

**FEDERATION AERONAUTIQUE INTERNATIONALE  
AEROMODELLING COMMISSION (CIAM) - PROPOSAL FORM**

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Date: **14.11.2020**

Proposal submitted by: Slovakia

For proposals from Subcommittees: Voting Numbers Required:

Overall Votes Cast:  For:  Against:

Sporting Code Volume: **S Space Models**

Heading of section: **4 – Space Models**

Class:

Number & heading of the paragraph: Annex 1 and Paragraphs 9.11.2 - 9.11.5

Page number if appropriate: **43-46**

This proposal is a:

Rule Change	<input checked="" type="checkbox"/>	Safety	<input type="checkbox"/>	Noise	<input type="checkbox"/>	Other	<input type="checkbox"/>
Clarification	<input type="checkbox"/>						

mark the boxes with **X** as appropriate

**S\_Annex1\_SVK\_20\_ver2.doc is an amendment from the previous proposal from last year.**

*Amend the Scale judging tables as shown below. Also, if rule change applied, change the number of points in Paragraphs 9.11.2-9.11.5 accordingly to the numbers in the tables in Annex 1.*

**ANNEX 1**

**SCALE SPACE MODELS JUDGE'S GUIDE**

EVENT: ( ) Scale (Class S7)  
( ) Scale Altitude (Class S5)

Name:

FAI Licence Number:

Competitor Number:

National Team:

Prototype Name:

Prototype Serial Number:

## SPACE VOLUME ANNEX 1 – SCALE JUDGING TABLES

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## DISQUALIFICATIONS

(Applicable FAI Rule Number Shown in Parenthesis)

Prototype is not a guided missile, rocket, or space vehicle (9.1)

Entry has no lower stage (multi-stage prototypes only) (9.2)

No length and/or diameter data supplied for prototype (9.4)

No photograph of prototype supplied (9.4)

Entry utilises plastic kit parts not identified as such (9.7)

Entry not submitted in flight configuration (minus motors and recovery device packing) (9.8)

Entry does not carry competitor's FAI number (4.4.2)

FAI CATEGORY	SUB-CATEGORY	JUDGING CONSIDERATIONS	POINTS
Technical Data	Prototype Drawings <b>and Data</b>  Prototype Photographs  <b>Flight profile</b>	To what degree is external prototype detail substantiated by drawings? How authentic are these drawings compared to prototype manufacturer's drawing? - authentic, authorised drawings <del>- authentic cross-section drawing(s)</del> - data which define colour and markings on it. - workshop drawing of scale model <del>-scale 1:1</del> - file containing all necessary data including those from paragraph 4.4.3 <b>and 2.4.5</b>  <del>To what degree are external prototype detail, colour, and marking substantiated by photographs?</del> - at least one colour photograph of the whole prototype with clearly visible details. <del>- at least three photographs of details and assemblies</del>  <b>- authentic flight profile of the prototype, taken from official sources (official publications, magazines, books, specifications of the design bureau or developer of space rocket systems)</b>	Note: no points for technical data. Check only what is submitted of the required data and below, give points only to those items documented by these technical data.

FAI CATEGORY	SUB-CATEGORY	JUDGING CONSIDERATIONS	POINTS
Degree of Difficulty	Configuration	To what degree does the entry depart from the configuration of a "finned cone-topped cylinder.	(0-20) <b>(0-25)</b>
	External Components	Consider the number and complexity of the entry's external components including fins, transitions, interstage adapters, shrouds, strap-on booster, launch lugs, antennae, etc. Also consider to what extent the aforementioned components were prefabricated by none other than the entrant.	<del>(0-20)</del> <b>(0-30)</b>
	Detailing	Consider the number of separate details including nuts, bolts, screws, rivets, fasteners, welds, hatches, panels, corrugations, etc. Also consider to what extent the aforementioned details were prefabricated by anyone other than the entrant.	(0-20) <b>(0-35)</b>

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<b>“Originality”</b> –	Paint Pattern	consider the number of colours and complexity of the entry point pattern. Also consider the number and complexity of the entry’s markings and to what extent these markings were prefabricated by anyone other than the entrant.	(0-20) _____
	“Flyability”	Consider the difficulty in adapting the entry to make a qualified flight including absence of fins, small fin area, extremes of CP and/or CG, etc.	(0-30) _____
	“Originality”	Bonus points: 40 points for a prototype of one kind in the competition; 20 points if there are two of the same prototype; zero points if there are three models of the same prototype. <b>Category Total (40 Max)</b>	(0-40) _____

FAI CATEGORY	SUB-CATEGORY	JUDGING CONSIDERATIONS	POINTS
Scale Adherence	Colour	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? <b>Subtract points if differs.</b>	(0-25) <b>(10 -0)</b> _____
	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? <b>Subtract points if differs.</b>	<del>(0-25)</del> <b>(10 -0)</b> _____
	Dimensions	Overall model length Nose cone length Greatest measurable body diameter Length of the <b>body of the</b> first stage Fin span (individual fin or tip-to tip) Selected dimension greater than <del>40</del> <b>20</b> mm (second stage length, diameter, etc.)  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 <del>40</del> <b>20</b> mm and check here ( )  <b>Category Total (<del>200</del> <b>130</b> Max)</b>	<del>(0-25)</del> <b>(20-0)</b> <del>(0-25)</del> <del>(0-25)</del> <b>(20 -0)</b> <del>(0-25)</del> <b>(20 -0)</b> <del>(0-25)</del> <b>(20 -0)</b> <del>(0-25)</del> <b>(30 -0)</b>

FAI CATEGORY	SUB-CATEGORY	JUDGING CONSIDERATIONS	POINTS
Workmanship	Construction	Consider the absence of visible glue joints, that edges and demarcations should be precise, that planar surfaces should be flat, etc. <b>Subtract points from maximum.</b>  Nose cone & transitions	(0-40) _____

SPACE VOLUME ANNEX 1 – SCALE JUDGING TABLES

		<b>Body &amp; transitions</b>	(0-40) <del>(40 -0)</del>
		Fins or Stabilising surfaces (including clear plastic)	(0-30) <del>(40-0)</del>
		Details	(0-40) <del>(50 -0)</del>
	Finish	Consider that surface textures should duplicate base material of prototype; that paint and other surface coatings should be uniform (unless this would deviate from prototype’s finish) thin, dust-free and of the proper texture; that colour demarcations and markings should be crisp* and precise. <b>Subtract points from maximum.</b>	
		Nose cone & Transitions	(0-40) _____
		Body & transitions	(0-40) <del>(20 -0)</del> _____
		Fins * *If the prototype is finless, then 0-50 <b>20-0</b> points each for “Nose cone <b>Body</b> & transitions” and “Body”, and check here ( ).	(0-20) <del>(20 -0)</del> _____
		Category Total ( <del>250</del> <b>170</b> Max)	

FAI CATEGORY	SUB-CATEGORY	JUDGING CONSIDERATIONS	POINTS
Flight Characteristics	Launch	Was the launch successful? If not, subtract 10 points for each misfire or hang-fire for a maximum of minus 30 points (0 or minus)	_____
		Realism of launch compared to prototype. Was the take-off speed abrupt or was it a smooth lift off from the launch pad? <b>Deduct points for each difference from original.</b>	<del>(0-30)</del> <b>(20-0)</b> _____
	<u>Flight of 1st part (whole configuration)</u>	<b><u>Realism of flight. Was it a vertical flight without weather-cocking of launcher tip-off? No rotation unless prototype rotated. Stable straight flight without oscillation? Deduct points for each difference from prototype's flight.</u></b>	<del>(0-30)</del> <b>(35-0)</b> _____
	<u>Flight of 2nd part (after 1st powered separation*)</u>	<b><u>Was it a vertical flight without weather-cocking of launcher tip-off? No rotation unless prototype rotated. Stable straight flight without oscillation? Deduct points for each difference from prototype's flight.</u></b>	<b>(35 - 0)</b>
	<u>Flight of 3rd part (after 1st powered separation)</u>	<b><u>Was it a vertical flight without weather-cocking of launcher tip-off? No rotation unless prototype rotated. Stable straight flight without oscillation? Deduct points for each difference from prototype's flight.</u></b>	<b>(35-0)</b>
	Special Effects	Did the model exhibit any special effects such as Launching a space probe, separating boosters, radio control devices, ejecting satellites, deploying shield, scale launcher, gliding recovery etc. Special effects can only emulate the actions of the prototype. Maximum of 45 <b>20</b> points for each effect.	<del>(0-60)</del> <b>(0-80)</b> _____

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	*Powered separation	Up to <del>30</del> points for realistic powered separation of a powered portion of a model (capsule, stage powered spacecraft, etc.) in accordance with paragraphs 2.3.1., 2.3.2. and Annex 2 – 4.d.2.	<del>(0-60)</del> _____
	Clusters	Add <del>5</del> points for each engine that ignites up to a maximum. No points for single engine models.	<del>(0-30)</del> _____
	RC Gliding Descent	Stable gliding, realism of gliding descent of the prototype and safe landing without damage. <b><u>Deduct points for each difference from prototype's flight.</u></b>	<del>(0-50)</del> <b>(50-0)</b> _____
	<b><u>Motors</u></b>	<b><u>To what extent does the placement of the entry's motors coincide with the prototype? Deduct points for each difference from prototype's</u></b>	<b>(30-0)</b>
		<b><u>Subtract 10 points for each engine that fails to ignite in clusters of first stage.</u></b>	<b>(0 or minus)</b>
	Recovery	Single stage model (or booster stage) Recovery device deployment (1 parachute — 10 points)	<del>(0-20)</del> _____
		Multi stage model (upper stage(s)) Recovery device deployment (1 parachute — 10 points, 1 streamer — 5 points)	<del>(0-20)</del> _____
		<b><u>Functionality of recovery device(s)</u></b>	<b>(15-0)</b>
		Category Total (300 Max)	_____