and the banning of monoline, that he took up F2A. Highly competitive as well as talented, Peter qualified for the British Team and competed in his first European Championship that year in Gent, Belgium. He placed 10th with a speed of 205 kph using a Super Tigre Gl 5RV and has qualified for a British Team place ever since.

When Peter left the Air Force, he spent a short time with British Midland Airways before joining Ron Irvine at Irvine Engines Limited. It was here that Peter, fully supported by Ron Irvine, began the research & development work which would culminate in powerful engines for both the competitive and leisure flier.

The Irvine 15R is the jewel in the Irvine crown, and Peter produced the first prototype on Good Friday, 1987. He flew the engine at the European Championships in Sweden that year and it helped the British team to the bronze medal - the first British speed team success for many years.

Continual development meant an ever more useful engine with an increasing world wide demand. In 1993 Peter took the individual silver at the European Championships, and the British Speed Team won its first ever team gold. Of the three man team, Peter and Dick McGladdery were both using Irvine 15R engines.

The culmination of Peter's flying career so far, was at the World Championships in China in 1994, where he won individual gold and the British Speed team took the team gold.

Back at the Irvine factory, where Peter is Technical Director, he has been developing a new generation of engines using the same techniques as for the l5R and transferring the information for use at low rpm.

No-one would disagree that noise is one of the major pollutants of modern life and in a successful effort to reduce engine noise, the 'Q' series of ultra-quiet engines has been developed.

The Q72, for example, running on a 13"x 9" propeller produces just 74 dba. The test model which the Q72 powers, is a scale aerobatics model which weighs seven pounds with the engine delivering exactly the right power at the right time. Power has

not been compromised in the search for a quiet, environmentally friendly engine.

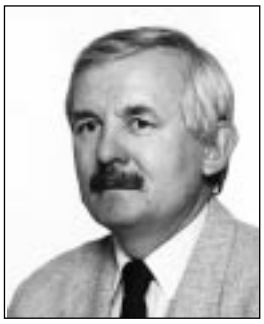
In Holland Sport 40 Pylon is flown with the Irvine Q40.

Although Peter flies competitively in F2A, he has also flown in the domestic F40 & F21 speed classes in which he held the British record for a number of years. In 1986 he used the Irvine 21R to take the world record for the 5 cc F2A Class 28. A list of his major contest successes appears below.

MAJOR CONTEST SUCCESSES

World Championships	1994	Gold
European Championships	1993	Silver
	1989	Bronze
British Nationals	1979-1981	
F2A Champion	1984	
	1986-1994	
British Nationals	1979	
Handicap Champion	1984	
	1989	
Utrecht Open International	1984	Gold
French Grand Prix	1990	Gold
	1994	Gold
Three Sisters International	1985-1989	Gold
	1991-1993	Gold
Majorca International	1988-1992	Gold

Aeromodelling Gold Medal



1996 Aeromodelling Gold Medal was awarded to Pawel Wlodarczyk from Poland.

Dorota Wlodarczyk, Sports Division, Aero Club of Poland

PAWEL WLODARCZYK is 50 years old. His adventure with aeromodelling started when he was nine years old. At that time he learned the secrets of almost all classes to choose his favourites: rubber powered free flight and control line team racing. He was four times National Champion (including National Champion of juniors in 1963), five times National Vice Champion in both FlB and F2C. Pawel was a member of the national F1B team that placed 2nd at the 1975 World Championships in Bulgaria. Pawel is a teacher. He graduated from the Academy of Physical Education. He is a national coach and aeromodelling instructor. He has founded many aeromodelling clubs. For several years (since l964) he has worked as an instructor. In 1972 he was employed by the Polish Aero Club. In 1983 he was promoted Manager of the Aeromodelling Division, and now is Chief of Training and Aeromodelling Sport. Since 1976 he has been a National Coach in Aeromodelling and a Polish delegate to CIAM-FAI since 1978. He initiated the first Free Flight World Cup for Juniors: (1988), a first in aeromodelling history; the 1992 World Free Flight Model Championships, Poland - Leszno, the 1992 World Indoor Model Championships, Poland - Wroclaw and the 1994 World Space Model Championships, Poland - Leszno. He was both initiator and member of the Organising Committees of 13 World and European Championships organised in Poland:

1. World Control Line Model Championships, Czestochowa - 1980
2. 5th World Spacemodelling Championships, Nowy Sacz ~ 1983
3. 1st European Indoor Model Championships, Wroclaw- 1987
4. 1st World Free Flight Model Championships for Juniors, Leszno - 1988
5. 1st World Slope Soaring Glider Championships, Nowy Targ - 1989
6. 11th World Scale Model Championships, Warszawa - 1990
7. European Control Line Model Championships,Czestochowa- 1991
8. World Indoor Model Championships for Seniors and 1st for Juniors, Wroclaw- 1992
9. World Slope Soaring Glider Championships for Seniors and 1st for Juniors, Krynica- 1993
10. World Spacemodelling Championships for Seniors and 1st for Juniors, Leszno- 1994
11. European Radio Control Helicopter Championships, Leszno - 1994
12. European Scale Model Championships, Deblin - 1995
13. 5th World Free Flight Model Championships for Juniors, Krakow - 1996

24 times nominated by the FAI to the Jury for the following events:

1. World Control Line Model Championships, Poland- 1980
2. European Spacemodelling Championships, Bulgaria - 1981
3. World Spacemodelling Championships, Poland - 1983
4. European Free Flight Model Championships, Jugoslavia - 1984
5. European Indoor Model Championships, Poland - 1987
6. World Free Flight Model Championships for Juniors, Poland - 1988
7. World Free Flight Model Championships, Argentina - 1989
8. World Slope Soaring Glider Championships, Poland - 1989
9. World Scale Model Championships, Poland - 1990
10. World Spacemodelling Championships, USSR-1990 (reserve)
11. European Slope Soaring Glider Championships, Czechoslovakia - 1990
12. European Control Line Model Championships, Poland - 1991
13. European Space modelling Championships, Bulgaria - 1991 (reserve)
14. World Free Flight Model Championships for Juniors, Czechoslovakia - 1992
15. World Indoor Model Championships, Poland - 1992
16. World Control Line Model Championships, Czechoslovakia- l992 (reserve)
17. European Indoor Model Championships, Czech Republic - 1993
18. World Slope Soaring Glider Championships, Poland - 1993
19. World Spacemodelling Championships, Poland - 1994
20. World Free Flight Model Championships, Ukraine - 1994 (reserve)
21. European Radio Control Helicopter Model Championships, Poland - 1994
22. World Slope Soaring Glider Championships, Slovakia - 1994
23. European Scale Model Championships, Poland- 1995
24. World Free Flight Model Championships for Juniors, Poland - 1996

1996 F3C R/C HELICOPTER EUROPEAN CHAMPIONSHIP

By Horace G. Hagen, Chairman FAI Jury

A number of years ago my friend Matti Jyllila asked me if Finland should sponsor a European Championship for R/C Helicopters. I thought it was a great idea since we never had a Championship that far north and could certainly take advantage of the longer days. In 1994 the aero-modelling section of the Finnish Aeronautic Association offered to run the 1996 European F3C Championships in the town of Nurmes, only about 250 km south of the arctic circle. After the initial offer, Matti Jyllila became Contest Director, Raimo Makkonen assistant CD and Markku Virtanen event director. They selected the FAI Jury and Judges and other officials. The contest was scheduled for 4 through 11 August.

I received my Finnair tickets three weeks before the departure date of 31 July. Unfortunately, no one remembered that the Atlanta Olympic games had just ended and this created a shortage of seats. To make a long story short, I had to buy my own ticket to fly to Frankfurt, Germany and then continued on Finnair from there. My luggage did not make it to Helsinki on my flight, but arrived a few hours later. A week before my departure I had asked Matti about the weather and he told me he was very concerned because the weather was very cold and wet and the forecast did not look promising. I arrived in Helsinki on 1 August on a sunny and warm day. I thanked Matti for ordering the good weather and we both hoped it would continue. I was supposed to continue my trip to Kuopio that day but since my luggage was delayed I spent a very nice afternoon and evening with Matti and his family just north of Helsinki and continued to Kuopio the next morning. Kuopio is the nearest city to Nurmes served by a scheduled airline.

Jari Vaahersola the owner of the only Hobby shop in Nurmes met me upon arrival at Kuopio airport and we drove about an hour to Nurmes The organisers had made arrangements for me to stay at the Hyvarila Resort Hotel located adjacent to a beautiful lake. When we arrived at the hotel we ran into a number of contestants and other contest officials including event director Markku Virtanen. He was most anxious to show me the flying site directly in front of the hotel. On the way to the site he told me that most of the contest officials and some contestants would also be staying at this hotel. However, most of the competitors stayed in cabins at the ~Bomba House~ resort, about 2 km from the flying site. The remaining competitors stayed in cabins or in the campground adjacent to the flying site. Later in the day, Markku invited me to have a cup of coffee and told me that breakfast, lunch and dinner would be furnished by the Hyvarila Resort Hotel in exchange for meal tickets.

My first impression of the site was that it appeared to be too narrow. However, I did like the idea that all of the support buildings were very conveniently located. After a guided tour of the site I suggested that the mobile homes directly opposite the start box be moved out an additional 30 meters to reduce the possibility of overflights. Even with this change the site was the smallest we have used to date The flying field consisted of mostly lush grass with essentially unlimited overfly zones at each end. The flight line had to be laid out running northwest to southeast which permitted its use only from 10:00 hours to minimise the sun getting into the pilot's and/or judge's eyes. This did not present a problem because the proximity to the arctic circle provided daylight from about 05:00 to 20:00 hours. I have never been this far north and found it very interesting to see the sun rise in the northeast and set in the northwest. The sun almost appeared to circle overhead.

The basic helipad had been laid out a few days earlier to allow contestants to practice from 1 to 3 August as advertised in Bulletin III. The headquarters building was

Group photo at the end of the competition

Winning FAI Teams left to right: Sweden 2nd, Germany 1st and Denmark 3rd place being congratulated by CIAM President Sandy Pimenoff

only about 30 meters from the helipad and provided space for the contest information desk and computer scoring system. I was very interested in the computer scoring system that Matti had told me about. Matti introduced me to Esa Wainio who had responsibility for the computer scoring system. Esa showed me the Microsoft Windows based computer program that he wrote and I was impressed. The program did require a few modifications but they were made on the spot. (I must point out that this competition marked the first use of the internet for disseminating contest

Individual Winners after receiving FAI Medals left to right, Daniele Graber - Switzerland 2nd, Jörg Rössner - Germany 1st and Johann Hönle also of Germany 3rd. CIAM President Sandy Pimenoff is on the right

information. Anyone with access to the internet was able to keep informed before, during and after the competition. Esa Wainio and JP Nurro were responsible for the improved communications.)

Space for the competitors' models, transmitter impound and conference room was allocated in the larger technical building. The final preparations of the flying site were completed by late Saturday 3 August. Contestant registration and model processing took place on Sunday, 4 August in the technical building. The organisers checked each model for FAI sticker, proper markings and compliance with general FAI regulations. Each transmitter was checked for carrier frequency and bandwidth. This activity was followed by a team manager's meeting at 16:00 hours. The competition was officially opened by CIAM President Sandy Pimenoff and a representative for the mayor of the city of Nurmes at 17:30 hours and the day ended with a traditional Finnish sauna party commencing at 19:30 hours.

Monday, was the official practice day, and each of the 16 teams was given thirty minutes to test fly at the contest site. To our surprise none of the 39 competitors complained about the size of the flying field. Most of us were also surprised to see the reigning European Champion with pod-and-boom helicopters. Daniele Graber had always flown his very attractive ZENITH model with a streamlined fuselage. We learned later that Daniele had lost his two top models in crashes during the previous months.

A demonstration flight for the judges took place at 09:30 hours prior to the start of the first round on Tuesday. The first round commenced at 10:00 hours and ended at approximately 17:30 hours. The standard of flying increased since the 1994 European Championship in Poland. When the results of the first round were posted, the top five finisher's were: (1) Rossner/Germany, (2) Graber/Switzerland, (3) Honle/Germany, (4) Kastiel/lsrael and (5) Sperling/Germany. An interesting result because Honle was the German national champion.

The second round started at 10:00 hours on Wednesday and also ended at 17:30 hours. For the second round only the order of the top five finisher's changed: (1) Rossner, (2) Graber, (3) Sperling, (4) Honle and (5) Kastiel. The German team appeared unbeatable but there was a battle brewing between the Danish and the Swedish teams for second place. The third elimination round was flown on Thursday with the same time schedule. For the third round the top five finisher's were: (1) Graber, (2) Honle, (3) Rossner, (4) Kessler/Switzerland and (5) Kastiel. The weather for the elimination rounds was sunny, warm and dry with variable winds. The final top ten at the end of the three elimination rounds (after dropping the low round) are shown in the following table. These pilots earned the privilege of going to the two fly-off rounds.

The results at the end of the third elimination round determined the final team standings. The Swiss team has traditionally placed higher but the other teams have improved even more. It must also be remembered that Daniele Graber was defending his title and was therefore not a member of the Swiss team. The top five teams are displayed in the following table. The FAI Gold Medal was awarded to the German team, the FAI Silver Medal went to the Swedish team and the FAI Bronze Medal went to the Danish team.

Place	Competitor	Country	Points
1	Rössner, Joerg	Germany	2000.00
2	Graber, Daniele	Switzerland	1988.45
3	Hönle, Johann	Germany	1882.55
4	Sperling, Jan	Germany	1823.71
5	Kastiel, Efraim	Israel	1804.41
6	Nyegård, Stefano	Denmark	1769.78
7	Lucchi, Stefano	Italy	1761.97
8	Kessler, Patrick	Switzerland	1761.87
9	Bexander, Lars	Sweden	1754.34
10	Nielsen, Kaj Henning	Denmark	1747.95

Place	Country	Points
1	Germany	5706.26
2	Sweden	5136.15
3	Denmark	5129.82
4	Italy	5050.04
5	Switzerland	4918.42

Friday was scheduled as a reserve day and was used by most for a day of relaxation or sightseeing. Prior to the competition I, as chairman, requested that we convene a CIAM F3C subcommittee meeting to firm up the 1997 F3C program. We had a very successful meeting on Friday with 9

subcommittee members and many other interested individuals present. I also planned to conduct a judges' course for the 1997 F3C rules and this was also advertised prior to the competition. The course took place in the large auditorium and was quite successful with a respectable number of participants.

The first fly-off round was flown the morning of Saturday and the top five finisher's for that round were: (1) Graber, (2) Rossner, (3) Kastiel, (4) Honle and (5) Kessler. This result gave Rossner and Graber each 2000 points and now the pressure for the second fly-off started to build. The second fly-off round followed after lunch. Graber was the third pilot to fly and flew an excellent flight for which he received 211 points, the highest score for this fly-off round thus far. Rossner was the last pilot to fly and the only pilot who could overtake Graber. All eyes were focused on that flight. Under extreme pressure, Rossner was able to put in the highest scoring flight with 214.5 points (1000 points after normalisation) and thus became the new European F3C Champion. I was standing near the start box when Rossner came back from that flight and Graber walked up to him and shook his hand. Rossner said, "You certainly did not make it easy for me" to which Graber answered, "I wanted you to earn the title". True sportsmen, both of them. Thus, the FAI gold medal was awarded to Joerg Rossner of Germany, the FAI silver medal went to Daniele Graber of Switzerland and the FAI bronze medal went to Johann Honle of Germany. The following table lists the final top ten individual finisher's.

The weather during the entire competition was so pleasant that our Finnish friends were quoted as saying that we were experiencing their complete summer. The flying standard observed during the contest was extremely high with the individual winner not determined until the very last flight. A protest regarding a judges' decision was submitted to the contest director during the second elimination round. However, after careful study, the protest was rejected by the FAI Jury.

Place	Competitor	Country	Points
1	Rössner, Joerg	Germany	3000.00
2	Graber, Daniele	Switzerland	2988.45
3	Hönle, Johann	Germany	2820.35
4	Sperling, Jan	Germany	2765.43
5	Kastiel, Efraim	Israel	2744.60
6	Kessler, Patrick	Switzerland	2697.28
7	Lucchi, Stefano	Italy	2661.49
8	Nyegård, Micheal	Denmark	2654.95
9	Nielsen, Kaj Henning	Denmark	2642.69
10	Bexander, Lars	Sweden	2615.59

Prior to the award ceremony a Finnish Folk Dancing group performed in front of the national flags on the grass courtyard next to the Hyvarila Hotel. During the award ceremony the FAI Medals for the team and individual winners were awarded by CIAM president Sandy Pimenoff in bright sunshine. Although the closing ceremony was scheduled to take place on Sunday, it was moved to Saturday to permit our southern European friends to participate. Most had travelled by auto and had planned to leave after the closing banquet.

The closing Banquet began at 19:00 hours on Saturday 10 August in the BOMBA HOUSE restaurant. The individual and team winners were awarded very nice trophies sponsored by the organisers. Approximately 150 persons attended the banquet. The buffet style dinner serving traditional Finnish food was enjoyed by most. Some participants from southern Europe were overheard to say that they had enough potatoes to last them a lifetime. Perhaps they now have sympathy for a northern European travelling in southern Europe. I prob-ably enjoyed it more than most because the food is very similar to that served in northern Germany where I was born.

The 6th F3C European Championship was very successful due to the hard work of the many contest officials coupled with almost ideal weather. The competition was well organised and run in a fair and friendly atmosphere. The organisers went to great lengths to assure that every participant was happy. As president of the FAI Jury I would like to thank my fellow jurists Dr. Georg Breiner (Austrian CIAM Delegate) and Mr. Sandy Pimenoff (CIAM President) for their help. I also want to thank the hardest working group, the FAI Judges: Tobias Schuk (Germany), Frits van Laar (Netherlands), Dag Eckhoff (Norway), Riszard Witkowski (Poland) and Carl Inge Lindberg (Sweden) for a job well done. And finally, I thank the aero modelling division of the Finnish Aeronautic Association, the staff of the Hyvarila resort hotel and the many contest officials for a most memorable competition.

Individual Winners left to right, Daniele Graber 2nd, Jörg Rössner 1st and Johann Hönle 3rd. with their trophies at the closing banquet

Contest site with FAI Judges on the left and helipad on the right

FAI Areomodelling / Spacemodelling World Records homologated in 1996

Aeromodels:

No. 21 Class F3A, Aeroplane, Distance in a Straight Line, 737.9 km by Mr. R. Rosenthal, USA.; date of record 29.08.95

No. 31 Class F3A, Aeroplane, Distance in a Closed Circuit, 1,250 km by Mr. R. Rosenthal, USA.; date of record 21.06.95

No. 32a Class F1D, Free Flight Indoor, Ceiling cat. iv, 39 min. 19 secs. by Mr R. Randolph, USA.; date of record 21.01.96

No. 36 Class F3C, RC-Helicopter, Distance in Straight Line, 134.1 km by Mr. M. Farnan, Australia; date of record 03.06.96

No. 55 Class F3B, RC-Soaring, Speed in Closed Circuit, 121.1 km/h by Mr. Z. Vakkasov, Russia; date of record 02.07.96

No. 72 Class F5-SOL, RC-electro, Distance in Straight Line, 40km by Mr. D. Beck USA; date of record 24.08.96

Spacemodels:

No. 32 Class S9A, Gyrocopter Duration, 81 sec. by Mr. K. Przybytek, Poland; date of record 21.04.96

No. 33 Class S9B, Gyrocopter Duration, 125 sec. by Mr. K. Przybytek, Poland; date of record 21.04.96

NOTICE

Please be advised of two errors in Section 4d of the 1997 Sporting Code.

Page 216 Para. 9.11.5 Change “300” to “250”

Page 270 (Space Models World Cup) for S8E. Change the equation to read:

$$B = (10 + (\log A - \log N) \times 100 \times \frac{\text{Competitor's Score}}{\text{Winner's score}})$$

Christopher R. Geenwood, Secretary

In Pursuit of AMA and World Records

by Dave Beck and Lee Murray Appleton, Wisconsin, U.S.A.

THERE ARE SEVERAL REASONS why you might be interested in establishing a world or AMA record. They include making the hobby more challenging, giving you pride of accomplishment, providing an opportunity to learn more about your sport and occasions for you to get together with friends, or family members, who have similar interests. The process begins with matching your interests with the opportunities for records. Those opportunities come from the AMA for national records and the FAI for world records.

AMA or National Records can be found in Model Aviation from time to time. The listing doesn't appear in the table of contents but can be found immediately following the "Focus on Competition" section. The February 97 issue had a list of records as of October 1, l996. There are many record categories with Indoor and Outdoor Free Flight having the most but I will be talking about is electric powered and sailplane RC categories - the subjects of RC Soaring Digest.

Solar Solitude with (L-R) Jim Murray, Lee Murray, Dave Beck, Ted Elliot

AMA Records

According to AMA's Steve Kaluf, the AMA is considering proposed record classifications for electric models. This could open many new electric flight categories for AMA members. Within the sailplane classification, the table below describes the categories. Within each grouping is three records for the age categories: Junior - under the age of 15 years old

Senior - at least 15 but less than 19 years old

Open - 19 years or older

Classification / Size	A: HLG	B: 2 Meter	C: Standard	D: Unlimited
Duration - Scope Soaring	J,S,O	J,S,O	J,S,O	J,S,O
Duration - Thermal	J,S,O	J,S,O	J,S,O	J,S,O
Declared Distance	J,S,O	J,S,O	J,SSO	J,S,O
Closed Course Distance	J,S,O	J,S,O	J,S,O	J,S,O
Altitude	J,S,O	J,S70	J,S,O	J,S,O
Speed	J,S,O	J,S,O	J,S,O	J,S,O

The requirements for AMA R/C Sailplane Records are spelled out in the AMA Competition Regulations 1996 and 1997, Rules for Governing Model Aviation Competition in the United States (pages 119-120) and records in general in the AMA Membership Manual for 1997 {page 7) which was mailed out at the end of l996.

World (FAI) Records All world records are overseen by the Federation Aeronautique lnternationale (FAI) located in Paris, France. They were originally formed at the turn of the century to classify and approve all world aviation records. To help in the organisation, they delegate same responsibilities to each countries national aero club. It is the responsibility of each national aero club to verify and submit world record applications to FAI. In the United States the National Aeronautic Association is the national aero club. The NAA further delegates matters of model aviation to the AMA who issues salutions and handles all paper work relative to model world records All three organisations are involved and each world record aspirant has to join all three organisations. Fortunately AMA makes this easy by providing an easy way to join all three in a single payment.

World records do not have age classifications or size classifications but there are several electric classifications. To classify as a model, the weight must be less than 11Ib. Some other limits are maximum wing area 2325 in2 and under 25.6 oz/ft2. The actual FAI records along with classifications are included in World and United States Aviation and Space Records and Annual Report. This is a very interesting book of about 400 pages which you get by virtue of membership to NAA. You may have noticed an area on your AMA membership renewal application for signing up for NNA & FAI membership. On the NET you can see these world records on the FAI web page: http://irra.mines.u-nancy.fr/-fai/aeromodeling/records

If you decide to go for a record, either AMA or FAI you will need a copy of the Sporting Code. This book contains a list of requirements for your record attempt application. The Sporting Code was last printed in 1993. Models records are discussed in Section 4a, Part 7. The classification numbers are shown in the table on the next page

As a directing official for my friend Dave Beck's pending solar powered model

Task / Propulsion	Unpowered Glider	S-Rechargeable Batteries	P-Non-Rechargeable	SOL-SOLAR Powered	COMB All Sources
Thermal Duration	24	59	65	71	77
Distance in a Straight line	25	60	66	72	78
Height (Altitude)	26	61	67	73	79
Speed	33	62	69	74	80
Distance in a Closed Circuit	34	63	69	75	81
Speed in a Closed Circuit	55	64	70	76	82

records, we have some experience with this. After some unsuccessful attempts at altitude records, we were successful at establishing a 24.17 mile declared distance in a straight line (category 72). This pending record is presently stalled at the NAA where, hopefully, it will eventually be passed on to the FAI in Paris where it is homologated (officially approval). Due to a staff shortage at the NAA, record attempts were temporarily relegated to a lower priority.

Dave's list of things which need to be done to secure your world record

1. Join AMA
2. Join NAA (FAI) through AMA at a reduced rate.
3 While joining the NAA, ask for the FAI sporting stamp. The NAA will send a card with stamp which needs to be referenced on a record dossier.
4. Determine what record you quest.
5. Get a support team consisting of a C.D. (directing official for FAI), two qualified observers (AMA members will do) and perhaps a back up pilot if that is permitted in your task.
6. Write AMA and request a sanction for that record. Specify the record in FAI terms i.e. F3E-72 for the solar powered distance record. Each sanction costs $2 and is good for the calendar year. You will receive an official looking certificate suitable for framing, which expires the end of March to correspond with the end of AMA's yearly insurance coverage. A second certificate will follow starting April 1.
7. Notify AMA at least 48 hours in advance of attempting your record. Also declare necessary goals as outlined in the Sporting Code. For example, starting and landing sites need to be declared for a distance record according to code.
8. The fun part ...you do the record.
9. Notify the AMA of your record within the time limits cited in the Sporting Code. Generally this is within 48 hours, but may be longer if on a weekend. The AMA has a FAX on Demand service. By dialling 1-800-500-3139 you can request the document number 311 Application for Possible National R.C Sailplane Record. You will have to provide your FAX number.
10. Write your dossier in compliance with the requirements of the Sporting Code. Send one original and two copies to AMA within one month of the flight. The original needs to have original calibration records, maps, etc. as well as other specific elements such as a drawing of the model, its weight, wing loading, span, etc. Check the list in the Sporting Code.
11. According to the Sporting Code, records copies are to be submitted to FAI within two months of the record. This may be a problem in the case of our record because of personnel changes at AMA and NAA. We are hopeful that the FAI will recognise extenuating circumstances.

Other Suggestions

1. Talk to other record holders and get a copy of their dossiers. Any dossier is available from the FAI for 250 FF ($40 US). Some successful record flight descriptions can be found on the FAI home page mentioned earlier.
2. Acquire well in advance any specialised equipment such as larger cells, guidance equipment, altimeters which are needed for your attempt.
3. Practice your skill and place yourself and your model in the situation you will face during the attempt? e.g. fly at high altitude, practice finding your plane after loosing sight of it under controlled conditions,
4. Calibrate any documentation equipment you will need for the attempt. Some calibration needs to be performed within 12 months prior to the record flight or 6 months after the flight. Considering the need to submit records within one month, do things in advance.
5. Plan for the things you know will happen during the course of your attempt. List them and think through how these will be accomplished, such as crossing a busy highway at a stop sign.
6. Select a plan which maximises the fun you will have in pursuit of your record.

John Beck (13) and Karen Beck (9). Both helped their dad with the solar plane project. John documented many flights with the camcorder, and joined his dad many times when the plane was being flown. Even John has flown Solar Solitude, as well as other sailplanes in the beck family fleet.

By being prepared you can minimise the number of times you have to assemble your team. You can't plan on them being available every weekend, so be prepared when the opportunity presents itself.

ED: Detailed information regarding the solar record is available at web site: http:i/home.cdsnet.net/~purple~your_cps/dbeck.htm

Dave Beck with Solar Solitude

FAI EUROPEAN CHAMPIONSHIP for CONTROL LINE MODELS.

VALLADOLID 13-19 JULY 1997

Editorial Staff, Aerosafa

The Spanish Aeromodelling Aeroclub (Fenda) offered to organise the 1997 European Control Line Championships for Spain. The FAI accepted this proposal and Fenda handed the organisation of the event to Agrupacion Deportiva Aerosafa. What is Aerosafa?

AEROSAFA: A place where the fulfilment of a hope turns into a duty.

THE BEGINNING

Every club has its own history and we want to tell you how we started off.

School and Sports Club

Some 17 years ago, a teacher at Sagrada Familia Primary School in Valladolid started AEROSAFA. He wanted it to be an educational initiative to motivate pupils' work. Years passed by and each time more pupils, ex-pupils, parents and competition aeromodellers became part of the Sports Club to give shape to our present Aerosafa: a Sports Club and a Sports School.

The educational aim has gone beyond the school walls and it has turned the fulfilment of a hope - aeromodelling - into a real duty to form champions.

This educational initiative has already achieved some important successes: two of its members have a professional career as Aeronautical Engineers.

(Junta de Castilla y Leon)

Fundacion Municipal Deportiva

The two highest Sports institutions in Valladolid: la Direccion General de Deportes de la Junta de Castilla y Leon (County Council) and la Fundación Municipal Deportiva del Excelentisimo Ayuntamiento (City Council) back up the revival of Aeromodelling as a competition sport in the Castilian capital city. Seven years ago, la Fundacion Municipal Deportiva built a flying site which could not be put into use because of technical problems. Aerosafa kept searching for a solution and el Servicio Territorial de Cultura de la Junta found the answer. At Carretera Renedo km 3, some old facilities were refurbished to be used as a “Combat” site. These Combat Circles are probably the only ones anywhere in the world that make it possible to hold four combat events simultaneously.

Improvements continue to be made and nowadays the facilities can be counted among the best in Europe, thanks to the effort made by la Direccion General de Deportes de la Junta.

OUR ACTIVITIES

Escuela Municipal for Aeromodelling

La Fundacion Municipal de Deportes is doing its best to promote all kinds of sports. It was quick to create la Escuela Municipal for Aeromodelling (City School) under Aerosafa's management.

There are three and six month courses to put young people in contact with the exciting world of Aeromodelling as a Sport.

Young people from 10 to 16 enjoy two hours of practical model building and two hours of flying experience as the basis for the beginners' programme.

Aeromodelling for University students and staff.

El Servicio de Deportes of Valladolid University under Aerosafa's guidance arranges aeromodelling courses for University students, and the University staff are provided with the University Sport Card.

The aim of the courses are to teach and popularise the aeronautical knowledge applied to aeromodelling. They also encourage participants to build and fly an aeromodel and present the world of aeromodelling as a sport giving the participants the opportunity to take part in local, regional or county competitions.

Aeromodelling camp

La Direccion General de Deportes de la Junta de Castilla y Leon offers a wide variety of summer activities under the name of “Young Summer”. Four years ago, Aeromodelling started to be one of the activities offered in the programme. Young people from all over the Castilla y Leon

We are showing the certificate of European Champions '95 to the President of the Castilla and León County Council (Junta de Castilla y León)

Ready for the combat

County can take part in a Summer Aeromodelling Camp.

Over a fortnight, more than fifty youngsters spend their holidays in a different way having fun resting and learning. Aeromodelling learning and practice blend with days in the countryside, educational activities and open-air activities, etc. We think it is a different method of popularising aeromodelling: a summer camp in the City.

European Championship

All these different activities and a large number of contests where Aerosafa takes part, or we are the organisers have given the club enough experience to organise the important Control Line event in July '97: the European Championship for Control Line Models for Junior and Senior competitors in F2A, F2B, F2C and F2D categories, which will be held next 13-19 July.

La Junta de Castilla y Leon, el Ayllntamiento de Valladolid and Fenda are carrying out a big effort to achieve the expectations of a the large number of competitors and supporters who will come to Valladolid. The flying facilities are being refurbished; technical and financial matters are being properly organised; accommodation for the large number of attendants is being arranged and the opening and closing ceremonies, etc. are being organised. All these problems are being thoroughly discussed by the two Institutions and they have been working hard with Aerosafa's help since the last European Championships finished at Hradec Králove.

25,000 Km

Aerosafa has been present at high level competitions for 4 years. We have been the Club which has sent more competitors to National Competitions during this period of time. We have also taken part in the '95 European Championship for Control Line Models at Hradec Kralove (Czech Republic) and in the '96 World Championship for Control Line Models at Norrkopping (Sweden).

We know that having a good team ready to enter into competition is difficult and tough. As an example, we had to find the money to build 118 planes last year. We also had the difficult task of making a name for the club all over the world: so, we travelled more than 25,000 km to take part in different events throughout Europe. We were present at County competitions, Opens, National and International Championships, Exhibitions and at some other minor contests. We have a very enterprising spirit.

Nowadays, Aerobatics and Combat are the categories we practice mainly. Last season, we produced two Spanish Champions, two Spanish Runners-up, three Third places and eight County Champions.

At the 1995 European Championships for Control Line Models one of our members won first place in F2D junior and he got the fourth place in the general classification.

OUR SPIRIT

The artist's brush and the warriors sword

Aerobatics and Combat. Art and Fight. The artist brush and the warriors sword - as our boys like to call F2B and F2D - are the two characteristics of this young club.

The artist's brush.- AEROBATICS is the most artistic category in Control Line. It involves co-ordination, accuracy and quietness. It means creating a group of lines, curves, corners and waves to form different shapes. One has to treat the plane as a painter's brush and draw on the sky.

The warriors sword.- COMBAT involves skill, cat-like reflexes, tension, attack and defence. It means seeing without looking, touching and leaving, chasing and flying away. One has to fly faster than the clock and wait patiently for the right moment to attack. It is like fencing using a super-sonic sword, a plane flying at 140 km/h.

Art and Sport

During the last two years F2C has become increasingly strong among our members and so we achieved the third place in Spanish Championship 1996.

That's the way we are

That is the way our boys are: art and fight, quiet and tense, painters and warriors. They devote themselves to their hobby and the competition. They have all the necessary requirements: youth and mastery, present and future, hopes and duties passion and quietness.

They have a future which started in the past. They are the fulfilment of a hope. They work hard to carry out their secret hopes; last year, they worked for 8196 hours in their hobby: Aeromodelling. Aerosafa means passion for flight They have their own anthem which sums up what they feel:

I invite you to fly,
to raise your life higher up.
I invite you to fly and,
stepping on the ground,
look up. Higher up.

Participants in the International Open "Ciudad de Valladolid

The medals obtained in the Spanish Final Championship '96

INFORMATION & EDUCATION WHICH WAY SHOULD WE GO?

by Mike Colling.

AS A NEW BOY TO the post of Chairman of the Information and Education Sub-committee of CIAM, I decided that a fresh look at the aims of the committee was needed, and how best to carry out those aims.

CIAM Flyer

As regards to the information side, this is extremely well covered by the annual publication that you are at present reading. The 'CIAM Flyer', I think, provides good reports of contests and championships, along with articles on promotional activities from member national clubs and lists of current FAI model world records. The real problem with 'CIAM Flyer' is distribution, are we getting it to the right person/-organisation, who do we want to see it and to what end? At present about 30 of the magazines, are given to each delegate who attends the CIAM March meeting, for them to take home and distribute, but where do they go? Here is a list of people and places I think should get a copy of the Flyer:- Chairman and secretary of other aviation sections of your National Aero Club, Editors of your country's modelling press, Editors of your country's sports aviation and commercial aviation press, Public relations departments of your country's major aviation companies and Sports, Aviation and Education Government Departments. The aim being to raise the profile of our sport to a level that it richly deserves. As each National Aero Club arranges their affairs in different ways it is not up to CIAM to tell you how to carry out this distribution but perhaps you could ensure that the Flyer is available to any person or organisation who you think would benefit from having a copy.

Education Questionnaire

As regards the education side of the sub-committee I decided that there was a requirement to find out more about the aviation education being carried out throughout the world. To this end a simple questionnaire was sent to every National Aero Club which is affiliated to the FAI asking them to fill in and return. This same questionnaire was also sent to persons nominated by their national model club as having interests in model education. In all over 90 questionnaires were sent out. The replies at first were extremely disappointing with only six responding, so three months after the original posting a second posting was made with a time limit set on the reply. After that we received another 20 replies.
The range of the reply is quite startling, some countries, all be it a small number, have fully integrated aviation education programmes others have no education input at all. It is also interesting to note that of the national aero clubs who have not replied they tend to be the ones where the modelling section is run as a separate organisation. Does this mean that the national aero club does not know what its various sections are doing or may be they do not care?

When all the information from the questionnaire and other sources has been looked into we will be able to make recommendations on how to help the national aero clubs, model aircraft clubs and individuals who wish to run their own education programme. It is hoped to produce a "file" of information, such as suitable model designs and plans which will help to aid the introduction of a practical education scheme, without the requirement of the organiser to produce new material.

Education schemes from around the World.

Good Model Aviation Education schemes are in operation in various parts of the world and below are a number of outstanding ones that have come to my attention in the past 12 months.

The South African Airways programme has now been running for two years, sponsored by SAA itself along with Rolls Royce and Airbus Industries. The programme has its own portable class room on the back of a truck and travels to schools where students are instructed on building and flying a version of the AMA Delta Dart, shown how aircraft fly and the work prospects available in the civil aviation industry. Investigations six weeks after the visit of

The winning Humberside University 'A' model at the BMFA University Challenge Event.

Making Humberside University 'B' model ready for 'A Big Lift Flight' at the BMFA University Challenge Event.

Youngsters at the Indoor World Championships building AMA Cubs (Delta Darts)

the truck has shown that over 60% of all models built are still with the owner.

Over on the West of America, the Boeing Employees Aerodynamics Model Society (BEAMS) are again using the AMA Delta Dart as well as other designs at special events run in the Boeing manufacturing plant and also at events up to 350miles away. For instance they ran a build and fly event that attracted dozens of youngsters, some travelling over 100miles to be at the Indoor World Championships held at Moscow, Idaho . They had a ball!

In New South Wales, Australia, they have a programme called "The Basics of Aviation through Model Aviation". They have 50 volunteers who visit schools and youth organisations and give a 30 minute talk on what building and flying is all about and how it can lead to jobs in Engineering and Technology. The programme has been in operation for 4years and it is now planned to expand to the rest of the country.

The Deutscher (German) Aero Club has a fully integrated education programme with lists of books, leaflets and videos that can be used by schools and youth organisations. They also run model flying contests for youngsters and seminars for teachers.

In Britain the education programme run by the British Model Flying Association is still expanding slowly. The contest run especially for universities, where students design, build and fly a radio controlled model which is built to exacting rules to lift a heavy payload, has now run for its second year with a significant increase in competitors.

In Hungary, aviation is part of the national education curriculum and is covered at three specific levels. Each level lists both theoretical and practical subject matter to be covered. Beginners models are made of card, with advanced designs being hand launch gliders with built up wings and tow line gliders with Jedelski wings.

Israel and Turkey both have aviation on their national education curriculum and use models in executing that curriculum.

Pen Friend

Most national aero clubs indicated on the questionnaire that they would like to take part in a pen friend scheme for young aviation enthusiasts, but the problem is, how to run the scheme with little finance and who will run it. If the reader has any ideas please let it be known.

Young new recruits are the life blood of any sport, and model flying is no exception. The difference lies in the fact that where football, golf and athletics may be fine in their own right, they do little to train youngsters for this modern age. Where as model building and flying is such, that it can help in giving skills which can help in the furtherance of a career in aviation, engineering or other high tech. industries. Please help a youngster today.

Group photo call before the BEAMS mass launch at the Indoor World Champsionship in Moscow, Idaho

11th World Championship of Rocket Modellers Ljubljana/Kamnik, 7-14.9.1996

Anton Sijanec

The endeavours and efforts of individuals within the Committee for Rocket Modelling Aeronautical Association of Slovenia as well as the Astronautics Rocket Club V.M. Komarov from Ljubljana, were rewarded with success. We organized the World Championship of Rocket Modellers for juniors and seniors - a demanding project which exceeded all previous ones because of the number of participants. The wishes of many Slovenian rocket modellers came true when we were awarded the bid for the 1996 Championships

The patron of the event was the President of the Slovenian Republik, Mr. Milan Kucan. A record number of competitors, team managers and referees from 22 states were involved in the Championship. Such a response indicates the growth of the sport, world over.

So large was the event that we had to build a settlement with 26 headquarters' tents for all representatives, for organisational needs, main sponsors and referees on the rocket range. We also had to build a field kitchen and dining room, a stage for ceremonies, and we had to equip 46 starting places with launching devices where the work of approximately 100 time-keepers, referees and members of the jury performed their duties. There were two separate rocket ranges where simultaneously competitions in seven categories were performed. Every day, there was transport for participants and referees which had to be organised from Ljubljana to Kamnik and return, as well, as meals to be prepared and served on the competition field. The entire organisation of the championship was built-on a completely volunteer basis. The organisational committee succeeded in getting enough enthusiasts from local teachers of technical education and modellers to complete the project. Some also came from abroad and assisted in helping with the championship.

Such a big event could not have happened without the support of sponsors because of the need for considerable financial help. The main sponsors of the championship were the company UHU GmbH from Germany and its general representative in Slovenia, UNIHEM doo, from Ljubljana; both have supported the development of rocket modelling in Slovenia as well as the technical development generally. They are also the sponsors of the Slovene state team.

The Ministry of Defence assisted in building the camp, but this help was not enough to complete the task and local modellers gave up their preparation time to help prepare the site.

Engine testing was taken over by the firm Mach from Loka at Zidani, producers of model rocket motors and models. Helping in this task was Mr. Taborski from the Czech Republic who provided a testing device and programme computer. As a result testing of all types of model motors which were used at the championship was performed.

Altitude measuring in the categories S1B and S5C, which had been questioned at

almost all previous championships, was performed correctly by the professionals of the Geodetic Office of the Republic of Slovenia and the firm Geoservis. For comupter processing of data, the firm SINEL was used. Catering was provided by the personnel from the restaurant 'Discovery.'

The opening ceremony was in the centre of Kamnik and will remain in the pleasant memories of all participants. The parade by the participants of the Championship in the streets of Kamnik and the celebration in the main place were accompanied by a great number of visitors of the festival in national costumes, which took place in Kamnik at the same time. This was attractive in appearance and flights of motor kites over the ceremony made it even more interesting.

After the opening ceremony the competition began in very good weather.

Slovene competitors got five medals, one gold and four silver. The best success was achieved by Toma` Kogej, from Leszno, member of ARK Komarov, who defended the championship with a record flight of 1244m. In the junior category S1B altitude the second place was achieved by his clubmate Jernej Vrtarnik with 807m. Our best placed competitor was Marjan Cuden with seventh place. First place was achieved by a Russian, Oleg Voronov. We have proven for some time that we are able to produce excellent models which exceed measurable altitute. This situation was also true this year as Andrej Vrbec, among the youth, and Jose Cuden and Matja` Porun failed to gain results.

The young ones were excellent also in S6A where Igor Stricelj from ARK Vega got a silver medal. The same result was

The last start of the 11th WSMC was the launching of the scale model of a V2, made by the boys from ARK Komarov Ljubljana club. It was also the biggest model at th 11th WSMC

achieved by the team which was made up of Matevz Dular (6) and Toma` Kogej (18). Our members did not achieve the best results in the branch in which we have had traditionally had good results; however they took a good fifth place. Surprisingly. the Spanish model-maker, Neus Misse, got the first place beating the Czech Jaromie Chalupo and Russian Oleg Voronov.

A medal was expected in RC-rocket gliders (S8E) where for the first time we had an excellent team. Junior team members Crtomir Nagode, Ivan Turk and Blaz Grgic performed their task well and took an excellent second place after the favoured Slovaks. Among the individuals, Nagode just missed a medal in the exciting "fly-off", and took a less enviable fourth place. The same thing happened to Bogo Stempihar who, together with Bogdan

Makuc and Ales Musec took the fifth place among the teams. Medals were won by the German Franz Weissgerber, gold, the Slovak Stefan Mokran, silver and American Geroge Gassaway, bronze.

Slovene members appeared for the first time in S5C scale altitude with three, precisely made Nike Cajuns' models. They were, according to the statical evaluations, right behind the best ones and their prospects were good before the flights. Jose Cuden and Miha Kozjak performed two excellent two-stage flights, but the judges only measured the first one. Additionally, Mateja Kozjak did not have much luck as she could not start the second step. At last, Jose Cuden took seventh place. The same was achieved by the team. The best flight was achieved by the American Kreutz with the model Sergeant Hydac, and he achieved the title of the world champion. Second and third places were taken by the Russians Minakov and Iljin, both with Taurus and Tomahawk models respectively.

In 'rockets with para-chutes,' we did not come near to previous achieve-ments. Here, it has to be emphasized that the members did not appear in the entire competition. The conditions on the second rocket stage enabled extraordinarily long flights which were a marathon "fly-off" for the referees. The referees stopped their stopwatches after more than one hour of careful timing of the Japanese, Suzuki, who alone remained in the air. After him, there followed the German Brwek and Russian Smatov. Among the juniors, was the surprising Spaniard Palau who flew in extraordinary conditions during his "fly-off". Among our competitors we should praise Andrej Vrbec who took 14th place. He was also successfull in rocket-gliders (S4B) where he was also fourteenth. In this category, our team did not repeat the achievement of two years ago when we got the silver medal. Due to a tight time schedule they appeared with reserve models. The result of which was below expectations. The world champion became the Russian Mencikov. He also had previously won a cup which was delivered to him by one of the living pioneers of rocketry, Karl Neubronner.

The day which was meant for rest and a trip to Bled and Bohinj was used by a majority of participants to compete in world cup events. In the ARK Komarov, they did not want to interrupt the tradition of every year holding an FAI-competition for the Ljubljana cup and so they participated in competitions for the world cup in S6A and S8E, where a record number of competitors appeared. For rockets with ribbons, there was Edgar Konstantinovics in the first place. Second and third places were taken by the Yugoslavs Ducak and R. Katanic. Among the 35 competitors who tried to get traditional Ljubljana 'drag-ons' in RV rocket-planes, was Slovak Mokran (first). Second was the Pole Moczala and third American McKiou.

As it is traditional in rocket compet-itions, on the last day there is the "Royal" branch of the space models S7 scale models. In summary, the first places were taken by the same names as at the last championships. The differences in points among the winners were minimal. So, the winner was defined by his flight. With a little luck, gold was achieved by Jan Kotuha from Slovakia, the American

Bledron and Latuian Baca had to be satisfied with lesser medals. Our competitors did not take part in this branch. When looking at the events of the championship, we can be more than satisfied with the results. The organisation of the championship was successful. We aquired several sponsors and last but not least, we have the five medals which we did not expect because of being involved in the organisation of the event.

Junior Tomaz Kogej (Slovenia) wins the title of world champion for the second time up on stage with Jernei Vrtacnik (second) (Slovenia) and Shi Qui (Third) (China).

Results

S1B Seniors

Place	Name	Country
1.	Oleg Voronov	Rus
2.	Robert Kreutz	USA
3.	Alenksey Koriapine	Rus

S3A Seniors

1.	Takashi Suzuki	Jap
2.	Uwe Brewka	Ger
3.	Igor Shmatov	Rus

S4B Seniors

1.	Vladimir Menchikov	Rus
2.	Jan Pikl	Cze
3.	Sascha Steinbeck	Ger

S6A Seniors

1.	Neus Misse	Esp
2.	Jaromir Chalupa	Cze
3.	Oleg Voronov	Rus

S8E Seniors

1.	Franz Weissgerber	Ger
2.	Stefan Mokran	Svk
3.	George Gassaway	USA

S5C Seniors

1.	Robert Freutz	USA
2.	Vladimir Minakov	Rus
3.	Sergey Iliyne	Rus

S1B Juniors

1.	Tomaz Kogej	Slo
2.	Jernej Vrtacnik	Slo
3.	Shi Qi	Chn

Open air stage for medal presentations

S3A Juniors

1.	Andreu Palau	Esp
2.	Ivan Ouliskov	Rus
3.	Agnius Sluckus	Ltu

S6A Juniors

1.	Dragana Cudic	Yug
2.	Igor Stricelj	Slo
3.	Bartosz Boniecki	Pol

S8E Juniors

1.	Martin Hudak	Svk
2.	Igor Hudak	Svk
3.	Lukas Herman	Cze

S4B Juniors

1.	Algimantas Deikus	Ltu
2.	Marius Costache	Rom
3.	Segey Karpushov	Rus

S5C Juniors

1.	Ivan Ouliskov	Rus
2.	Radoslav Hudec	Svk
3.	Lukas Herman	Cze

Launching site during the action in category S1B altitude