

4th PAGC – LEM 2022 – 15m+Std Handicapped Class – RATIONALE

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4th PAGC Organisers expect strong thermals and high cloud bases for the competition period, consistent with previous years when it was not uncommon to see Jantar Standards turning 400-500 km tasks with 110-130 km/h average speed. In this scenario, wing loading tends to play a major role. As a result, one important criteria for this competition handicap is that it should differentiate among similar gliders (same generation) when they have different wing loads at MTOM.

Also, due to very low availability of last generations gliders in South America, the handicapped class should cover a wide range of models. Libelle, Cirrus Standard, LS4, Jantar Standard, ASW20, Ventus "1" are among the most common there. Nonetheless, as a continental championship, we shall make an effort to also accommodate the possibility of pilots bringing top performance aircrafts like ASW27, ASG29, Ventus 2 and 3, Diana 2, JS3.

After comparison between well known handicaps in use throughout the world, the Organisers decided that the most adequate for this competition is the one used by SSA – Soaring Society of America, in United States.

In order to be used in the 4th PAGC, the original SSA system had to be adjusted according to the following criteria:

- general indexes inversion to reflect "the higher, the better";
- index adjustment to every model to bring it from the SSA reference mass/weight to its MTOM, using SSA own correction formulae;
- simple rescaling to bring paramount glider model (Jantar Standard 2) to a handicap index at MTOM to 1,000.

Also, 4th PAGC Organisers adopted additional criteria:

- a) no differentiation between pure gliders and motorgliders of the same model, provided MTOM are the same and aerodynamic features are similar. As an example, front retractable propeller aircrafts are considered similar to the pure glider of the same model;
- b) no differentiation between different fuselages (a/b) and similar features (c/cx), provided MTOM are the same and aerodynamic features are similar. In case SSA assigns different indexes, 4th PAGC organisers adopted the average after levelling for the same mass/weight;
- c) there will be a 0.004 increase in handicap index if winglet is fitted and not yet considered in the published model. Only manufacturer approved or maintenance inspector signed-off winglets will be allowed. Winglets should not result in increased wingspan (measured as defined in Sporting Code).
- d) 4th PAGC handicap index is based on MTOM for each model and MTOM will be enforced. If a pilot chooses to take off with a take off mass below MTOM, he/she can do it, provided it follows the configuration approved during technical inspection or as otherwise authorized by championship officials.
- e) if the pilot intends to fly a model which is not published in the table, or the published model lists different characteristics of his/her glider model, the Organisers may assign a specific handicap index for it under request. There will not be adjustments to particular serial numbers to accommodate for differences like heavy or light pilots, painting/repairs or equipment weight, etc. unless otherwise defined by championship officials. MTOM will be enforced.