

Comment				Comment summary	Suggested resolution	Comment is an observation or is a suggestion*	Comment is substantive or is an objection**	EASA comment disposition	EASA response
NR	Author	Section, table, figure	Page						
1	Boeing		Page 3 Paragraph 3	<p>THE PROPOSED TEXT STATES:</p> <p><i>“The end item safety tests, particularly the thermal runaway containment test, require a modification of the battery, such as the addition of a heating device. This modification modifies the article response to the shock and vibration tests and may not be able to sustain the shock and vibration levels. Hence, it is inappropriate to require that the actual batteries used in the End Item safety tests have previously passed the End Item vibration and shock tests. These batteries are however modified for the purpose of the test from new batteries of the same design that met the criteria for the battery tests.”</i></p> <p>REQUESTED CHANGE:</p> <p>Delete or coordinate with RTCA to update Figure 2-27 in DO-227A to indicate the correct order of tests.</p> <p>JUSTIFICATION:</p> <p>The second sentence is incorrect in that the specification does not require the addition of the heater prior to the shock and vibration testing. Therefore, there is no change in the dynamic characteristics of the Battery and/or End Item, and it is appropriate to utilize these actual Batteries in the End Item safety tests. For clarification, RTCA SC-235 intended the Batteries used in the End Item Containment Test to have previously experienced the shock and vibration environment of those prior tests</p>		no	yes	Rejected	<p>Depending on the design of both the battery pack and the end-item (e.g. moulded injection), the modification of the battery to include the heater can only be performed during the production of the equipment, and not as a modification of a production-standard article.</p> <p>Furthermore, it is noted that no thermal stress, such as a temperature cycling test, is required at the end-item level. It is therefore understood that the objective of the end item functional tests (DO-227A §2.4.3.1 containing the vibration and shock tests) is not to condition the battery pack but to verify that the installation of battery pack in the end-item does not result in a more stringent environment than the one exercised during the battery tests.</p> <p>Introducing an order to the end-item tests means adding a requirement, which would most probably result in a new revision of DO-227A.</p> <p>We do not intend to impose a more stringent testing than what is currently required by DO-227A Figure 2-27 without this being discussed within RTCA SC-235.</p> <p>We look forward for SC-235 to discuss further the question and resolve the contradiction.</p>
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** Please complete this column using the word “yes” or “no”