

Tabela de diferenças entre emendas e justificativas Emenda 145 para 146

25.954		Justificativa
RBAC 25 Emenda 25-145	RBAC 25 Emenda 25-146	
<p>§ 25.954 Fuel system lightning protection. The fuel system must be designed and arranged to prevent the ignition of fuel vapor within the system by— (a) Direct lightning strikes to areas having a high probability of stroke attachment; (b) Swept lightning strokes to areas where swept strokes are highly probable; and (c) Corona and streamering at fuel vent outlets.</p>	<p>25.954 Fuel system lightning protection. (a) For purposes of this section— (1) A critical lightning strike is a lightning strike that attaches to the airplane in a location that, when combined with the failure of any design feature or structure, could create an ignition source. (2) A fuel system includes any component within either the fuel tank structure or the fuel tank systems, and any airplane structure or system components that penetrate, connect to, or are located within a fuel tank. (b) The design and installation of a fuel system must prevent catastrophic fuel vapor ignition due to lightning and its effects, including: (1) Direct lightning strikes to areas having a high probability of stroke attachment; (2) Swept lightning strokes to areas where swept strokes are highly probable; and (3) Lightning-induced or conducted electrical transients. (c) To comply with paragraph (b) of this section, catastrophic fuel vapor ignition must be extremely improbable, taking into account flammability, critical lightning strikes, and failures within the fuel system.</p>	<p>O requisito 25.954, 25.981(a)(3), 25.981(d) e adição do H25.4(a)(5) estão sendo emendados para aliviar as exigências das emendas anteriores em relação à proteção contra descargas atmosféricas do sistema de combustível de aviões categoria transporte. As emendas vigentes até então se mostraram impraticáveis de serem cumpridas em relação a esses aspectos, tendo sido publicadas pela FAA Policy Letters de orientação para elaboração pedidos de isenção parcial e condições especiais para os projetos sob essas emendas, o que se tornou prática para os aviões certificados sob a emendas anteriores. Após intensa discussão com a indústria, optou-se pela revisão dos supracitados requisitos conforme a emenda 25-146.</p>

	(d) To protect design features that prevent catastrophic fuel vapor ignition caused by lightning, the type design must include critical design configuration control limitations (CDCCLs) identifying those features and providing information to protect them. To ensure the continued effectiveness of those design features, the type design must also include inspection and test procedures, intervals between repetitive inspections and tests, and mandatory replacement times for those design features used in demonstrating compliance to paragraph (b) of this section. The applicant must include the information required by this paragraph in the Airworthiness Limitations section of the Instructions for Continued Airworthiness required by § 25.1529.	
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25.981		Justificativa
RBAC 25 Emenda 25-145	RBAC 25 Emenda 25-146	
<p>§ 25.981 Fuel tank ignition prevention.</p> <p>(a) ...</p> <p>....</p> <p>(3) Demonstrating that an ignition source could not result from each single failure, from each single failure in combination with each latent failure condition not shown to be extremely remote, and from all combinations of failures not shown to be extremely improbable. The effects of manufacturing variability, aging, wear,</p>	<p>25.981 Fuel tank explosion prevention.</p> <p>(a)</p> <p>...</p> <p>(3) Except for ignition sources due to lightning addressed by § 25.954, demonstrating that an ignition source could not result from each single failure, from each single failure in combination with each latent failure condition not shown to be extremely remote, and from all combinations of failures not shown to be extremely</p>	<p>O requisito 25.954, 25.981(a)(3), 25.981(d) e adição do H25.4(a)(5) estão sendo emendados para aliviar as exigências das emendas anteriores em relação à proteção contra descargas atmosféricas do sistema de combustível de aviões categoria transporte. As emendas vigentes até então se mostraram impraticáveis de serem cumpridas em relação a esses aspectos, tendo sido publicadas pela FAA Policy Letters de orientação para</p>

<p>corrosion, and likely damage must be considered.</p> <p>....</p> <p>(d) Critical design configuration control limitations (CDCCL), inspections, or other procedures must be established, as necessary, to prevent development of ignition sources within the fuel tank system pursuant to paragraph (a) of this section, to prevent increasing the flammability exposure of the tanks above that permitted under paragraph (b) of this section, and to prevent degradation of the performance and reliability of any means provided according to paragraphs (a) or (c) of this section. These CDCCL, inspections, and procedures must be included in the Airworthiness Limitations section of the instructions for continued airworthiness required by §25.1529. Visible means of identifying critical features of the design must be placed in areas of the airplane where foreseeable maintenance actions, repairs, or alterations may compromise the critical design configuration control limitations (e.g., color-coding of wire to identify separation limitation). These visible means must also be identified as CDCCL.</p>	<p>improbable, taking into account the effects of manufacturing variability, aging, wear, corrosion, and likely damage.</p> <p>....</p> <p>(d) To protect design features that prevent cata-strophic ignition sources within the fuel tank or fuel tank system according to paragraph (a) of this section, and to prevent increasing the flammability exposure of the tanks above that permitted in par-agraph (b) of this section, the type design must include critical design configuration control limita-tions (CDCCLs) identifying those features and providing instructions on how to protect them. To ensure the continued effectiveness of those fea-tures, and prevent degradation of the performance and reliability of any means provided according to paragraphs (a), (b), or (c) of this section, the type design must also include necessary inspection and test procedures, intervals between repetitive in-spections and tests, and mandatory replacement times for those features. The applicant must in-clude information required by this paragraph in the Airworthiness Limitations section of the Instruc-tions for Continued Airworthiness required by § 25.1529. The type design must also include visible means of identifying critical features of the design in areas of the airplane where foreseeable maintenance actions, repairs, or alterations may compro-mise the CDCCLs.</p>	<p>elaboração pedidos de isenção parcial e condições especiais para os projetos sob essas emendas, o que se tornou prática para os aviões certificados sob a emendas anteriores. Após intensa discussão com a indústria, optou-se pela revisão dos supracitados requisitos conforme a emenda 25-146.</p>
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Apêndice H ao RBAC 25		Justificativa
RBAC 25 Emenda 25-145	RBAC 25 Emenda 25-146	
H.25.4(a)(5) Inexistente	<p>H.25.4(a)</p> <p>...</p> <p>(5) Each mandatory replacement time, inspection interval, and related inspection and test procedure, and each critical design configuration control limitation for each lightning protection feature approved under § 25.954.</p>	<p>O requisito 25.954, 25.981(a)(3), 25.981(d) e adição do H25.4(a)(5) estão sendo emendados para aliviar as exigências das emendas anteriores em relação à proteção contra descargas atmosféricas do sistema de combustível de aviões categoria transporte. As emendas vigentes até então se mostraram impraticáveis de serem cumpridas em relação a esses aspectos, tendo sido publicadas pela FAA Policy Letters de orientação para elaboração pedidos de isenção parcial e condições especiais para os projetos sob essas emendas, o que se tornou prática para os aviões certificados sob a emendas anteriores. Após intensa discussão com a indústria, optou-se pela revisão dos supracitados requisitos conforme a emenda 25-146.</p>