

## **BULLETIN No 2**

05<sup>th</sup> February, 2010.

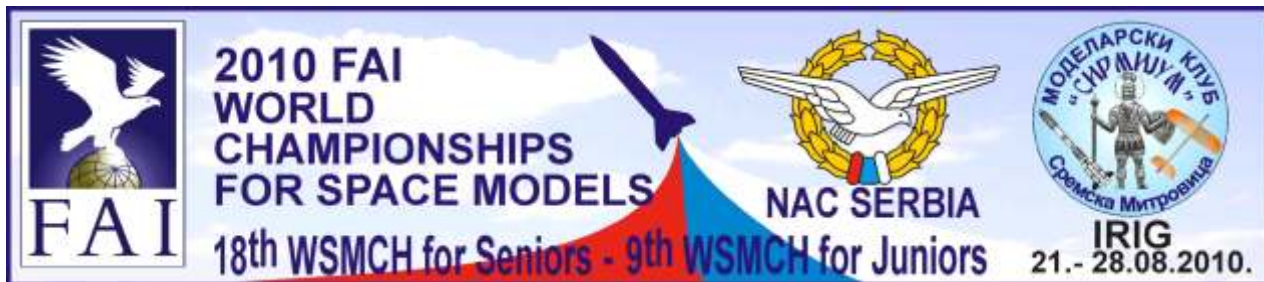
### **2010 FAI WORLD CHAMPIONSHIPS FOR SPACE MODELS**

- Seniors and Juniors –

**(18<sup>th</sup> World Spacemodelling Championships for seniors)**

**(9<sup>th</sup> World Spacemodelling Championships for juniors)**

**21<sup>st</sup> - 28<sup>th</sup> August , 2010. – Irig, Serbia**



## 2010 FAI WORLD CHAMPIONSHIPS FOR SPACE MODELS

- Seniors and Juniors -

(18<sup>th</sup> World Spacemodelling Championships for seniors)

(9<sup>th</sup> World Spacemodelling Championships for juniors)

August 21<sup>st</sup>- 28<sup>th</sup> 2010. – Irig, Serbia

### ORGANIZERS AERONAUTICAL UNION OF SERBIA,

Uzun Mirkova 4/1, Belgrade and

### MODELLING CLUB «SIRMIUM»

Ticanova 30, 22000 Sremska Mitrovica, Serbia

Phone/Fax: ++381-22-631-273

E-mail: [office@mksirmium.com](mailto:office@mksirmium.com)

Web: [www.mksirmium.com](http://www.mksirmium.com)

Director of the Championship:

**Andrija Ducak**

General manager of the Championship:

**Dragana Spasojevic**

Secretary of Championship:

**Ivana Gvoka**

Sports director:

**Vladimir Pauljev**

**DATES World Championship will be held from 21<sup>st</sup> - 28<sup>th</sup> August , 2010.**

### PRELIMINARY SCHEDULE

**August 21, 2010. – SATURDAY**

- 1<sup>st</sup> day - Hotel «TERMAL» Vrdnik - arrival of participants, accommodation, registration -, turn-in of S5 and S7, engine testing, TM meeting

**August 22, 2010.- SUNDAY**

-2<sup>nd</sup> day - engine testing, official training, the World Championship opening ceremony

**August 23, 2010. – MONDAY**

- 3<sup>rd</sup> day – Contest flights – S6, S4 Juniors and Seniors

**August 24, 2010. – TUESDAY**

- 4<sup>th</sup> day - Contest flights – S1, S9 Juniors and Seniors

**August 25, 2010. – WEDNESDAY**

- 5<sup>th</sup> day - Contest flights – S5, S3 - Juniors and Seniors

**August 26, 2010. – THURSDAY**

- 6<sup>th</sup> day - Contest flights – S7, S8 - Juniors and Seniors

**August 27, 2010. – FRIDAY**

- 7<sup>th</sup> day – Reserve day, banquet, closing ceremony

**August 28, 2010. – SATURDAY**

- Departure of participants after breakfast



## PRELIMINARY ENTRIES

Until 3<sup>rd</sup> February 2010, preliminary entry forms from the following NAC teams have been received

No	COUNTRY	SENIORS	JUNIORS	T.M.	T.M.A	Help. Supp.	T.K.	TOTAL
1	SLOVAK REPUBLIC	10	8	1	1	3	2	25
2	ITALY	1						1
3	CZECH REPUBLIC	6	4	1				11
4	GERMANY	9		1			1	11
5	SWITZERLAND	3		1		1		5
6	U.S.A.	17	14	2	2	10		45
7	BELARUS	3	3					6
8	POLAND	11	10	2		1	2	26
9	BULGARIA	10	3			3		16
10	SLOVENIA	13	1			4		18
11	LITHUANIA	4						4
12	ROMANIA	6	6	1		2		15
13	SERBIA	10	10					20
14	GBR	6	2			1		9
15	SPAIN	11	4			2		17
16	RUSSIA	12	10	2		4		28
17	JAPAN	12		1				13
		<b>144</b>	<b>75</b>	<b>12</b>	<b>3</b>	<b>31</b>	<b>5</b>	<b>270</b>

## FINAL OFFICIAL ENTRY FORMS

Final official entry forms should not be send later than **30<sup>th</sup> April**, accompanied with payment of the full entry fee. Forms send to E-mail: [office@mksirmium.com](mailto:office@mksirmium.com)

## PARTICIPATION

National teams of each member of the FAI may enter with a team consisting of:

- Maximum 3 senior in each class,
- Maximum 3 junior in each class,
- One TM (for seniors),
- One TM (for juniors),
- One assistant TM accordingly for juniors and seniors,
- **2 timekeepers**
- Official helpers, supporters

## TIMEKEEPERS

SC4\_Vol\_ABR\_10 Effective 1st January 2010.

**B.13.1.** Each team shall have the right to provide a timekeeper of World Championships; with the organiser to be responsible for providing lodging and food only. **Teams must nominate only skilled timekeepers and the timekeepers must bring binoculars, watches** (quartz controlled electronic stopwatches with digital readout recording to at 1/1000<sup>th</sup> of a second according to the rule B.13.4) **and tripods for their own use.** The organiser must use these timekeepers as a priority, before allocating duties timekeepers of the host nation or other timekeepers.



Timekeepers will be accommodated in Vrdnik in option: 1.2. Hotel object is 100 metres from the main hotel and it has rooms with 3 beds.

In case that timekeepers do not have their own **binoculars, watches and tripods**, they will not be accepted as timekeepers and they will bear the cost of their residence, food and taxes, like helpers.

### **ENTRY FEES**

- **350 Euro – Senior competitor/ Team Managers or TM assistant**
- **250 Euro – Junior competitor**
- **70 Euro – Supporter, helper**
- 33 Euro – Banquet
- 35 Euro – Lunch in contest site- 5 day

Entry fee covers the cost of: participation card in World Championship, informative materials, souvenirs, local transportation between hotels and site during competition days, sport trophies.

Entry fee payments April 1<sup>st</sup> to 30<sup>th</sup> 2010.

<b><u>Date of payment entry fee</u></b>	<b>Benefit</b>	<b>Fine</b>
February	- 10 %	/
March	- 5 %	/
April	-	-
May	/	+ 5 %
June, July	/	+ 10 %
On site	/	+ 50 %

### **Instruction for customer transfers in EURO ONLY:**

EUR correspondent is:

AGRIFRPP – Credit Agricole Paris

Acc. With Institution: 57A:

MEBARS22

CREDIT AGRICOLE SRBIJA AD, Novi Sad

Beneficiary: 59:

IBAN : RS35330007070000017438

SIRMIJUM MODELARSKI KLUB, SR.MITROVICA

Title: ENTRY FEE \_\_\_\_\_ (COUNTRY)

### **ACCOMMODATION**

- **1** - Hotel "TERMAL" Vrdnik – for 250 + 60 contestants+ camp
- **2** – Hotel for students in Sremska Mitrovica – for 90 contestants
- **3** – Restaurant "MINES" – for 30-50 contestants



## **FLIGHT ALTITUDE MEASUREMENTS BY ELECTRONIC ALTIMETERS**

### **Rules**

Flight altitudes in all altitude classes (S1A and S5B for Juniors and S1B and S5C for Seniors) shall be measured by electronic altimeters in accordance with the FAI Sporting Code, Section 4, Volume ABR, paragraph B.12 and Volume Space Models, paragraph 4.9.2.1.

“Local Rules for the Contest Process in Space Models Altitude Competition in Classes S1 and S5” as approved by the CIAM Bureau on 5<sup>th</sup> December, 2009 were given in Annex 1 of Bulletin No 1.

### **Electronic altimeters to be used in altitude classes competitions**

All flights shall be measured by the same type of the electronic altimeters produced by the same producer: **ALT-USB** (or ALT-LED) made by **ADREL Company** (Poland). The altimeters are tested and have certificate for use in national and international competitions issued by the producer's National Airports Control. These devices are selected after the organizer's "Invitation for offers for electronic altimeters to be used for altitude measurements in the FAI World Space Models Championships 2010" conducted in January 2010.

Electronic Altimeters of the same type produced by the same producer shall ensure the organizer for all sportsmen to compete in these Championships.

Technical data for electronic altimeters ALT-USB (or ALT-LED) are given in Annex 1 of this Bulletin No 2 as provided by the producer of these devices.

### **Altimeter Guidelines and Competition Tips**

“Altimeter Guidelines and Competition Tips” were published in “Local Rules for the Contest Process in Space Models Altitude Competition in Classes S1 and S5” given in Annex 1 of Bulletin No 1.

Technical solutions for application of electronic altimeters are subjected to ideas and skills of competitors and must be in compliance with the rules for electronic altimeters. Since there is a wide spectrum of technical solutions and ideas for these applications, the organizers shall post at its site <http://www.mksirmium.com> as “Electronic Altimeters Application – Ideas and Practice” interesting solutions from different countries to ease every competitor to find the most appropriate design for his/her models.

### **Deposit**

Every team shall submit, at registration, a deposit of 40 Euros for each altimeter that will be issued. The deposit must be paid in cash before the contest starts. The deposit shall be returned when the altimeters and batteries are returned. If an altimeter and battery is not returned, or is damaged, the deposit shall be retained.

If all altimeters per team are lost, during a competition, a new deposit must be paid to allow the team to continue in the competition.

### **Post Contest Activities**

Based on the criteria established in the pre-contest organization the altimeters, chargers and batteries shall be sold or distributed.



### **PROTEST**

The protest fee is 35 Euro.

### **VISAS:**

Organizers will prepare an official letter with the list of registered team members. This letter will be issued after the receipt of the entry fee and the Final official entry form signed by NAC's representative.

### **OFFICIAL LANGUAGE:**

English and Serbian

### **MODEL MARKING**

Each model must be marked according to FAI Sporting Code, Section IV, Volume Space Models, para 4.4.2.

### **NATIONAL FLAGS AND ANTHEMS**

Team managers are kindly requested to bring a CD with a national anthem and two flags. They will be collected at the registration of the team and returned after the prize giving ceremony.

### **NEXT BULLETINS** on : [www.mksirmium.com](http://www.mksirmium.com)

- Bulletin No 3 - 5<sup>th</sup> May 2010.
- Bulletin No 4 - 1<sup>st</sup> August 2010.



### Annex 1 of Bulletin No 2

#### TECHNICAL DATA FOR ELECTRONIC ALTIMETERS "ADREL" ALT-USB AND ALT-LED

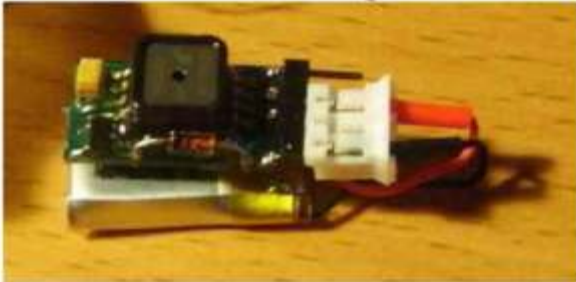
Item	Dimension (mm)	Weight (gr)
Electronic Altimeter ALT-USB (or ALT-LED)	9,5 x 24 x 8	1,4
LiPo Battery 20 mAh	10,7 x 18,9 x 3,2	1,2
Overall length and weight for tubes D>15 mm	34	2,6
Overall length and weight for tubes D<15 mm	48	2,6
Minimum compartment diameter (D<15mm)	10,8	-
Minimum compartment diameter (D>15mm)	13,8	-
Electronic Altimeter operation data	Requested	Achieved
Identification mark of a device	Serial number	Serial number
Additional identification mark for competitor	-	Competitors No.
Principle of work	Barometric	15 – 115 kPa
Records difference between ground altitude and the altitude achieved	1200 m	5500 m
Data readout recorded (or better)	1 m	0,2 m
Sampling rate samples/ second (or better)	10	15
Must be capable of being completely cleared of all previous flight data before flight.	YES	YES
<b>Battery operation data</b>	Discharging (hours)	Charging (min)
Discharging time of the full battery	>3	30-40
Current consumption (mA)	5,9	-

NOTE: Electronic altimeters "Adrel" ALT-USB and ALT-LED are identical in design, technical characteristics, weight and dimensions. The only difference is in readout: ALT-LED uses only a flashing LED, but ALT-USB is able to present reliably height-time diagram of the flight on the PC monitor and store it to a memory device and analyze later.



**PHOTOGRAPH OF THE ELECTRONIC ALTIMETER “ADREL” ALT-USB (OR ALT-LED)**

For rockets with a diameter greater than 15mm



For rockets with a diameter of less than 15mm

