CIAM Space Models Subcommittee Technical Meeting Minutes 2014

Report by: Srdjan D. Pelagic, CIAM Space Models S/C Chairman

Lausanne (SUI), 11th April, 2013

Rewritten with the Amendments for Jo Halman

Present:

Name	Country	Title
Srdjan Pelagic	Serbia	SM SC Chairman, Delegate
Joze Cuden	Slovenia	SM SC member, Delegate
Toshko Dragov	Bulgaria	SM SC member,
Zoran Pelagic	Slovakia	SM SC member,
Dr John Langford	USA	SM SC member,
Hans Stoll	Switzerland	SM SC member,
Olga Maximova	Ukraine	FSMS UKR secgen, Observer
John Jacomb	UK	Observer
Chris Flanigan	USA	Observer
Esther Roura	Spain	Observer
Franziska Stoll	Switzerland	Observer

A G E N D A

1. Space Models rules changes 2014,
2. Future World and European Championships,
3. Donation of a perpetual trophy,
4. Any other business.

Item 1:

SM Technical Meeting considered proposals for SM rules changes and the results of votes are given in the table below.

No	Prop	Mark	Rule	Proposal	Recom-mended	SM SC		SM TM	
						YES	NO	YES	NO
1	SRB	a	2.3.3	Number of stages of scale models in S5 and S7	SM SC	8	4	0	9
2	SRB	b	2.4.4	Minimum dimensions of subclasses	Withdraw	5	8	0	9
3	USA	c	2.4.4.	MInimum dimensions of subclasses	Amended	5	8	9	0
4	SRB-SVK	d	New 2.4.6	A prefabricated ejection charge - not explosive	Approve	12	1	9	0
5	SRB-USA	e	2.4.7	Min weight of S4, S8 and S10 -30% of max	Withdraw	12	1	~~9~~ 0	~~0~~ 9
6	SRB-ITA	f	New 2.4.8	Space models shall be painted	Withdraw	8	5	1	8
7	SRB-RUS	g	3.10.3	No engine testing in Champs if all of the same type	Approve	9	3	8	1
8	SRB	h	3.14.2	Standard markings of the engines	Approve	12	0	9	0
9	SRB-SLO	I	4.1.g	Change for Champs Class S8E/P to S8D/P	Withdraw	9	4	0	9
10	USA	j	4.1.b	Change for Champs Class S6A to S2/P	Withdraw	3	10	1	8
11	SRB	k	4.2	Number of Models - add an extra model for fly-offs in Classes S1 and S2	Approve	13	0	9	0
12	SRB	l	New 4.5.4	Add a definition of a re-flight	Approve	13	0	9	0
13	SRB	m	New 4.7.5	In WChs/CChs shall be used 2.4 GHz spread-spectrum RC devices*(see note)	Approve	13	0	9	0
14	SRB	n	4.8.3	Add: "unless otherwise defined by the rules of of a particular class"	Approve	13	0	9	0
15	SRB	o	4.9.2.1	Amend p.9 b) to: "For FAI Cat 2 events simpler devices may be used that gives **data read out of the peak altitude on its hand-held reader..."**	Approve	10	1	9	0
16a	SRB	p	5.1.	a) Change: tracked and reduced to measured and calculated;	Approved	9	1	9	0

16b			5.3.	b) Introduce big models LMAR1 and LMAR 2 for 1 and 2 stage models;	Amended	9	1	9	0
16c			5.4.	c) Classification for altitude models clarified	Amended	9	1	9	0
17	SRB	q	New S4D/P	New provisional class - S4D/P - Programmed flight	Withdraw	1	11	0	9
18a	USA	r	9.11.2	Change judging areas for adherance to scale to two areas: dimensions 150 pts and colour and markings 50 pts - total 200 pts	Approved	7	1	9	0
18b			Annex 1	In Annex 1 – Scale Adherence – Dimensions amend the second line to read: Greatest **measurable body** diameter	Amended	7	1	9	0
19	USA	s	11.2	Purpose - landing in 20x20m -delete last sentence.	Approve	9	2	9	0
20	USA	t	11.4	Timing and Classification - add new paragraphs 11.4.2 - 11.4.4	Approve	9	2	9	0
21	SRB-SLO	u	11.6	Subclasses - change S8E/P to S8D/P	Withdraw	9	4	0	9
22	SRB-SLO	v	11.7	Class S8E/P change to S8D/P, engines to 10,01-20Ns and wing span to 1100 mm.	Withdraw	9	4	0	9
23	SRB	w	New S8F/P	A new class - RC Triatlon Tournament	Withdraw	1	11		
24	SRB-BLR	x	12.6.5	Subclasses for S12P	Approve	10	0		
25	SRB	y	Annex 2 - 3.	d. Unsafe Recovery - do not DQ if recovery device of a small and insignificant part does not deploy than detract points.	Approve	10	0		
26		z	Annex 2 - 3.	e. Engine ejection - delete the whole paragraph.	Approve	12	0		

Amendments: **(see Amendments in a document below)**

~~No 3 - Divide table in two tables. The actual stays with S5 deleted and the new is for S5 and reads:~~

~~Event Class~~	~~Minimum diameter (mm)~~	~~Minimum Overall Length (mm)~~
~~A~~	~~20~~	~~400~~
~~B~~	~~25~~	~~500~~
~~C~~	~~30~~	~~600~~
~~D~~	~~40~~	~~800~~
~~E~~	~~50~~	~~1000~~
~~F~~	~~60~~	~~1500~~

~~First sentence below the table in par. 2.4.4 change to read:"~~ **~~In the case of Class S1 the smallest body diameter must be not less then 18 mm and the Class S5 25 mm, for at least 50% of the overall length of each stage.~~** ~~Last underlined sentence stays with three last words deleted.~~

NOTE:

No 13 - Were needed add in text "no impound for 2.4 GHz RC spread spectrum devices".

~~No 16b – Delete "Note" and in table LMAR1 single stage and LMAR 2 two stage~~

~~No 16c – Last sentence end with: and may use a new model.~~

Item 2:

There were shortly discussed future World and Continental SM Championships. EuSMCh 2015 is awarded to Ukraine and this is the first SM 1st Cat event in this country. Bidding for WSMCh 2016 will be tomorrow and bidders are Ukraine and Serbia. Dr Langford suggested new country organizers in future because SM Championships rotate in a very small number of countries.

Item 3:

SM SC Chairman informed SM TM that he and his brother Miodrag Pelagic have decided to donate a perpetual trophy to best senior team in World SM Championships. CIAM Plenary shall decide on that tomorrow and if approved it will be donated in WSMCh 2014 in Bulgaria for the first time.

Item 4:
There were no specific items. SM SC Chairman thanked to TM for effective cooperation today and all these years since he in chair of this SC.

Prepared by: Srdjan Pelagic, SM SC Chairman

AMENDMENTS BY THE SPACE MODELS TECHNICAL MEETING

TO THE PROPOSALS FOR RULES CHANGES IN THE AGENDA FOR THE CIAM PLENARY MEETING
Lausanne (SUI), 11th April, 2014
Note – Amendments are in red letters *and later clarifications are in red, underlined italic letters*

c) 2.4 Construction Requirements — USA

Technical Secretary's Note: the table did not contain any amendments.

Amend the text [and table] as follows:

2.4.4 Minimum dimensions of subclasses of classes S1, S2, S3, ~~S5~~, S6, S9 and S10 must not be less than:

Event Class	Minimum diameter (mm) (for at least 50% of the overall length) ~~and 20% for S5)~~	Minimum Overall Length (mm)
A	40	500
B	40	500
C	50	650
D	60	800
E	70	950
F	80	1100

~~Models of Classes S1, S2, S3, S6, S9 and S10 must have minimum diameter of 30 mm of enclosed airframe for at least 50% and for Class S5 for at least 20% of the overall body length.~~ In **the** case of Class S1 the smallest body diameter must be not less than **18** ~~25~~ mm for at least 75% of the overall length of each stage~~, including their back sections. No boat tails or reducers are allowed unless they meet this requirement~~. **An S1 sustainer stage may not have a boat tail.**

The minimum dimensions of Class S5 *must not be less than:*

Event Class	Minimum diameter (mm) *of each stage*	Minimum overall length (mm)
A	20	400
B	25	500
C	30	600
D	40	800
E	50	1000
F	60	1500

***In the case of* Class S5 *models* shall have a minimum ~~the smallest body~~ diameter ~~must be not~~ of an enclosed airframe ~~less than 18~~ ~~mm~~ *eagual or larger than that in table above* for at least 50% of the overall length of each stage.**

m) 4.7. Radio Controlled Space Models Serbia

Add a new paragraph as follows:

4.7.5 In World and Continental Championships because of increased safety, reduced harmful radio-interferences and simplified organisation of the RC events, spread spectrum 2.4 GHz radio devices shall be used. When all RC devices in a contest are spread spectrum 2.4 GHz devices they must not be impounded.

S1 – Altitude Class

p) 5.1 2 Definition & 5.3 Sub-Classes Serbia

Amend the following paragraphs and add a new paragraph at 5.4 as shown.

5.1. Definition

In any altitude competition event, the model achieving the highest maximum altitude as ~~tracked and reduced~~ **measured and/or calculated** shall be declared the winner.

5.3. Sub-Classes

Altitude competition shall be divided into classes based upon the maximum allowable gross launching weight of the model and the maximum permissible total impulse of the engine or engines powering the model. Any number of engines may be used in any arrangement provided that the sum of the total impulses of the individual engines does not exceed the allowable total impulse maximum for the competition class.

The following event classes are in effect for altitude competition:

CLASS	TOTAL IMPULSE (Newton-seconds)	MAXIMUM WEIGHT (g)		
S1A	0,00 -	2,50	~~30~~ **60**	
S1B	2,51 -	5,00	~~60~~ **90**	
S1C	5,01 -	10,00	120	
S1D	10,01 -	20,00	240	
S1E	~~**LMAR1**~~	20,01 -	40,00	300 ~~single stage~~
S1F	~~**LMAR2**~~	40,01 -	80,00	500 ~~two stage~~

~~**Note: LMAR stands for Large Model – Altitude Rocket and shall be used for promotional purposes of Spacemodelling in addition to competitions. They shall encourage new designs in order to achieving ultimate flight specifications.**~~

5.4. Classification

Every competitor shall be given three opportunities to make official flights. The best out of three flights shall be taken for classification. In case of tie the second or even the third flight shall be decisive. ~~It~~ If the tie stays competitors shall be allowed to make an additional flight ~~with~~ and they may use a new model.

r) Annex 1

FAI CATEGORY	SUB-CATEGORY	JUDGING CONSIDERATIONS	POINTS
Scale Adherence	**Colours**	Comparing the entry to colour photographs, paint samples, or other colour substantiation, to what degree does the entry's colour(s) resemble that prototype's colour?	(0-**25**)_____
	Markings (lettering & insignia)	Comparing the entry to photographs, marking diagrams, or other marking substantiation, to what degree to the entry's markings resemble the prototype's markings?	(0-**25**) _____
	~~Overall Model~~ **Dimensions** ~~Configuration~~	Overall model length	(0-**25**) _____
		Nose cone length	(0-**25**) _____
		Greatest ***measurable*** **body** diameter	(0-**25**) _____
		~~One selected dimension greater than 10mm~~	~~(0-20) _____~~
		Length of first stage	**(0-25) _____**
		Fin span (individual fin, or tip-to-tip) *	**(0-25) _____**
		Selected dimension greater than 10 mm (second stage length, diameter, etc.)	(0-**25**)_____
	~~Second Stage~~	~~Second stage length~~	~~(0-20)_____~~
		~~Second stage diameter~~	~~(0-20)_____~~
	~~Third stage~~	~~Third stage length~~	~~(0-20)_____~~
		~~Third stage diameter~~	~~(0-20)_____~~
		Award points shall be based on a % deviation from the prototype's scaled dimensions. Each 1% error reduces the value by 2 points. Deviation > 10% shall be awarded a value of 0.	
		*** If prototype is finless, select one other dimension greater than 10 mm and check here ( )**	
			Category Total (200 Max)
	~~Note: A difference of 1% reduces 2 points for every measured item~~		

y) 3.General Judging Criteria **Serbia**

Amend paragraph d) as follows:

d. Unsafe Recovery. Crashes and other unsafe recoveries cannot be qualified. What constitutes an unsafe recovery? The rules state it is one that creates a hazard to property or people. For consistency let us ask ourselves if we would like to be under the rocket we are judging when it lands. If the answer is "no" then a disqualification is called for especially during payload flights where no minimum size parachute is required. **In case of scale models unsafe recovery is when a recovery device (parachute or streamer) of a substantial part, which are nose cone, any of the stages or boosters does not deploy and can make hazard for ~~men~~ persons or property on the ground. If a streamer or a parachute of a smaller and insignificant part *(light, Styrofoam or similar forms that represent satellites or other special effects and that have streamer or parachute for recovery)* does not properly work this is not a reason for disqualification *of the flight,* than for reduction of points for recovery devices in flight characteristics.**

Note: This clarification for "**smaller and insignificant part**" was requested by the Italian delegate in CIAM Plenary and he asked the meeting to allow TS and SC Chair to make this clarification.