

REPORT BY THE F.A.I. JURY TO THE INTERNATIONAL AEROMODELLING  
COMMISSION (CIAM)

(Corrected on number of countries.)

EVENT DETAILS:

**2018 FAI WORLD CHAMPIONSHIPS FOR SPACE MODELS  
2018 FAI JUNIOR WORLD CHAMPIONSHIPS FOR SPACE MODELS**

**(22<sup>TH</sup> WORLD SPACEMODELLING CHAMPIONSHIPS FOR SENIORS AND 13<sup>TH</sup> FOR JUNIORS)**

DATE: 29<sup>th</sup> of August to 4<sup>th</sup> of September 2018

LOCATION: Airfield Kruszyn close to the City of Włocławek

ORGANIZING NAC: NAC of Poland

EXECUTIVE ORGANIZER: The local Aeroclub and the City of Włocławek

CONTEST EVENTS / NUMBER OF COMPETITORS/ NUMBER OF TEAMS

At the 2018 FAI World Championships for Space Models (#22) participated the NAC teams from 24 countries: BLR, BUL, CHN, CRO, CZE, ESP, EST, GBR, GER, ITA, JPN, LAT, LTU, NED, POL, ROU, RUS, SLO, SRB, SUI, SVK, UKR, USA, UZB. There were 24 senior teams with 174 competitors including 8 females and 16 junior teams with 109 competitors including 20 females. Total participation (Jury, Judges, S/J competitors, TMs, TMA, helpers, supporters, press, local personnel etc.): approx. 450 persons.

FAI JURY: Narve L. JENSEN (NOR) Jury President, Vladimir SVEC (SLO) Member, Tadeusz KASPRZYCKI (POL) Member.

COMPLAINTS AND PROTESTS: There were 2 protests, one in senior classification and one in Junior classification. Both were denied.

COMMENTS ON THE EVENT:

GENERAL: The 2018 FAI World Championships for Space Models were hosted by Polish Aero Club, which has already hosted European FAI SM Championships in 2017 on the same venue.

The executive organizers were the Aeroclub of Włocławek and they hosted these Championships very well according to the FAI/CIAM standards.

PRE-CONTEST INFORMATION: There were 2 pre-contest bulletins posted on the organizer's WEB site, published from January to August with all necessary information. The second bulletin was also updated, and the final bulletin with all results was distributed to all teams at the Closing Ceremony.

ACCOMMODATION, FOOD AND TRANSPORTATION: Participants were accommodated mainly in Jutrzenka Medical SPA in Wieniec Zdrój, about 15 km from the flying field in two bed rooms. Several teams rented their own accommodation in nearby hotels. Breakfasts and dinners were served at the hotel restaurant. Lunch was served at the flying field canteen. Food and accommodation were good. The canteen at the flying field served grilled meat and beverages at competitive prices between the regular meals. Transportation to the flying field was by buses or by the competitors' own cars or vans.

FLYING FIELD & LAUNCHING SITE: Flying field was Airfield Kruszyn, the local Airfield of the Aeroclub of Włocławek. There was erected two long lines of tents, one tent per every team. There were also tents for canteen, FAI Jury and medical care. There were also available toilets on both lines and a truck with a large water tank for refreshment.

Layout of the launching area was classical - two quarter-circles – one for juniors and one for seniors. Launch site for every team was marked with plastic ribbons. There were two chairs for time-keepers, two binoculars, digital stop-watches and a plaque with a launch site number etc at every launch site.

Jury's concern was a nearby highway close to 1 KM from the launching area, and some models managed to cross the highway and the follow crew did cross the highway on the on foot giving the organizers and police worries about their safety. The organizers posted on the information board and used the public address system to inform all involved that the highway was a no-go zone, and we had no further incidents.

WEATHER: Weather was sunny, clear and very hot with temperatures ranging from 25°C in the morning to 36°C+ early in the afternoon. Wind speed was low and caused no problems. Drinking water and water for refreshment of participants was supplied in plentiful and helped to endure spending long hours in the rather hot conditions.

MODEL PROCESSING AND ENGINE TESTING: Model processing was conducted by experienced personnel in two tents (one for seniors and one for juniors) at the flying field. Engine testing was conducted by international crew composed of qualified persons on a high-quality engine tester, used many times in SM championships. Engine testing was done in presence of the TMs of relevant teams. The organizer provided the special boxes for keeping the tested engines safe.

FLYING: Flights were controlled by the RSOs for seniors and juniors and their two assistants. Judging of flights and time-keeping (TK) was fair and correct. TK was conducted by local and foreign experienced time-keepers.

As have been done at earlier Championships, every competitor in addition to results written in his flight card received printed diagram of the flight and one copy was kept for the organizer's archive.

One Team Managers briefing was held at the beginning of the Championships. All other information was posted at the information board during the contests and were enough for all needs.

STATIC JUDGING IN S7 SCALE MODELS: It was the usual rotation of judges in classes S5 and S7 for these Championships in relation to last year's European SMCh 2017 (two new out of five FAI judges were approved by the CIAM Bureau)

EXTRAORDINARY SITUATIONS: There were a few interventions by the medical team on the field because of overheating, due to the high air temperatures 35°C+. Thanks to the organizers' generous supply of drinking water each day and the City's Fire Brigade that did regular rounds spraying the field with water and creating a sort of "open field air conditioner", most of us got through the days without problems.

DATA PROCESSING: Data processing was at a computer center located in a special container. It was equipped with computers and well-trained crew lead by Krzysztof TURMIŃSKI. In front of the computer center was a scoreboard and two large TV screens. All data were posted there on time and the screens were real time updated.

#### CEREMONIES & PRIZES:

Opening Ceremony was held on the CL circle in front of the Clubhouse, in presence of the Polish NAC officials and regional and local authorities with parade of all teams and usual welcoming speeches. The Jury President declared the Championship for open and the FAI Anthem was played as the FAI flag was raised.

The Closing Ceremony was held on the same place in front of the Clubhouse together with the last prize giving ceremony, including prizes for

The best overall senior team to TEAM RUSSIA

The best junior team to TEAM RUSSIA

Two traditional challenge trophies were also awarded at this time:

1) In Class S4A – Carl Neubronner ChT to VOLIKOV Valeriy - RUSSIA

2) in Class S8E/P President of the Polish NAC Challenge Trophy to Team Russia

The "Pelagic Brothers Trophy" donated by brothers Srdjan (SRB) and Miodrag (SVK) Pelagic as the perpetual trophy to the best multi class senior team was awarded to Team Russia.

The FAI Jury President declared the Championship for closed and the FAI Anthem was played as the FAI Flag was lowered, then all left for the Closing banquet at the Hotel Jutrzenka.

The Closing Banquet were in the large banquet hall of Jutrzenka Medical SPA in Wieniec Zdrój where all the officials and some team stayed. This included a nice awarding ceremony to those who contributed to the organization and running of this event.

Award ceremonies per classes were at the end of every day (previous day's competitions), on the field with a podium, flags and National Anthems. There were awarded FAI medals and diplomas winners and the winning teams and organizer's medals to the team members and souvenirs to all winners.

THE SPACE MODELLERS SC MEETING: Space Models SC meeting was held on 28<sup>th</sup> August in the evening. It was open to SM SC members, Competitors and all Team Managers, the meeting was well attended.

The Agenda was:

1. Current status of SM by countries,
2. Experience with new EU restrictions for SM
3. Certification process of SM engines
4. SM classes and how to improve them
5. Open discussion

#### Item 1.

Z. PELAGIC (SM SC Chair) opened the Meeting. He expressed thanks to the NAC of Poland, Polish Aeromodelling Federation and the executive organizer Aeroclub in Wloclawek and Municipality of Wloclawek for a successful organization of this greatest SM event in 2018. Accommodation and food in the restaurant and at the field is very good. Experience in organization first level events had improved in the last years, but it is still necessary to remove some ambiguities from the recent rules that caused some protests of the participants. He later remembered all the spacemodellers who have passed away this year - Vladimir Minakov (RUS), Tadeusz Mucha (POL) and Gradimir Rancin (SRB), and a minute of silence was held for them.

The overall situation in all present countries can be considered as stable. Due the new European Union (EU) restrictions, some EU member countries (especially Germany, Spain) have problems to organize competitions. M. MAEHL (GER) gave a detailed report on this topic.

A. BACA (LAT) informed that to motivate youngsters in Latvia, they use semi-scale paper model rockets, which are quite easy to build and good to fly.

I. GUZU (ROU) gave a brief description about the flying site and organization status of the next EuSMCh which will be held in Buzau next year.

I. VOLKANOV (UKR) reported that the SM situation in Ukraine is good, the number of spacemodellers has increased for about 60% in the last years, mainly with the help of sponsors.

A. EZHOV (RUS) informed that the SM situation in Russia is stable, and to improve the level, number of competitions and to attract more people to SM, they are using the help of sponsors.

M. MAEHL (GER) stated that due EU restriction, no SM competitions will be organized this year in Germany.

J. R. Font (ESP) informed that due EU restrictions, they are flying time duration classes on A1/2 motors, to stay under the maximal allowed altitude for space-models. He also informed that the fines are high if these restrictions are crossed.

J. JACOMB (GBR) said that the main problem for GBR competitors is the transport of SM rocket motors to EuSMCh and WSMCh, and that the best way to avoid all the difficulties is to let the organizers provide rocket motors at first level SM competitions. This idea is supported by many countries.

J. CUDEN (SLO) reported that due the problems in the Slovenian NAC, the situation is good and invited all to the 40<sup>th</sup> Ljubljana Cup (the traditionally last SM WCup competition). He mentioned that Slovenia will be the candidate to organize the 2022 WSMCh. He stated that in 2022 it will be 50 years since the first WSMCh was organized in Vrsac (that time Yugoslavia) and that Slovenia as former Yugoslav country would be honored to be the host for this celebration. The idea that a Yugoslav successor state would organize the WSMCh in 2022 is supported by many countries.

CONCLUSION: WSMCh 2018 in Poland is successfully organized and conducted in spite of some ambiguities in the rules that should be rectified as soon as possible.

Item 2.

M. MAEHL (GER) informed that the new EU restrictions do not allow the use of rocket motors which are not certified. Currently, only Estes (USA) and Klima (GER) motor have the needed certifications to be sold, shipped and used at EU SM competitions. In Germany, this year no competition will be held. The only exception could be the German nationals in S8, due the models can be flown by certified motors.

CONCLUSION: The current restrictions need to be taken to consideration to what extend the current SM rules are matching the restrictions and what changes need to be done to preserve SM in all EU and US countries. A detailed analysis of the situation should be done till the end of the year by SM SC Chairman and other SM SC members. Also a better exchange of information on this topic should be established.

Item 3.

Z. PELAGIC (SM SC Chair) gave a short information about the certification process of rocket motors. The costs to certify a set of rocket motors used for FAI SM competitions (A1/2 to D) can be up to tens of thousands of Euros. The certification process depends on the country of certification.

CONCLUSION: The not certified producers of rocket motors have to inform themselves about how and where to get their products certified, so they can be shipped and used in the EU. This is also valid for producers which are not from EU or US countries and want to sell and ship their product to these countries.

Item 4.

J. CUDEN (SLO) pointed out that the current technologies in form of microelectronics allow us to put small and light devices into the models. These are specially interesting for scale and altitude classes. He also presented an information bulletin containing detailed information about each SM class. This publication can be used as an introduction brochure to present SM to public such as schools and sponsors, which are not involved into our sport. Some samples in printed form were given to delegates, and a digital copy is available upon request.

As later mentioned in the discussion, electronical devices could be also applied to improve S2P class. A fragile payload ("satellite" in form of a combined altimeter/accelerometer/timer transmitter device) could be used. This would allow a new type of interactive competition (the results in form of graphs would be displayed on a table interactively) interesting for spectators.

CONCLUSION: The usage of modern technologies and electronics can improve SM. This was the case in altitude classes where the usage of altimeters has improved the classes to a new level. Low prices and good accessibility of modern technologies should encourage competitors to take more use of them mainly in altitude and scale competitions. Real time altitude tracking in near future can attract more people to SM. This topic should be discussed more often in the next period.

Item 5.

N. JENSEN (Jury President) pointed out that the current sporting code for SM has some paragraphs which need to be revised and edited to make the sporting code more easily to understand and to avoid confusions.

I. VOLKANOV (UKR) addressed a remark on the S7 junior class judging.

N. JENSEN (Jury President) and Z. PELAGIC (SM SC Chair and chief scale judge at the 2018 WSMCh) answered to the remark to give clarification.

J. CUDEN (SLO) pointed out that due the restrictions in the EU and US, models can't exceed the current maximal impulse (160 Ns) and weight (1500g) limitations. He also asked the delegated not to send proposals to exceed these limitations which would cause problems to organize SM competitions in the EU and US.

Z. PELAGIC (SM SC Chair) stated that with the usage of modern materials large models can be built without exceeding the current limitations. Good examples are the US and Romanian S7 models.

CONCLUSION: There is a number of issues that require to be either redefined or changed and many new items deserve to be put in the rules. A revision of the current sporting code should be done till the next TM. This

revision should have the main purpose to clarify and erase “confusing” paragraphs. Also rule change proposals in the future should take into account the restrictions which are valid for most of SM countries.

Minutes prepared by:

Dr. Zoran M. Pelagic,

CIAM Space Models SC Chairman

Closing REMARKS:

*Electronic altitude measurements were used successfully once again, and all earlier problems was completely gone. Weather at the end of July beginning of August this year proved to be too hot and we do hope for more convenient temperature for future SM Championships. Once again, a big Thank You to the organizers for their liberal and free supply of bottled water throughout the Championship.*

*As to computer programs for scoring, there are too many different local programs around in several classes and often the Jury do have problems figuring out if they are working correctly as by the rules. The different classes should develop one set of programs that can be used by all Cat1 event, and we suggest that one of the demands for such a program should be the ability to export all single scores to a normal Excel sheet, to give the Jury the possibility to manually control the results.*



KASPRZYCICI, Tadeusc  
FAI Jury Member



JENSEN, Narve  
FAI Jury President



SVEC, Vladimir  
FAI Jury Member