



Request for Interpretation No. 6

of

AC Class Rule Version 1.2: June 10th 2015

Rule References:

15.1 The management of power used to adjust **control surfaces** on an **AC Class Yacht** shall only be controlled by:

- (a) **manual** input;
- (b) Electrical or electronic systems, operated in compliance with the **AC Class Rule** and initiated by **manual** input;
- (c) passive devices that limit power transmission or flow to one direction (check valves, relief valves, cams or ratchets, etc); and/or
- (d) relief valves including counter balance valves that release hydraulic oil into a low pressure return.

15.2 Control Systems in General

- (a) Except as provided in Rule 15.2(c) and 15.3, systems and devices used to adjust the **control surfaces** may only use direct **manual** input and/ or an internally generated timing signal initiated by **manual** input. Any input or feedback used by the control systems to adjust the **control surfaces** is not permitted unless specifically allowed by the **AC Class Rule**.
 - (c) A system controlling a hydraulic valve or drive clutch may use feedback from the internal state of that valve or drive clutch (e.g. to drive a cam or spool to a target position), providing that the feedback provides no information or indication as to the state of the control system outside that valve, drive clutch, or drive clutch actuator.
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Question:

Is it permissible for a hydraulic control valve on an AC Class Yacht to be controlled by an electrical signal received from a pressure sensor (directly or via a logic circuit), where that control valve is used to:

- a) select a hydraulic gear on a manually driven pump?
- b) control flow to or from an accumulator?

Interpretation:

- a) If the manually driven pump is used to adjust a control surface the control of the pump including gear selection must be initiated by manual input as required by Rules 15.1 (a) and 15.1 (b) Passive devices listed in Rule 15.1 (c) and (d) may always be used.
- b) As the accumulators are used to adjust control surfaces, flow to and from the accumulators must be initiated by manual input as required by Rules 15.1 (a) and 15.1 (b). Passive devices listed in Rule 15.1 (c) and (d) may always be used. End

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