

**PUBLIC COMMENT LOG**  
**AC 45-4**

Item No:	Company or Group	Page and Paragraph No:	Comment	Reason	Recommendation	Disposition
1	Garmin	Page 1, Question 5	The answer to this question imposes additional requirements on the material used to satisfy the “fireproof” requirement in (14 CFR) §45.11(a). Material as fireproof as steel or stainless steel is required by this AC which is more restrictive than the FAR.	(14 CFR) §45.11(a) currently just requires this plate to be “a fireproof identification plate” and many are made of lightweight aluminum.  The present wording would impose new requirements to perhaps disallow the use of aluminum plates which are so commonly used today in experimental and perhaps S-LSA/E-LSA aircraft.	Delete all sentences after the first sentence in the response to question 5 to prevent imposing a requirement that is more restrictive than the existing regulations.	<b>Non Concur:</b> 14 CFR 1.1 defines fireproof as the capacity to withstand the heat associated with fire at least as well as steel. The use of stainless steel is a means of compliance but as worded allows for other materials as long as the fireproof requirement is met.
2	Garmin	Page 4, Question 12	The response to this question recommends that the words “light sport” or “experimental” be displayed on the exterior surfaces of the aircraft.	(14 CFR) §45.23(b) does not require that the words “EXPERIMENTAL” and “LIGHT SPORT” appear on the exterior of the aircraft, and are commonly located inside the cabin in view of those entering the cabin. Also refer to this guidance from EAA which explains that these markings are not required to be external: <a href="http://www.eaa.org/experimenter/articles/2010-04_tales.asp">http://www.eaa.org/experimenter/articles/2010-04_tales.asp</a>	Remove sentence that recommends placement of these markings on the exterior of the aircraft to prevent imposing requirements that are more restrictive than the existing regulations.	<b>Non Concur:</b> This is correct that 14 CFR §45.23(b) does not specify external markings. This is a means of compliance but not the only means.
3	Garmin	Page 6, Question 13(e.(4))	This section implies that all S-LSA aircraft should be placarded that “flight operation in IMC are prohibited”.	Garmin has been told by an S-LSA company that their aircraft may be operated in IMC, so we are unclear as to whether this placard is required for all aircraft of this type.	Determine whether the IMC flight prohibition is accurate and if not, revise or remove the question and its response.	<b>Question or Statement:</b> ASTM Consensus Standard F2245-11 Section 9.21 states flight operations limited to VMC. So an S-LSA with a special airworthiness certificate in the light sport category has operational limits by design.

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4	Garmin	Pages 9-17, Questions 22- 31	The inclusion of guidance on marking various types of instruments including attitude, directional gyro, and power plant instruments seems beyond the scope of an AC on “Identification, Marking and Placarding” of LSA aircraft.	<p>There are ASTM working groups working to improve system and subsystem requirements for instrumentation used on LSA aircraft.</p> <p>Providing instrument marking guidance in this AC will certainly conflict with some of the ASTM guidance which will ultimately be provided by a consensus standard.</p> <p>Instrument marking is a complex topic not easily covered properly with an AC. As an example, the section providing guidance on marking attitude instruments discusses “blue over brown” coloring but doesn’t take into account the coloring present when a synthetic terrain presentation is used as is common on almost all of today’s EFIS systems. As another example, the requirements for inclinometer display include ball and vertical lines. As written, this would preclude other currently accepted means used such as aligned triangles.</p>	Remove questions and responses related to marking instruments.	<b>Non Concur:</b> While ASTM groups may be working instrument standards, the information contained in this document is a means of compliance for instruments installed but not the only means.
5	Adam Morrison	Page 2, Question 8	The subject of this question may be better addressed by the LSA consensus standards, where some information like this is already addressed.			<b>Non Concur:</b> It should be recognized that there are markings identified and required by the manufacturer that can be found in operating and in the maintenance manual and inspection procedures. We are highlighting this fact.

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6	Adam Morrison	Page 3, Question 11i	Some ultralight-style LSAs as well as 'boom-tail' designs may not be able to display 12 inch height letters on the boom nor the vertical stabilizer due to limited space.			<b>Non Concur:</b> Only LSA airplanes are required by regulation to have 12 inch nationality and registration markings.
7	Adam Morrison	Page 4, Question 12	If the intent is to be able to see the markings from the ground, it seems inconsistent to allow different sized and much smaller markings on certain types.			<b>Non Concur:</b> Sizes are dictated by regulation. See 14 CFR 45.
8	Adam Morrison	Page 5, Question 13	There are many references to ASTM standards in this section as well as text that looks nearly identical to language in the standards. It could be better to provide a reference to where the standards can be acquired. The standards are revised regularly, so at some point the standards and this AC could come into conflict, which would be very confusing. It seems that regularly revising this AC to reflect standards language would be burdensome.			<b>Non Concur:</b> The light-sport manufacturers assessment report dated May 17, 2010 revealed several issues regarding placarding. In this AC we are highlighting these issues.

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9	Adam Morrison	Page 7, Question 16	E-LSA aircraft are built in accordance to manufacturer's supplied Kit Assembly Instructions. They are supposed to be identical to S-LSA at the point of airworthiness approval. If the Kit Assembly Instructions require installation of a placard, then it must be installed...at least initially.			<b>Non Concur:</b> According to Order 8130.2g Change 1 Section 6 & 8, the FAA inspector or DAR will look for a placard for experimental aircraft.
10	Adam Morrison	Page 7, Question 20	There is active work within the ASTM standards committees to further define instrument and system performance requirements for indicating systems for LSA. These standards will not likely reference TSOs. It is confusing to mention TSOs here because the way it is worded gives the appearance that TSO instruments are required.			<b>Non Concur:</b> There is no conflict. The use of conditional language gives the public guidance regarding what is recommended and acceptable to the FAA. Other standards may be used, but the FAA may find them unacceptable.
11	Adam Morrison	Page 7, Question 21	I don't believe that there are any explicit restrictions about the type of instruments (technology) that may be installed. What value does this question add to the draft AC? Eventually, it could be limiting, should technology advance to a new areas that isn't listed here.			<b>Non Concur:</b> The information contained in this document is a means of compliance for instruments installed, not the only means.

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12	Adam Morrison	Page 13, Question 29	Why would the sight tube or translucent tank be limited to PPC and weight-shift? Airplanes have used these techniques successfully for many years.			<b>Non Concur:</b> These are only examples for PPC or weight-shift, not requirements, as a means of compliance and not the only means.