ANNEX 5
FAI SPACE MODEL SAFETY CODE

1. Materials

Space models shall use only lightweight, non-metal parts for the nose, body, and fins and shall not use any internal heavy metal part that could cause injuries to persons or damage to property.

2. Motors

Space models shall only be flown with space model motors that have been certified by a National Airsports Control, and these motors shall not be tampered with or used for any purposes except those recommended by the manufacturer.

3. Ignition System

Space models shall be launched with an electrical launch system and electrical motor igniters. The launch system shall have a safety interlock in series with the launch switch, and it shall use a launch switch that returns to the "off" position when released.

4. Range Safety Officer

All space models presented for operation on the flying field shall be permitted or denied flight by the Range Safety Officer on the basis of his considered judgement with respect to the possible safety of the model in flight.

5. Launch Safety

Space models shall be launched from a launch device that is within 30 degrees of vertical and is of sufficient length to ensure that the space model flies nearly straight up. They shall be launched only after a 5-second countdown that is audible to all persons nearby and only if all persons are at least 4 metres away. When launching space models with multiple stages, with clusters of multiple motors, or with motors exceeding 20 N-sec, all persons must be at least 8 metres away and the launch device must be at least 10 degrees away from vertical. If the safety or stability of a space model is in question, it shall only be flown after warning spectators and clearing them away to a safe distance and direction as determined by the RSO.

6. Fire Safety

Space models shall not eject any materials such as recovery device protection that may burn or smoulder and shall use containment tubes for fuse-type dethermalizers, so that the space models do not present a fire hazard. Launch devices shall have a means to prevent the engine's exhaust from directly hitting the ground, and any dry grass close to the launch pad shall be cleared before launch.

7. Flight Safety

Space models shall not be launched at targets, into clouds, or near airplanes, and shall not contain any flammable or explosive payload.

8. Launch Site

Space models shall be launched outdoors, in an open area free of hazards to the safety of fliers or spectators and whose size is appropriate to the power of the models and to the weather conditions, as determined by the RSO, and with wind speeds no greater than 9 metres per second.

9. Recovery

Space models shall be so constructed to be capable of more than a single flight and shall contain a means for retarding the descent of all parts of the model to the ground so that the space model’s structure may not be substantially damaged and so that no hazard is created to persons and property on the ground.

10. Recovery Safety

No attempt shall be made to recover space models from power lines or other dangerous places.

11. Recovery Device Dimensions

In classes S1, S5 and S7, the minimal recovery device dimensions are: 25x400mm for streamer and 4dm^2 for parachute recovery for parts under or equal to 20 grams of mass. Streamer recovery might be used to a maximum weight of 50 grams, where the minimal streamer area is 3dm^2 for parts heavier than 20 grams. For parachute recovery, the minimal area is 7dm^2 for every 50 grams the part weighs (e.g. 150g part has to have a minimal parachute area of 21dm^2). An area tolerance of maximum 10% is allowed. The RSO, Judges and Jury may request to have the recovery device area re-measured if there is a doubt. If the recovery device is not matching the minimal allowed size, the flight is considered DQ.
For selected masses, the minimal parachute (with approximate diameter) and streamer areas are:

Part mass (g)	Minimal streamer area (dm^2)	Minimal parachute area(dm^2)	Minimal diameter for area - round parachute (dm)	Minimal side for area - square parachute (dm)
0 – 20	1	4	2.26	2.00
21 – 50	3	7	2.99	2.65
51 – 100	-	14	4.22	3.74
101 – 150	-	21	5.17	4.58
151 – 200	-	28	5.97	5.29
451 – 500	-	70	9.44	8.37
951 – 1000	-	140	13.35	11.83
1451 – 1500	-	210	16.35	14.49