AMA Competition Regulations Rules Change Proposal Form

Please complete this form and click on the SUBMIT button at the bottom of the page. This will send the proposal to the Competition Department at AMA HQ. A copy will then be sent to the appropriate Contest Board Chairman. The current issue of the Competition Regulations must be referenced.

Proposal Number: CLA21-10
Received Date: 2/
Revised Date:/
Version Number:

Proposal Type:
Basic

Applicable Competition Regulations this proposal relates to:
CL Aerobatics

Give Brief Summary of the Proposed Change:
Forbid electronic flight aids beyond motor speed control.

State exact wording proposed for the Competition Regulations. List paragraph number where applicable. Example: Change "quote present rule book wording" to "exact wording required".

2.7 Electronic Flight Aids/Augmentation

Electronic flight aids that act in any manner other than speed control are prohibited.

2.7.1 The input from the pilot to the aircraft shall be solely via mechanical movement of the control line or lines, with only the exceptions noted in Paragraph 2.6. The movement of any aerodynamic control surface shall be implemented only using mechanical linkages from the control lines. There shall be no electromechanical actuators (servos, motors, etc.) that in any way directly affect movement of any control surfaces or otherwise affect aerodynamic changes by electromechanical means.

2.7.2 The propulsion elements (engine or motor plus propeller or ducted fan) may use any form of feedback control (electronic controls, tuned pipes, etc.) as long as it does not affect the mechanical control system. Use of engine throttle, motor speed control, variable pitch propellers
is allowed. Use of accelerometers, gyros, pitot tubes, tank vents facing the wind is allowed.

2.7.3 Retractable landing gear shall not be considered an aerodynamic control surface so long as it retracts during flight and does not undergo controlled changes of position during maneuvering. It shall be the judgement of contest officials whether retracts that do not fully retract and appear to move during flight are being used as "cheater" control surfaces or are a result of poor workmanship.

2.7.4 Items intended to vector the propulsion thrust or apply maneuvering torque or force (including but not limited to engine gimbals, cyclic propellor pitch control, thrust vectoring vanes or direct lift control) shall be considered "aerodynamic control surfaces". Any such aerodynamic control surfaces shall be actuated entirely manually and only respond to control line movement through mechanical linkages as in paragraph 2.7.1 above.

2.7.5 Aircraft that use electromechanical actuators in the aerodynamic control system shall be excluded from competition until any and all such actuators are removed from the aircraft or are demonstrated to be mechanically disconnected. Electronically disabling such actuators ("turning them off") is not sufficient.

State logic behind proposed change, including alleged shortcoming of the present rule(s).
STATE INTENT FOR FUTURE REFERENCE:
The intent of 2.7 is to preclude the use of anything resembling aerodynamic stability augmentation, fly-by-wire control systems, or autopilots, while permitting the use of feedback control of the engine/motor/propellor via any means that may be devised, within the limits of paragraph 2.6. Any system or innovation not mentioned here shall be evaluated for compliance with this intent, and shall be permitted or excluded at the discretion of the CD/ED

If this proposal is for a new event, include all event test data/information here. Please provide information on what testing of this new event has taken place to include number of participants and number of contests.

State effect, if any, on current AMA records:
None

Note: The Contest Board Chairman may, in coordination with the submitter of the proposal, at any time prior to submitting a proposal to the contest board for Final Vote, edit proposal wording to increase clarity and to avoid ambiguity, provided the proposal intent is not changed.

Submitter Information:
AMA Number: 64232
Accompanying Documents: