

ANNEX 1
 SCALE SPACE MODELS JUDGE'S GUIDE

| 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 consider to what extent the aforementioned components were prefabricated by none other than the entrant. | (0-20)_____ (0-35) |
| | 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)_____ (0-35) |
| | 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)_____ (0-30) |
| | "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? | (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) _____ |

2020 PLENARY MINUTES ANNEX 7m
 Agenda Item 14.13 by) – Transferred to 2021 Agenda
SPACE VOLUME ANNEX 1 – SCALE JUDGING TABLES

| | | | |
|--|------------|--|--------|
| | Dimensions | Overall model length | (0-25) |
| | | Nose cone length | (0-25) |
| | | Greatest measurable body diameter | (0-25) |
| | | Length of the 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) |
| | | 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. | (0-25) |
| | | * If prototype is finless, select one other dimension greater than 10 mm and check here () | (0-25) |
| | | Category Total (200 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. | |
| | | Nose cone & transitions | (0-40) |
| | | Body | (0-40) |
| | | Fins or Stabilising surfaces (including clear plastic) | (0-30) |
| | | Details | (0-40) |
| | 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. | |
| | | Nose cone & Transitions | (0-40) |
| | | Body | (0-40) |
| | | Fins * | (0-20) |
| | | *If the prototype is finless, then 0-50 points each for "Nose cone & transitions" and "Body", and check here (). | |
| | | Category Total (250 Max) | |
| | | <u>In all (600 Max)</u> | |
| FAI CATEGORY | SUB CATEGORY | JUDGING CONSIDERATIONS | POINTS |
| Flight | Launch | Was the launch successful? If not, subtract 10 points for each misfire or hang-fire for a maximum | |

2020 PLENARY MINUTES ANNEX 7m
 Agenda Item 14.13 by) – Transferred to 2021 Agenda
SPACE VOLUME ANNEX 1 – SCALE JUDGING TABLES

| | | | |
|-----------------|--------------------|--|--|
| Characteristics | | 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? | (0-30)____ <u>(0-50)</u> |
| | Flight | 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? | (0-30)____ <u>(0-50)</u> |
| | 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, <u>confirmed by information from official sources.</u> Maximum of 15 points for each effect. | (0-60)____ <u>(0-90)</u> |
| | Powered separation | <u>Separation of prototype stages according to the flight scheme, confirmed from an official source.</u> <u>transverse (tandem) division of steps:</u> 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. <u>In the case of block (batch) separation of the rocket model stage, the participant is awarded 40 points</u> | (0-60)____ <u>(0-60)</u> <u>(0-80)</u> |
| | 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) |
| | RC Gliding Descent | Stable gliding, realism of gliding descent of the prototype and safe landing without damage. | (0-50) |
| | Recovery | Single stage model (or booster stage) Recovery device deployment (1 parachute – 10 points) Multi stage model (upper stage(s)) Recovery device deployment (1 parachute – 10 points, 1 streamer – 5 points) <u>All stages of the missile model and other parts according to the missile flight cycle must be returned to the rescue system according to paragraph 1.1. Part One - GENERAL DEFINITION</u> | (0-20) <u>Note: there are no points for a safe</u> |

2020 PLENARY MINUTES ANNEX 7m
Agenda Item 14.13 by) – Transferred to 2021 Agenda
SPACE VOLUME ANNEX 1 – SCALE JUDGING TABLES

Ukraine

| | | | |
|--|--|--|----------------|
| | | | <u>return.</u> |
| | | Category Total (300 Max) Category Total (350 Max) | |

