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: _____

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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 devicec 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 **and Data** Prototype Photographs	To what degree is external prototype detail substantiated by drawings? How authentic are these drawings compared to prototype manufacturer's drawing? - authentic, authorised drawings ~~- authentic cross-section drawing(s)~~ - data which define colour and markings on it. - workshop drawing of scale model ~~- scale 1:1~~ - file containing all necessary data including those from paragraph 4.4.3 **and 2.4.5** **- authentic flight profile of the prototype** ~~To what degree are external prototype detail, colour, and marking substantiated by photographs?~~ - at least one colour photograph of the whole prototype with clearly visible details. - ~~at least three photographs of details and assemblies~~	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)_____
	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	(0-~~20~~ **30**)_____

		consider to what extent the aforementioned components were prefabricated by none other than the entrant.	
	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~~ **40**)_____
	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.	(0-40)_____
		Category Total (150 Max)	

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? **Subtract points if differs.**	(0-~~25~~)**(20 -0)** _____
	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? **Subtract points if differs.**	~~(0-25)~~ **(20 -0)** _____
	Dimensions	Overall model length	~~(0-25)~~ **(20-0)**
		~~Nose cone length~~	~~(0-25)~~
		Greatest measurable body diameter	~~(0-25)~~ **(20 -0)**
		Length of the **body of the** first stage	~~(0-25)~~ **(20 -0)**
		Fin span (individual fin or tip-to tip)	~~(0-25)~~ **(20 -0)**
		Selected dimension greater than 10 mm (second stage length, diameter, etc.)	~~(0-25)~~ **(30 -0)**
		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~~ **150** Max)	

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. **Subtract points from maximum.**	
		~~Nose cone & transitions~~	~~(0-40)~~ _____
		Body & transitions	(0-40) **(30 -0)**
		Fins or Stabilising surfaces (including clear plastic)	(0-30) **(30-0)**
		Details	(0-40) **(40 -0)**
	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. **Subtract points from maximum.**	
		~~Nose cone & Transitions~~	~~(0-40)~~ _____
		Body & transitions	~~(0-40)~~ **(50 -0)**
		Fins * *If the prototype is finless, then 0-50 points each for "~~Nose cone~~ **Body** & transitions" ~~and "Body"~~, and check here ( ). Category Total (~~250~~ **200** Max)	(0-20) **(50 -0)**

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? **Deduct points for each difference from original.**	~~(0-30)~~**(20-0)**
	Flight **of 1st part (whole configuration)**	**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.**	~~(0-30)~~ **(40-0)**
	Flight of 2nd part (after 1st powered separation*)	**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.**	**(40 - 0)**
	Flight of 3rd part (after 1st powered separation)	**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.**	**(40-0)**
	Special Effects	Did the model exhibit any special effects such as Launching a space probe, separating boosters, radio control devices, ejecting satellites,	~~(0-60)~~ **(0-80)**

		deploying shield, scale launcher, gliding recovery etc. Special effects can only emulate the actions of the prototype. Maximum of ~~15~~ **30** points for each effect.	
	*Powered separation	~~Up to 30 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.	~~(0-60)~~ _____
	~~Clusters~~	~~Add 5 points for each engine that ignites up to a maximum. No points for single engine models.~~	~~(0-30)~~ _____
	~~Cluster Misfires~~	~~Subtract 15 points for each engine that fails to ignite.~~	~~(0 or minus)~~ _____
	Motors	To what extent does the placement of the entrys motors coincide with the prototype? If not, subtract 1-5 points for each not realisticaly placed motor.	~~(~~**0-30)**
	RC Gliding Descent	Stabile gliding, realism of gliding descent of the prototype and safe landing without damage. **Deduct points for each difference from prototype's flight.**	~~(0-50)~~ **(50-0)**
	~~Recovery~~	~~Single stage model (or booster stage) Recovery device deployment (1 parachute – 10 points)~~	~~(0-20)~~ _____
		~~Multi stage model (upper stage(s)) Recovery device deployment (1 parachute – 10 points, 1 streamer – 5 points)~~	~~(0-20)~~ _____
		Category Total (300 Max)	_____