



IJMC Giant Scale Class 2024 Rulebook

Introduction:

The Giant Class will be flown for the first time in Norway at the IJMC JWM, thanks to the weight limit of 150kg for model airplanes in Norway.

Since the weight limit in other countries, mainly in european countries, is legally limited to 25kg without a special permit, the Giant Class **cannot** be promoted to an official competition class.

If there is again the possibility to offer the Giant Class to the pilots as an IJMC competition class in one of the next JWM, this will be done in close cooperation with the hosting country representatives.

Due to this legal limitation **no** entitlement to hold the competition with the integration of the Giant Class is given.

Giant class pilots are allowed to participate also in either the Turbo Prop or Basic Scale class with an appropriate scale model, but **not** in the Jet Scale class.

Giant class pilots do **not** need to belong to a Jet Team of a country but start as individuals. The ranking will **not** be taken into account for the nations trophy of the Jet Scale class. The winner of the Giant Class is awarded the title IJMC Jet World Champion Giant Scale Class.

As the Giant Class is **not** (yet) an official IJMC competition class, pilots from the Giant Class may participate in the Airshow with the competition model before the competition has been started either with the static or flight display. After the competition has been started officially no competition pilot is allowed anymore to fly on the local airfield for show flying until the competition has been terminated with the last competition flight.

1.0 General Characteristics Giant Scale Class

1.0.1 Participation

Pilots participating in the Giant Scale class are permitted to also compete in either the IJMC Turbo Prop or Basic Jet Scale class.

1.0.2 Team classification

The ranking of the individual pilot in the Giant Scale Class will not be considered for the ranking of any team or nations ranking of the Jet Scale class and will have no nations ranking.

1.0.3 Propulsion of the model

The propulsion of the Giant Scale model must be a **jet or turboprop engine**.

1.1 Documentation

a) The documentation requirement is the minimum considered necessary to fully assess the outline from 3 aspects, the color, the markings and the realism. As with all scale airplanes static judging, good photographs are the prime means of judging scale accuracy. Photographs and reproductions should be of a reasonable size, (preferably DINA-4) and presented on separate sheets.

b) There are no prescribed penalties for missing or inadequate documentation, but judges can only award marks on the basis of the documentation available. Poor documentation will be reflected in reduced scores and any item of static judging for which there is no documentation will result in a Zero score for that item.

1.1.1 Photographic evidence:

A minimum of one (1) photograph or printed reproductions and a maximum of six (6) photographs or printed reproductions of the prototype, one or more of which must show the actual subject aircraft being modelled. At least one photograph must show the whole aircraft.

Photographs of the model are not permitted unless it is posed alongside the full-size prototype modelled for proof of color.

Photographs which show evidence of digital manipulation shall result in disqualification.

There is no requirement for close up or detailed photographs, but additional photographs (within the maximum of 6 total) can be used to support the three aspects if the outline needs clarification. One photograph (within the maximum of 6 total) can show a close-up of a scale detail.

1.1.2 Drawings:

Three view drawings (side view - left or right, front view, top view) are required and will be used by the judge as the basis for judging outlines.

Photographs take precedence when discrepancies exist between the drawings and the chosen subject.

1.1.3 Proof of color and markings:

This may be in the form of color chips or original paint samples, color photographs (which may be the same photos supplied for outline), or color illustrations published in books, magazines or on kit boxes. Published descriptions are also acceptable when accompanied by examples of similar colors used on other aircraft types. Authenticated color chips will not be a requirement for proof of color.

1.2 Static Judging

- a) The final static score shall be the sum of the individual judge's marks.
- b) All static judging is carried out at a distance of 5 meters. This is measured from the Centre line of the model to the judges seating position.
- c) Each of the items will be awarded a mark out of 10 by each Judge using increments of a tenth (1/10) of a mark.

1.2.1 Scale Accuracy

This is an assessment of the outline accuracy of the model compared with the prototype as seen from three aspects (side, front and top plan), judged by comparison with the documentation presented.

1.2.2 Colour Accuracy

This is an assessment of the accuracy of the colors of both the color scheme and the markings of the model in comparison with the documentation presented.

1.2.3 Markings Accuracy

Markings accuracy is an assessment of the position, orientation and size of the markings, including the camouflage scheme in comparison with the documentation.

1.2.4 Surface Accuracy

This is an assessment of how well the prototype's surface, as illustrated by the documentation, is reproduced on the model.

1.2.5 Scale Detail Accuracy

This reflects the accuracy with which the scale detail presented on that one picture is reproduced on the model.

1.2.6 Overall Realism

This is a subjective assessment of how well the model captures the character of the prototype as illustrated by the documentation, taking into account the surface finish, weathering and any other detail that is noticeable at 5m.

1.2.7 Propeller and Spinner (if applicable)

The number of propeller blades has to be the same as the full-scale prototype. The shape and size of the blades will not be judged. The shape of the spinner is judged under 1.2.1 Scale accuracy of the outlines.

1.2.8 Static Judging Items K-factor

Scale Accuracy:	
Side view	K= 7
Front view	K= 7
Top view	K= 7
Colours scheme Accuracy	K= 5
Markings Accuracy	K= 7
Surface Accuracy	K= 10
Scale Detail Accuracy	K= 7
Overall Realism	K= 10
<u>Total K=</u>	<u>60</u>

Normalisation:

The total of the competitors' static scores will be normalised to 500 points as follows:

$$\text{Static Points } x = Sx/Sw \times 500$$

Where:

Static Points x = Normalised Static Score for competitor x , Sx = Static Score for competitor x , Sw = Highest Static Score

1.3 Flying Schedule

The Flying Schedule and associated flying pattern are **identical to the Jet Scale class**.

Normalisation:

The total flight score of each competitor for each round will be normalised to 1000 points as follows:

$$\text{Flight Points } x = Fx/Fw \times 1000$$

Where: Flight Points x = Normalised Flight Score for competitor x , Fx = Flight Score for competitor x , Fw = Highest Flight Score

1.4 Final Scoring

For each competitor, add the normalised static score earned in 1.2 to the average of the normalised scores of the two best flights under 1.3.

If the competitor has achieved only one flight, the normalised score awarded for that flight will be divided by two.

If for any cause beyond the control of the organisers less than three official rounds can be flown, the scoring shall be completed as follows:

- If two rounds are flown, the average of the normalised scores of the two flights as in 1.3. will be used.
- If only one round is flown, the single normalised flight score of that one round will be recorded.
- The scores in an official round can be recorded only if all competitors had equal opportunity for a flight in that round.

2.0 Weight

2.0.1 The maximum Take-Off weight MTOW - **wet** (Fuel and ballast tanks adequately filled) of the Giant Scale model may not exceed 150kg. A weighting tolerance of +0,5% (750gr) is allowed due to the scale accuracy.

After refilling of all tanks the MTOW-wet is measured on a scale immediately before the start of the flight in the Pre-flight preparation zone. After the measurement procedure the model may not be modified or changed with any equipment which might lead to a change in weight. N.B.: A removable external tank can be used during the taxiing to the take-off position.

2.0.2 If the flying schedule will not be terminated by a safe and proper landing with a running engine caused by **missing fuel** the entire flight will be rated with zero points due to safety reasons. In this case the level of fuel will be checked and validated by the flight director after landing.

If a model does not meet the weight criteria for the class entered, the flight will score zero. The Organisers are encouraged to pursue weight checks after further flights on any model close to the limit.

Note 1: The organiser must provide scales with a resolution of 50 gram. In order to check the accuracy, he must also provide calibration weights of 1kg and 5kg for use throughout the competition so that scales can always be checked and scale calibration certificates will not be required. The scales used in the competition should be calibrated at the 25.0 kg limit and made available to the contestants at least one day before the start of the competition.

Note 2: The upper limit must comply with legal limits required by the country hosting the event.

