COMMENT RESPONSE DOCUMENT (CRD) TO NOTICE OF PROPOSED AMENDMENT (NPA) 2009-07

for amending the Executive Director Decision No 2003/02/RM of 17 October 2003 on certification specifications, including airworthiness codes and acceptable means of compliance, for large aeroplanes (« CS-25 »)

'Security related design standards'

Explanatory Note

I. General

1. The purpose of the Notice of Proposed Amendment (NPA) 2009-07, dated 14 July 2009, was to propose an amendment to Decision 2003/02/RM of the European Aviation Safety Agency of 17 October 2003 on certification specifications, including airworthiness codes and acceptable means of compliance, for large aeroplanes CS-25 as last amended by Executive Director's Decision 2009/017/R of 11 December 2009 (CS-25 amendment 8).

II. Consultation

2. The draft Executive Director Decision amending Decision No 2003/02/RM was published on the website (http://www.easa.europa.eu) on 16 July 2009.

   By the closing date of 16 October 2009, the European Aviation Safety Agency ('the Agency') had received 29 comments from 12 National Aviation Authorities, professional organisations and private companies.

III. Publication of the CRD

3. All comments received have been acknowledged and incorporated into this Comment Response Document (CRD) with the responses of the Agency.

4. In responding to comments, a standard terminology has been applied to attest the Agency's acceptance of the comment. This terminology is as follows:

   - **Accepted** — The comment is agreed by the Agency and any proposed amendment is wholly transferred to the revised text.
   - **Partially Accepted** — Either the comment is only agreed in part by the Agency, or the comment is agreed by the Agency but any proposed amendment is partially transferred to the revised text.
   - **Noted** — The comment is acknowledged by the Agency but no change to the existing text is considered necessary.
   - **Not Accepted** — The comment or proposed amendment is not shared by the Agency.

   The resulting text highlights the changes as compared to the current rule.

5. The Executive Director Decision will be issued at least two months after the publication of this CRD to allow for any possible reactions of stakeholders regarding possible misunderstandings of the comments received and answers provided.

6. Such reactions should be received by the Agency not later than **14 June 2010** and should be submitted using the Comment-Response Tool at http://hub.easa.europa.eu/crt.

IV. CRD table of comments, responses and resulting text

(General Comments)	-

comment	6	comment by: *LAMA*
	The Light Aircraft Manufacturers Association (LAMA) USA is the leader and advocate of the Light Sport Aircraft (LSA) Community in both the USA and Overseas. As the Light Sport industry, (in which the majority of European manufactures enjoy the majority of their sales of these 2-place training and recreational airplanes in the USA) benefits from the ASTM airworthiness standards created by the FAA, interested public persons, and the LSA industry itself, LAMA sees no value or purpose for EASA to pursue complicated airworthiness issues, such as "amending standards of large airplanes" for these kind of aircraft. We plead to EASA to come to the same conclusion many other countries in Afica, Asia, Australia, South America and China have come to, and for uniformity, for industry self-regulation, we plead for EASA to adopt the ASTM airworthiness standards for light sport aircraft. Respectfully submitted: Larry Burke, Founder and Chair Emeritus Light Aircraft Manufacturers Association	
response	*Noted*	
	This comment is not applicable to our rulemaking task as CS-25 is not applicable to LSA.	

comment	9	comment by: *Luftfahrt-Bundesamt*
	The LBA has no comments on NPA 2009-07.	
response	*Noted*	

comment	14	comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*
	The Swedish Transport Agency, Civil Aviation Department is supporting the content of NPA 2009-07	
response	*Noted*	

comment	18	comment by: *KLM*
	General remark: The proposed requirements may increase security on board. However, as the security barriers on board the aeroplane are the last line of defense, a study should be performed to investigate whether it is more beneficial to implement better security requirements/procedures on the ground which increases the security on board of the aeroplanes by at least the same level as this NPA. Security is made on the ground.	

response	*Noted*
	We fully support the idea that the highest security level can only be obtained if high security level is achieved on the ground. Anyhow, this rulemaking task was only aimed at improving the design of large aeroplanes thanks to improved security provisions. The security on the ground is outside of the remit of this task.

comment	*21*	comment by: *ECA- European Cockpit Association*
	ECA considers that all security rules should be in the same legal act. In ECA's comments to NPA 2009-02 we stated our preference for all security related legislation to be concentrated in Regulation 300/2008. Without prejudice to this remark, ECA accepts the logic that certification specifications for aircraft design are all in one set of rules, even if they concern security. However, it would be useful to make a rlear reference to Regulation 300/2008 to ensure consistency and avoid any possible conflict of laws.	
response	*Not accepted*	
	CS-25 only contains design specifications and only refers to technical guidance. The Agency believes it is of no help for manufacturers to have a reference to Regulation 300/2008 in CS-25. The regulation 300/2008 does not deal with aircraft design so there is no possibility of conflict.	

comment	*22*	comment by: *ECA- European Cockpit Association*
	In addition to features proposed in this NPA, ECA advocates for the introduction of the following criteria in the security design of aircraft: a. Seat design with easy check capability. b. Transparent or easy to inspect seat back pockets. c. Transparent or easy check or sealable life jacket containers. d. Easy check maintenance and replenishment panels and spaces. e. Security sealing of rarely used panels which are accessible to passengers. f. Fixed mirrors in overhead bins and difficult corners of baggage spaces. g. Provision of simple search equipment for crews, e.g. mirrors on rods, probes. h. Unbroken linings for cabin stowage's and cabin walls. i. Fairing over external spaces which are difficult to inspect. j. External panels openable only with special tools.	
response	*Partially accepted*	
	At the time FAA was drafting the rule, the requirement on search was the one which raised the biggest concerns from the Working Groups requested to make proposals to FAA. Original concept of the rule was to cover the whole cabin. But it was concluded that compliance of the whole cabin and implementation harmonisation would be too difficult to assess. So the final proposal was finally provided by FAA based on the areas given the most concern by security and by people actually performing the searches: tops of stowage bins, life preservers stowage areas and toilet discharge. However, in addition to those mandatory areas, AMC 25.795 (c) (3) (appendix 1 of AC 25.795-8) refers to recommendations for supplemental design	

	improvements to facilitate the search. These non mandatory recommended practices include all of your proposals except for items g and j that are outside the remit of our rulemaking task.

A. Explanatory Note — IV. Content of the draft opinion / decision — Subject of the proposed amendment	p. 4-9

comment	*28*	comment by: *Boeing*
	Page: 6 Paragraph: *16* Boeing suggests that the following changes be made: Either: Modify the last sentence to read as follows: 'This new requirement will allow compliance with ICAO annex 8 (Amendment 101), ***except that the requirement does not cover aeroplanes used solely to transport cargo***.' or Add a statement that this requirement only applies to airplanes that have a cockpit door. **JUSTIFICATION:** The clarifying statement needs to be added because this part of the NPA is only intended to be applicable when a flight deck door is installed (not for cargo airplanes).	
response	*Partially accepted*	
	The Agency agrees that this requirement only applies when a flight deck door is required by the operating rules. But as mentioned at the beginning of the paragraph, the proposed change only extends the already existing requirement to bulkhead and accessible boundary. The applicability is not changed, this is why it is not repeated in this paragraph. Anyway, for clarity, it could have been explicitly mentioned. The comment is agreed in principle but the Explanatory Note, not being part of the rule, will not be re-published and so formal revision is not needed.	

comment	*29*	comment by: *Boeing*
	Page: 7 Paragraph: *18* Boeing suggests that the following change be made: Change the last paragraph, which currently states: 'FAA (in FAR 25.795) as well as ICAO (in Annex 8, except for fire suppression system, see paragraph 19 a.) have elected to apply the same applicability criteria. ' To read as follows: FAA (in FAR 25.795) as well as ICAO (in Annex 8, except for fire suppression system, see paragraph ***20*** a.) have elected to apply the same applicability	

	criteria.' **<u>JUSTIFICATION</u>:** The reference to paragraph 19 a. is incorrect. The correct reference is paragraph 20 a.
response	*Partially accepted*
	The commenter is right: reference to 19a is wrong; correct one is 20a. The comment is agreed in principle, but the Explanatory Note, not being part of the rule, will not be re-published and so formal revision is not needed.

A. Explanatory Note — V. Regulatory Impact Assessment p. 9-17

comment	*16*	comment by: *KLM*
	'In paragraph 25 a under I (Safety) it is stated that modifications to the Aircraft design will save 114 lives in a period of 50 years. These modifications, due to the weight increase of aircraft, will also increase the fuel burn and associated Greenhouse emissions (50 ton per year = 2500 ton in 50 years). In the NPA no substantiated figures are given about the negative impact on human lives in relation to the extra Greenhouse emissions in the next 50 years.'	
response	*Partially accepted*	
	The analysis of the GHG emissions showed that there is an effect, albeit a very limited one, which is outweighed by the benefits in terms of lives saved. The possible negative impact on human lives caused by the additional GHG emissions is very difficult to estimate and would go beyond the scope of this analysis. Note also that with the inclusion of aviation in the EU Emissions Trading Scheme (ETS) there is a European approach to managing the greenhouse gas emissions from aviation.	

comment	*17*	comment by: *KLM*
	Because of the increase of the weight (incl. fuel) with approx 160 kg due to these new security requirements, the max. payload will decrease. This has not been included in the regulatory impact assessment	
response	*Accepted*	
	Thank you for this comment. The Agency will consider this effect in future assessments. For the current proposal it is not considered to change the overall outcome of the assessment as for the bulk of aircraft this would represent less than 1% of payload reduction.	

comment	*19*	comment by: *KLM*
	Para. ii. Economic, Option 2 a.o. states: "*... In some rare cases of <u>significant</u> changes like passengers to freighter conversions, major cabin refurbishment, some requirements could become applicable for a <u>major change to the TC</u> and this would imply additional design costs.*" For clarification (and to avoid any misinterpretations) a statement must be added that these requirements are applicable only in case of significant major	

	chances to the TC (and thus not in case of non-significant changes to the TC).
response	*Not accepted*
	The sentence proposed begins with 'in some rare cases of significant changes', which makes clear applicability of the change. In addition, in the section 'Subject of the proposed amendment', under paragraph 10 (page 5 of NPA), general applicability of the regulation is given: 'This CS-25 amendment is only applicable to new and amended Type Certificates and STCs as applicable under Part 21A.101. This NPA does not cover any retroactive requirement.'

comment	*27*	comment by: *Gulfstream Aerospace Corp*
	Gulfstream understands and supports the intent of security related design changes as applied toward air carrier operations. However, the purpose of this NPA is clearly targeting aircraft with large passenger carrying capability to derive the biggest safety benefit to the flying public. The impact assessments indicated within this NPA are statistically tailored from air carrier type aircraft operations, and do not appear to take into account corporate or private large aircraft operations. While the corporate and private type aircraft are becoming increasingly larger the number of flights and persons/passengers involved is relatively small, comparatively speaking, from those of commercial aircraft operations. As such the proposed rule should not make reference to a weight threshold, but should be solely based on passenger count. Therefore, Gulfstream requests that EASA consider applicability of this proposed amendment to exclude all corporate and/or private airplanes with 20 passengers or less.	
response	*Partially accepted*	
	As mentioned in paragraph 18, the dividing line of 45500 kg and 60 passengers was defined 'according to the security risks associated with the size of the aeroplane'. The only exclusion is about all-cargo aeroplane because the number of occupants is small and they are not considered as 'passengers'. This means that they can receive specific safety instructions. Today there is no differentiation in CS-25 between private large aeroplane transporting passengers and commercial air transport large aeroplane transporting passengers. There is a rulemaking task that was just opened (task MDM-066) that will cover the case of specific VIP cabin designs. At that time, we will take into consideration your proposal to discriminate this requirement for more or less than 20 passengers knowing the specificities linked to VIP operations: access, passengers, cabin… The requested consideration is outside the remit of this task and cannot be done in the frame of this task.	

comment	*30*	comment by: *Boeing*
	Page: 13 Paragraph: *25.a.ii Economic* <u>Boeing suggests that the following changes be made</u>:	

	Change the proposed text that currently states: "It is to be noted that those impacts are limited by the fact that this requirement is only applicable for new TC." To read as follows: "It is to be noted that those impacts are limited by the fact that this requirement is only applicable for new ~~TC~~ ***and amended TCs and STCs as applicable under Part 21A.101. This NPA does not cover any retroactive requirement.***" **JUSTIFICATION:** The wording in this paragraph needs to be consistent with Paragraph 10 of this NPA (on page 5 of the NPA).
response	*Partially accepted*
	The Agency agrees that this simplified paragraph on applicability is not fully consistent with paragraph 10. This paragraph was indeed simplified to focus on economical impacts. Nevertheless, even if the comment is agreed in principle, the explanatory note, not being part of the rule, will not be re-published and so formal revision is not needed.

comment	*31*	comment by: *Boeing*
	Page: 13 Paragraph: *25.a.ii Economic* Boeing comment: EASA states that the FAA estimate for certification and manufacturing costs related to Amendment 25-127 is around 196 million Euros, while the EASA estimate for the same is 78 million Euros. However, there is no explanation for this 118 million Euro difference. Some discussion should be included in this section of the NPA. **JUSTIFICATION:** As this is a cost that directly affects manufacturers such as Boeing, as well as operators, it is appropriate that an explanation of the cost differences be provided.	
response	*Partially accepted*	
	The figures quoted are aggregate costs for certification and manufacturing. In this calculation the certification costs and the manufacturing costs per aircraft are the same in the FAA and EASA analysis. The difference is exclusively driven by the assumed affected fleet. As you can see in table 4, 60 deliveries in EASA countries are estimated based on the rule per year by EASA. FAA assumed 156 for the US. We agree with you that we could have highlighted it better in the explanatory note. But the explanatory note, not being part of the rule, will not be revised and re-published.	

B. DRAFT RULES — II Draft Decision CS-25 p. 18-20

comment	4	comment by: *LHT DO*
	The rulemaking activity of FAA does focus on Part 121 aircraft and therefore does not include VIP aircraft. Therefore, EASA shall not set the rules more stringent. LHT proposal is to harmonize our business under both regulations: CS25.795 (b): first line: Exchange '... of more than 60 persons ~~**or**~~ a maximum take-off weight of over 45500 kg' by '... of more than 60 persons **and** a maximum take-off weight of over 45500 kg'. CS25.795 (c): first line: Exchange '... of more than 60 persons ~~**or**~~ a maximum take-off weight of over 45500 kg' by '... of more than 60 persons **and** a maximum take-off weight of over 45500 kg'.	
response	*Not accepted*	
	See answer to comment No 27 concerning VIP aircraft. In addition, as already emphasised in answer to comment No 19, this task does not cover any retroactive requirement. CS-25 amendments are only applicable to new and amended Type certificates and STCs as applicable under Part 21A.101. The applicability of both paragraphs CS 25.795 (b) and (c) for new TC is the same as for FAA.	

comment	7	comment by: *Jean-Jacques MACHON*
	Comment to EASA NPA N° 2009-07 The proposed CS-25 25.795 amendment, § (b)(3), addresses the cargo compartment fire suppression system components in the event of a bomb explosion and reads: "(3) ... *All cargo-compartment fire suppression-system components must be designed to withstand the following effects ...:* *(i) impact or damage from a 13 mm (0.5 in) -diameter aluminium sphere travelling at 131 m/s (430 feet per second);* *(ii) a 103 kPa (15 PSI) pressure load if the projected surface area of the component is greater than 0.4 square meter (4 square feet). Any single dimension greater than 1.2 meters (4 feet) may be assumed to be 1.2 meters (4 feet) in length."* The ISO TC20/SC9, Air Cargo, sub-committee is concerned at potential interpretation of the "fire suppression system component" designation as including any future fire resistant containers or pallet covers, that could be introduced to improve fire protection in cargo compartments other than Class C, and thus might be deemed part of the fire suppression system in the broad	

	sense. TC20/SC9 is currently working on a preliminary draft international standard (ISO 14186) for such pallet covers. They will definitely have an area greater than 0.4 square meter, and the application of (b)(3)(ii) to an area of 1.2 x 1.2 = 1.44 square meter would result in a local load of approximately 148000 N being instantly applicable to any such local area on the larger container or pallet cover surface. This is more than the whole TSO C90 approval testing ultimate load for either containers or nets, where loads are distributed on a much larger whole surface. It is doubted whether containers could withstand it, but there is a strong belief that fire resistant pallet covers, being built of lightweight materials, in any event could not. It also seems highly unlikely that either could withstand the aluminium sphere impact as per (b)(3)(i). The corresponding FAA Advisory Circular 25.795-5 of 24 Oct 2008, § 6 b) and c), considers fire suppression system components as being fire detectors and suppression agent storage vessels, distribution tubing and associated hardware. This definition clearly does not include cargo containers and pallets, whether or not designed to provide fire-resistant features. EASA is requested to provide clarification that cargo containers and pallets, whether or not designed to provide a fire-resistant capability, are not to be considered "fire suppression system component" for the purposes of the new regulation. Submitted by: Jean-Jacques Machon Vice Chair ISO TC20/SC9 Convenor TC20/SC9/WG2, Airworthiness
response	*Partially accepted*
	The comment is about the definition of ‘fire suppression system component’. The commenter wonders if the future fire resistant containers or pallet covers that could be introduced as part of fire protection in cargo compartments can be considered as a component of the cargo-compartment fire suppression-system. The AC 25.795-5 describes indeed the general detection and fire suppression systems components. ‘The fire detection system generally consists of detectors…’ and ‘the fire suppression system generally consists of storage vessels, distribution tubing or piping and associated hardware’. This comment raises an interesting point. Whilst it is difficult to consider fire resistant pallet covers or containers as fire suppression ‘system’ components, it must be considered that the intention with future Class F Cargo Compartment design solutions has always been that they will provide a minimum level of safety consistent with the other available classes of cargo compartment. In the case of the risk covered by CS25.795(b)(3), i.e. an explosive device, if a Class F Cargo Compartment solution were to provide significantly lower post explosion protection against further aircraft damage (i.e. from the subsequent fire) than for instance a Class C Cargo Compartment designed to the new rule, this would be contrary to this intent. At this stage, detailed Class F Cargo Compartment designs have not been presented to EASA and so it is difficult to assess the feasibility of compliance to CS 25.795(b)(3). For instance, a single penetration of a Fire Containment Cover (FCC) by the 13mm diameter aluminium sphere will not necessarily

	negate its fire containment properties. Furthermore, it might be possible to include some form of pressure relief in a FCC to allow venting during an explosive event and the preservation of some fire containment performance. In the case where a Class F Cargo Compartment has a liner that would provide some continued aircraft protection from the effects of post explosion fire sources, it may be acceptable that the design of the pallet covers or containers has less or no ability to meet the requirements of CS25.795(b)(3). After consideration of all the above, EASA is of the opinion that these issues be best handled on a case by case basis as designs for Class F Cargo Compartments are presented. If deemed appropriate, Special Conditions would be issued. At this point it is not possible to make a clear decision that the intent of CS 25.795(b)(3) will not be deemed applicable to fire resistant pallet covers or containers. Please also refer to comment No 13 about fire suppression system definition

comment	*8*	comment by: *Zhuguo Zhang*
	I have some questions as follow: For pilot and cabin smoke protection, AC 25.795-3 and -4 state that relevant protions of the smoke removal procedures in AC 25-9A may be followed. However, I don't think the same pass/fail criteria can be applied to the flight test for requirement of pilot/cabin smoke protection. For example, if the cabin smoke can be removed during a long time, it's unacceptable. So then could the smoke removal time be determined? For cargo fire suppresion system, it must be designed to withstand 15 Psi pressure load if the projected surface area of the component is larger greater than 4 square feet. while, could you clarify the projected surface area, Which surfaces should the component project? Are the projected surfaces need relative to the potential event or any surfaces? Section 25.795(c)(1) states "flight-critical system", while section 25.795(c)(2) states "redundant airplane system necessary for continued safe flight and landing", What's the difference between them? AC 25.795-7 states that flight critical system are identified by manufacturers. What are they generally? Section 25.795(c)(1) requires that a least risk bomb location must be designed on the airplane, so AC 25.795-6 introduces some approaches to best protect integrity of the structure and flight-critical systems, while the AC state that the location of the LRBL should include considerations of the secondary effects, including ingestion of debris into the engine, large mass strikes on the tailplane. If the LRBL is a door, the door may be lost when detonation occurs, then the door as a discrete source can easily be ingrested into the engine or strike on the tailplane. So I request clarifying how the secondary effects be considered. Section 25.795(c)(3) states that "Life preservers or their stowage locations must be designed so that tampering is evident", I requrest some examples acceptable by EASA be provided to show compliance with the requirement. If manufactures design life preservers stowage location that is easy to see, What's the typical location? Does it mean that life preservers cannot be placed under seats?	

	Thank you very much!
response	*Noted*
	1) 1. AC 25.795-3 and AC 25.795-4: Concerning passenger cabin smoke protection, the AC 25.795-4 proposes an acceptable means of compliance which is an air change rate of at least once every 5 minutes, for a 30-minute continuous period. So this acceptable means gives an idea of the timeframe if the chosen option is the removal of the smoke. An alternative to direct evacuation of the smoke is to provide occupants with protective breathing equipment. This design solution can either extend the time to remove the smoke or even cancel the requirement if the protective equipment provides protection of the occupants for the entire duration of the flight. So, depending on the design solution it is difficult to define the smoke removal time and it shall be assessed on a case by case basis. Concerning the flight deck protection, the requirement is such that there is no time criteria: the aircraft must be designed to limit the entry of fumes thanks to a pressure differential. 2) 2. Cargo fire suppression system to withstand pressure load: You are right, the projected surface is relative to the potential event: in other words, the surface to be considered is the one facing the explosion if we assume the explosion can take place anywhere in the cargo compartment. 3) 3. 25.795(c)(1) 'flight-critical system'/25.795(c)(2) 'redundant airplane system necessary for continued safe flight and landing'. The wordings are different because they refer to completely different rules and systems: The first one is about a specific location (LRBL) where flight critical systems need to be designed in such a way that effects of an explosion in that location are minimised. This location shall be chosen where the least possible critical systems are. The second one refers to all the existing redundant systems that are necessary for continued safe flight and landing and requires for a physical separation. This applies to the whole aeroplane (some exceptions are given where it is impracticable). Concerning the flight critical systems, you are right: they are defined by the aircraft manufacturer. They are the ones necessary for safe flight and landing. For more information on a given aeroplane, we suggest you contact the manufacturer of this aeroplane. 4) 4. 25.795(c)(1) and AC 25.795-6: LRBL and secondary effects For the LBRL assessment, the focus should be on primary effects but in a second step, if there are different possible locations, the secondary effects should be considered as mentioned in the AC. There is no unique and ideal LBRL location. Its determination will always be a compromise and balance of different effects. The objective is to minimise the

	effects of a bomb so the assessment of the manufacturer consists in ensuring that consequences will be minimised if the bomb is located in the LRBL. 5) 5. 25.795(c)(3) 'Life preservers or their stowage locations must be designed so that tampering is evident'. The paragraph 25.795 (c) (3) on life preservers stowage does not prevent the life preservers to be under the seat. One of the proposed designs in the AC (paragraph 7.a.) is to include tamper seals that will break any time the life preserver compartment is accessed. This design typically allows for life preservers to be placed under the seat as tampering becomes evident without getting it out from under the seat. So this paragraph does not necessarily require for a change in location. It requires the life preserver stowage to be easily seen so that tamper is not evident.

comment	*10*	comment by: *Airbus SAS*
	This comment is related to NPA chapter B II., Draft Decision CS25.795 (b)(2), (c)(1) & (c)(3): Airbus proposes to remove the exclusion of cargo-only airplanes from sub-paragraphs (b)(2), (c)(1) & (c)(3). Instead, add a dedicated paragraph for cargo-only airplanes. Rationale for proposal: Cargo-only airplanes are already excluded from the applicability of paragraphs (b) & (c) "An aeroplane with a certificated passenger seating capacity of 60 persons…".	
response	*Not accepted*	
	Cargo-only aeroplanes are not basically excluded from the whole paragraphs (b) and (c) and therefore exclusion of those aeroplanes is needed in the appropriate subparagraphs (b) (2), (c) (1) and (c) (3): Applicability of paragraphs (b) and (c) is given as follow: 'Aeroplanes with a certificated passenger seating capacity of more than 60 persons or a maximum take-off weight of over 45 500 kg (100 000 lb)' which means that aeroplanes that meet only one over the two criteria need to comply with the relevant requirement. So basically, (b) and (c) paragraphs are applicable to cargo-only aeroplanes with maximum take-off weight over 45 500 kg. So the Agency does not see any reason to create a dedicated paragraph.	

comment	*11*	comment by: *Airbus SAS*
	This comment is related to NPA Chapter B II. Draft Decision CS25.795 (b)(3)(iv): Airbus proposes to add "…*accordance with paragraph (c)(2) of this*.." between "in" and "section" in the sentence "…components that are redundant and separated in section or are installed remotely…", to read: "(iv) Paragraphs (b)(3)(i) through (iii) of this paragraph do not apply to components that are redundant and separated in *accordance with paragraph (c)(2) of this* section or are installed remotely from this compartment." Rationale for comment: The sentence as written in the NPA is incomplete.	
response	*Accepted*	

	The paragraph will be corrected.

comment	12	comment by: *Airbus SAS*
	This comment is related to NPA chapter B II., Draft Decision CS25.795 (c)(1): Airbus proposes to replace "…integrity of the structure…" by "…flight-critical structures…" Rationale for comment: The proposal results in a requirement text harmonized with FAR 25.795 (c)(1).	
response	*Not accepted*	
	The Agency agrees to make everything possible to harmonise with FAA rules. The wording of proposed CS 25.795 (c) (1) was discussed within the Agency and with FAA. The conclusion of the Agency is that: Based on AC 25.795-6, the intention of the rule is clear but the wording proposed by FAA was not considered to be fully appropriate for the following reasons: — There is no definition of flight critical structure and to a large extent all parts installed could be considered as critical against a specific threat (fatigue, rapid decompression, rotor burst …). — As it is explained in the AC, the objective is not to protect flight critical structure (the example of the door loss confirms that critical structure will not be systematically protected) but to minimise the risk induced by loss of integrity of the structure or system in order to ensure continued safe flight and landing following an explosion. This change of wording does not aim at changing the requirement or the mean of compliance. This is only meant to clarify the rule in regard with its intent described in the relevant AC. It was confirmed with FAA that this wording change does not create any regulatory difference, so it has no impact on interpretation and application of it.	

comment	13	comment by: *Airbus SAS*
	This comment is related to NPA Chapter B II., Draft Decision CS 25.795 (b)(3), 3rd phrase: *"All cargo-compartment fire suppression-system components must be designed to withstand the following effects […]"* and in the following (ii) *"A 103 kPa pressure load if the projected surface of the component is greater than 0,4 square metre"*. Airbus proposes to change the beginning of the cited phrase to read: *"Cargo compartment fire suppression system storage, activation and distribution components must be designed to withstand the following effects […]".* The rationale for the proposal is to make sure that no ambiguity exists in the wording of the requirement. The CRI D-12 from the A380 and subsequent FAA regulations all list explicitly the components (or sub-systems) to be protected, whereas the NPA just states "all", which can be misinterpreted to include not only active fire protection means but also passive ones. This in turn would lead to consideration of the cargo compartment lining as being part of the fire suppression system as intended by the NPA, due to the fact that the lining is responsible for maintaining the Halon concentration in the class C cargo compartment.	

	However, cargo compartment lining will not be able to fulfill §25.795(b)(3)(ii) as proposed by EASA; decompression panels are installed inside the lining for safety purposes and will activate long before a pressure of 103 kPA on 0.4 m² is reached. In addition, the lining and its supporting structure is not able today to even resist a fraction of that pressure. Changing the lining to comply with an eventual area load is not practicable, insofar as it would mean that the aircraft can be composed of multiple pressure zones, which in turn leads to increased effort for warning, prevention and solving of residual pressure on ground in cargo compartments. In addition, lining and structure would have to be strengthened to a point where the airframe is no longer commercially viable. Note that FAA and CRI-D12 are different in the wording and that, as such, above comments do not apply to the FAA and CRI-D12, which clearly state that requirements are only applicable to “storage, activation and distribution”.
response	*Partially accepted*
	We confirm that liners are not concerned by CS 25.795 (b) (3) and do not need to be tested accordingly. This is clearly written in AC 25.795-5 paragraph 7.c: ‘Existing requirements for cargo compartment liners are adequate’. In your comment you refer to ‘CRI D-12 from the A380 and subsequent FAA regulations [that] all list explicitly the components (or sub-systems) to be protected whereas the NPA just states “all”…’. We are not sure we understand your concern as the rule we propose on cargo compartment fire suppression is fully harmonised with FAA: CS 25.795 (b) (3) has the same wording as FAR 25.795 (b) (3) and AMC 25.795 refers to FAA ACs. So, as for FAA, our guidance gives more information on fire suppression system components. In addition, the CRI D-12 does not list all the components but states ‘cargo compartment fire suppression system including the extinguishing agents’. So in conclusion, in order to keep aligned with FAA, we do not plan to amend our rule. AMCs to CS 25.795 define the fire suppression system components and exclude the liners from the applicability. Please also refer to comment No 7 about fire suppression system definition.

comment	*15*	comment by: *Airbus SAS*
	Attachments #1 #2	
	This comment is related to NPA 2009-7, chapter B II. AMC 25.795: This AMC does not establish an EASA AMC but introduces cross-references to FAA ACs 25.795-1A, -2A, -3 through -8. For the sake of harmonization, Airbus appreciates this approach to establish the same means of compliance for North American and European manufacturers. However, in the FAA system the preamble materials and comments/responses remain available to be used for future interpretation and evaluation of the respective materials, if any need should arise. Compared to the FAA consultation process, the EASA approach chosen for this NPA does not provide for completeness of comment/response information.	

	Therefore, Airbus recommends EASA to take into consideration and to archive all comments/responses established during the FAA consultation. At that time, Airbus commented on AC25.795-7 and -8. For EASA use and information, the 2 Airbus comment letters to FAA are attached to this comment.
response	*Partially accepted*
	The complete AMC, including the references to FAA ACs, are part of the NPA. This means that the content of these ACs is subject to possible comments. The link to the websites where those ACs can be found have been provided in the NPA. So your comments on ACs are valid and welcome. To take them in turn: A. Airbus letter reference M07005989 dated 4 April 2007 about AC 25.795-7X: 1. Paragraph 1. Purpose — The cross-reference to 25.795 (c) (2) was corrected by FAA in AC 25.795-7. — In addition, a statement on the 'structural damage not to be considered' has been added by FAA in AC 25.795-7. 2. Paragraph 5. Discussion — Concerning the reminder on new redundancies and independent failures, this comment was answered by FAA in their final rule in paragraph II. J. 6. (see NPA 2009-007 reference 1). The proposed rule is deemed to be clear enough and shows that the requirement applies to the system architecture (i.e. separation) but does not change the functional requirements of the systems affected. The AC 25.795-7 reflects this intent. — Concerning the functional redundancies (do they also require separation?), the answer was provided by FAA: 'The requirement is applicable to redundant systems necessary for continued safe flight and landing. The extent to which a piece of equipment can have functional redundancy and satisfy the existing requirements for protection against single failures would dictate the effect of this requirement. Many pieces of equipment have functional redundancy as a matter of design practice, but this feature is not a secondary (or backup) system. It enables higher reliability of a given system. If the functional redundancy necessary to meet the current rules is embedded in the same piece of equipment, then the philosophy of § 25.795(c)(2) applies. Assuming that this occurs in a portion of the airplane affected by the rule, then the "impracticable" provision of the rule would likely apply, and protection would be the approach.' Concerning the definition of the 'Flight critical system', the introduction of the AC explains that the rule applies to 'redundant airplane systems necessary for continued safe flight and landing'. The actual term 'flight-critical' takes on that meaning, but in fewer words. 3. Paragraph 6a. System Separation The whole comment was taken into account by FAA. This is explained in the final rule 25-127 (Docket no FAA-2006-26722) in the paragraph J. In addition, the final rule has been modified accordingly. B. Airbus letter reference M07005460 dated 4 April 2007 about AC 25.795-8X:

	1. Paragraph 1. Purpose The cross-reference to 25.795 (c) (3) was corrected by FAA in AC 25.795-8. 2. Paragraph 3. Related sections Concerning the § 25.809 and 25.853 to be deleted and 25.787 to be added: FAA estimated that depending on the approach, all of them could be applicable or not. This list of applicable paragraphs does not have consequences on the applicability or interpretation of the rule. 3. Paragraph 6a. Discussion The cross-reference to 25.795 (c) (3) was corrected by FAA in AC 25.795-8. 4. Paragraph 7b. Overhead bins The final rule was amended by FAA to take this comment into account in paragraph 7b. 5. Appendix I The introduction of the appendix 1 clearly specifies that this appendix contains only recommendations. 6. Appendix I, Crew compartments The proposed deletion of 'intended for ground use only' was not agreed by FAA as it was only an example.

comment	*20*	comment by: *UK CAA*
	Page No: 19 Paragraph No: CS 25.795 (c) (3) Comment: The deterrence of object concealment should not prevent in-flight panel removal to gain access for fire-fighting Justification: Fires in cabin areas behind panels pose a constant threat to aircraft safety. It is not generally possible to monitor these areas for fire and there are generally no detection systems. It is essential that cabin crew are able to gain quick access to these areas for fire fighting Proposed Text (if applicable): (3) Interior design to facilitate searches. Except for aeroplanes intended to be used solely for the transport of cargo, design features must be incorporated that will deter concealment or promote discovery of weapons, explosives, or other objects from a simple inspection. This deterrence of concealment must not prevent in-flight access to non-visible areas for the suppression of fires. This applies to the following areas of the aeroplane cabin:	
response	*Partially accepted*	
	We agree that deterrence of concealment must not prevent in-flight access to non visible areas for the suppression of fire. Anyway we do not plan to revise the rule for the following reasons: — The rule itself only covers the areas above the overhead bins, the toilet tube and the life preservers as well as their storage. To conform to those three requirements, the Agency does not see any relative new design that would	

	prevent in-flight access to non visible areas. In addition, the AC 25-795-8 in the paragraph 6 refers to 'conflicting needs'. This paragraph highlights that there are safety considerations that may make it less convenient to search for hidden objects. It is to be highlighted that to apply this rule, the designer may need to balance conflicting needs and propose the best compromise between time saving, security increase and safety improvement.

comment	*23*	comment by: *ECA- European Cockpit Association*
	ECA proposed comment: add text CS 25.795 (a) Protection of the flight deck If a secure flight deck door is required by operating rules, Airplanes with a certificated passenger seating capacity of more than 60 persons or a maximum take-off weight of over 45 500 Kg (100 000 lb) must be equipped with a secure flight deck door and a secondary barrier. **(1)** Protection of secure doors: the bulkhead, door, and any other accessible boundary separating the flightcrew compartment from occupied areas installation must be designed to: ~~(1)~~(i) Resist forcible intrusion by unauthorized persons and be capable of withstanding impacts of 300 Joules (221.3 footpounds) at the critical locations on the door , as well as a 1113 Newton (250 pound) constant tensile load on accessible handholds, including the doorknob or handle (See AMC 25.795(a)(1)), and ~~(2)~~(ii) Resist penetration by small arms fire and fragmentation devices by meeting the following projectile definitions and projectile speeds (See AMC 25.795(a)(2)). ~~(i)~~(a) Demonstration Projectile #1. A 9 mm full metal jacket, round nose (FMJ RN) bullet with nominal mass of 8.0 g (124 grain) and reference velocity 436 m/s (1430 ft/s) ~~(ii)~~(b) Demonstration Projectile #2. A .44 Magnum, jacketed hollow point (JHP) bullet with nominal mass of 15.6 g (240 grain) and reference velocity 436 m/s (1430 ft/s) **(iii) The flight deck door lock should be operable from the pilot's station** **Justification** For practical reasons it should be clarified that flight deck doors shall be operable from the pilot position: When one of the pilots is outside the cockpit, the pilot operating the airplane shall be able to open the doors without having to get up and leave flying unattended.	
response	*Not accepted*	
	This requirement is an operational requirement and is outside the remit of our task which is limited to harmonization with FAR 25.795. In addition, It is already covered in EU OPS 1 (Council Regulation (EEC) 3922/91): 'OPS 1.1255 Flight crew compartment security	

	(a) In all aeroplanes which are equipped with a flight crew compartment door, this door shall be capable of being locked, and means or procedures acceptable to the Authority shall be provided or established by which the cabin crew can notify the flight crew in the event of suspicious activity or security breaches in the cabin. (b) All passenger-carrying aeroplanes of a maximum certificated take-off mass in excess of 45 500 kg or with a Maximum Approved Passenger Seating Configuration greater than 60 shall be equipped with an approved flight crew compartment door that is capable of being locked and unlocked from each pilot's station and designed to meet the applicable retroactive airworthiness operational requirements. The design of this door shall not hinder emergency operations, as required in applicable retroactive airworthiness operational requirements.' For your information, a rulemaking task (21-039K) is today covering the additional airworthiness requirements for operation. The objective of this task is to transpose JAR 26 into the European frame. Particularly, JAR 26.250 content and applicability will be assessed. 'JAR 26.250 Flight Crew compartment door operating systems – Single incapacitation (a) Each operator must establish means to enable a cabin crew member to enter the pilot compartment in the event that a flight crew member becomes incapacitated. Any associated system must be operable from each pilots' station.'

comment	24	comment by: *ECA- European Cockpit Association*
	Attachment #3	
	ECA proposed comment: renumber and add paragraph: CS 25.795 (a) Protection of the flight deck **(1)** Protection of secure doors: the bulkhead, door, and any other accessible boundary separating the flightcrew compartment from occupied areas installation must be designed to: ~~(1)~~(i) Resist forcible intrusion by unauthorized persons and be capable of withstanding impacts of 300 Joules (221.3 footpounds) at the critical locations on the door , as well as a 1113 Newton (250 pound) constant tensile load on accessible handholds, including the doorknob or handle (See AMC 25.795(a)(1)), and ~~(2)~~(ii) Resist penetration by small arms fire and fragmentation devices by meeting the following projectile definitions and projectile speeds (See AMC 25.795(a)(2)). ~~(i)~~(a) Demonstration Projectile #1. A 9 mm full metal jacket, round nose (FMJ RN) bullet with nominal mass of 8.0 g (124 grain) and reference velocity 436 m/s (1430 ft/s) ~~(ii)~~(b) Demonstration Projectile #2. A .44 Magnum, jacketed hollow point (JHP) bullet with nominal mass of 15.6 g (240 grain) and reference velocity 436 m/s (1430 ft/s) **(iii) The flight deck door lock should be operable from the pilot's station** **(2) Protection of the secondary barrier: A Secondary Barrier system should have the ability to delay and deter potential assailant from entering the flight deck from the cabin area during this period of "door**

	transition," which can be defined as that period of time when the flight deck door remains open due to operational needs and/or crew requirements. Five seconds is considered a reasonable amount of time for "door transition". **Justification** Flight decks remain vulnerable, especially when the doors are opened for normal/legitimate reasons. The best example is the unlawful interference in Turkish Airlines flight TAL 1476. The report of the Captain reads: *"While the chief stewardess entered the cockpit to ask if we needed anything, the terrorist entered by force. I tried to push him out, but he was a big man and I failed to stop him"* The flight deck door needs to be open to grant access to the cockpit, to allow exit and to exchange objects and information. Opening the flight deck door constitutes a possibility for an attempt of unlawful access to the cockpit. The goal of secondary barriers is to protect the cockpit during flight deck door transitions. Secondary Barriers should respond to the following criteria: – 5 Second delay – Ease of use – Egress in case of emergency evacuation – Clear field of view for crew Combined with appropriate procedures, the secondary barrier is a pre-emptive solution and a deterrent for unlawful attempts to enter the cockpit. It creates a secured buffer zone, and allows the crews to assess the intentions of persons trespassing the barrier and gain precious seconds to secure the cockpit. Attached: Examples of secondary barriers on board of United Airlines' aircraft.
response	*Not accepted*
	First of all, this requirement is outside the remit of our task which is limited to harmonising with FAR 25.795. So the proposed rule will not be up-dated to take into account this secondary barrier. For your information, this subject was debated already at FAA and the Agency decided to follow FAA decision. Currently the secondary barrier is indeed not seen as a contributor to flight deck security as required by FAR 25.795 but more as a supplemental security measure intended to complement existing flight deck door access procedures (refer to FAR 121.584 (a) (1) and OPS 1.1255) In conclusion, there is no intention to mandate any secondary barrier. The idea is more to ensure safety of the flight deck thanks to operational procedures.

comment	*25*	comment by: *ECA- European Cockpit Association*
	ECA Proposed Comment: Delete Words: CS 25.795 (b) (2) Passenger cabin smoke protection. ~~Except for aeroplanes intended to be used solely for the transport of cargo, m~~ Means must be provided to prevent passenger incapacitation in the cabin resulting from smoke, fumes, and noxious gases as represented by the initial combined volumetric concentrations of 0.59% carbon monoxide and 1.23% carbon	

	dioxide. Justification: While it is true that all cargo airplanes do not have passengers in the general public term, it is not unusual to have persons in the cabin of all cargo airplanes. All cargo aeroplanes habitually transport reinforced crews or crews in transit in bunks or seats. Another example of persons flying on all cargo airplanes is grooms and other persons accompanying life animals. All cargo crews access the cabin when using the toilets. In the absence of other solutions designed for cargo aircraft offering the same levels of security, the same rules should apply for both passengers and cargo.
response	*Not accepted*
	This subject was covered in the NPA in paragraph 19. There were two possible options: the first one was to follow ICAO standards and make this requirement applicable to aeroplanes transporting only cargo. The second one was to harmonize with FAA regulations and to exclude all cargo aeroplanes from the applicability. Harmonization with FAA is always requested by the Industry for certification/validation efficiency. From a safety perspective, we assessed the fact that aeroplanes transporting cargo only have very few passengers and that those passengers can be briefed on safety procedures. Specific safety equipment and operational procedures can be put in place for them to ensure their protection. In addition, it is to be highlighted that most of the cargo aeroplanes are derivatives of passenger carrying aeroplanes, which means that even if not formally requested by CS-25, most of the time they will have the same certification standards as passenger carrying aeroplanes.

comment	*26*	comment by: *ECA- European Cockpit Association*
	ECA Proposed Comment: Delete Words: CS 25.795 (c)(3) Interior design to facilitate searches. ~~Except for aeroplanes intended to be used solely for the transport of cargo,~~ Design features must be incorporated that will deter concealment or promote discovery of weapons, explosives, or other objects from a simple inspection in the following areas of the aeroplane cabin: Justification: The concealment of prohibited articles in the cabin of all cargo airplanes is not impossible: - There is minimum one toilet in each cargo plane. There should be provisions to prevent concealment and help to discover of weapons, explosives or other objects which could have been hidden there -On cargo aircrafts there are always storage compartment. These compartments need to be designed in a way to prevent objects from being hidden. - On board of cargo aircraft there are also always life preservers, so their storage location should have the same security design as passenger aircraft.	

	Justification: Cargo airplanes should provide the same level of safety and security as passenger aircraft. Making a generic exception for cargo represents a risk to security. If it is know that the concealment of unlawful objects is easier in cargo airplanes, this will be the next target. In the absence of other solutions designed for cargo aircraft offering the same levels of security, the same rules should apply for both, passengers and cargo.
response	*Not accepted*
	This subject was covered in the NPA in paragraph 19. There were two possible options: the first one was to follow ICAO standards and make this requirement applicable to aeroplanes transporting only cargo. The second one was to harmonise with FAA regulations and to exclude all cargo aeroplanes from the applicability. Harmonisation with FAA is always required by the Industry for competition reasons. From a safety perspective, the security risk was assessed to be smaller for cargo aeroplanes due to the fact that those aeroplanes are less targeted by terrorists and also because the number of boarding occupants is smaller. In addition, even if there are hidden areas, their number is much smaller and operational procedures could be easily put in place for search due to the very limited area to be searched. Finally, as pointed out in the answer to comment no 25, we can expect that even if the requirement will not be applicable for cargo aeroplanes, most of them being derivatives of passenger-carrying aeroplanes will be designed with same standards as passenger-carrying aeroplanes.

comment	*32*	comment by: *Boeing*
	Page: 18 Paragraph: *II (a) Draft Decision CS-25* <u>Boeing suggests that the following changes be made</u>: Change part (a) to read as follows: **(a) Protection of flightcrew compartment. If a flightdeck door is required by operating rules:** **(1) The bulkhead, door, and any other accessible boundary separating the flightcrew compartment from occupied areas must be designed to resist forcible intrusion by unauthorized persons and be capable of withstanding impacts of 300 joules (221.3 foot pounds).** **(2) The bulkhead, door, and any other accessible boundary separating the flightcrew compartment from occupied areas must be designed to resist a constant 250 pound (1,113 Newtons) tensile load on accessible handholds, including the doorknob or handle.** **(3) The bulkhead, door, and any other boundary separating the flightcrew compartment from any occupied areas must be designed to resist penetration by small arms fire and fragmentation devices to a level equivalent to level IIIa of the National Institute of Justice (NIJ) Standard 0101.04.**	

	JUSTIFICATION: Paragraph 20 of this NPA suggests that a goal of this NPA is to have the EASA requirements harmonized with the similar FAA requirements in 14 CFR §25.795. Our change is recommended so that the requirements applicable to the flightdeck door and accessible boundary are harmonized with those FAA requirements.
response	*Not accepted*
	The content of the rule is the same. We can note only three differences: — The first one is the format that was chosen at the time CS 25.795 was introduced. There is no impact on the rule content. The Agency sees no reason to modify it as it does not introduce any confusion. — The second is related to the reference to the 'level IIIa of the National Institute of Justice (NIJ) Standard 0101.04'. At the time of its introduction in CS 25.795, it was preferred to include this reference in the AMC. Once again, the Agency does not see any reason to modify it. — The third one is related to the word 'secure' that is part of CS-25 whereas it is not part of FAR 25. This difference is linked to the different regulation structure between EASA and FAA. If the word 'secure' is removed from our text, it would result in a different and greater applicability: our operational requirement requires indeed a door (non secured one) for all aeroplanes with more than 19 passengers (refer to EU OPS 1.735). Thus CS 25.795 (a) (1) (2) (3) would become applicable to all aeroplanes with more than 19 passengers, which was not the intent of our rule. So the Agency proposes to keep the same format and wording.

comment	*33*	comment by: *Boeing*
	Page 18: Draft decision, section 25.795 ALSO: Page 9: Paragraph 20.c., Note 2 and Page 16: Paragraph 25.a.viii Boeing suggests that the following changes be made: To the CS, add exclusionary paragraph 25.795(d), which is consistent with 14 CFR §25.795, as follows: ***"(d) Exceptions. Airplanes used solely to transport cargo only need to meet the requirements of paragraphs (b)(1), (b)(3), and (c)(2) of this section."*** **JUSTIFICATION:** Paragraph 25.a.viii (on page 16) notes the differences between the 14 CFR §25.795 regulation and the proposed CS 25.795 regulation. This section points back to paragraph 20.c., Note 2, which discusses the differences related to Part 135 carriers (excluded by FAA, but not EASA) and that the FAA rule includes some airplanes with less than 60 passengers/45,500 Kgs. However, the noted differences do not mention the difference that proposed CS 25.795, as written, would only exclude cargo airplanes from the requirements of CS 25.795(a) as long as the operating rules do not require a flightdeck door on those cargo airplanes. At such time that the	

	operating rules change in the future to require a flightdeck door, and if CS 25.795 were part of the type certification basis of an airplane, that would require an in-line production change to upgrade the flightdeck boundaries of those cargo airplanes once the door was installed (to meet the operating rules). This would be an unplanned activity driven by a change to operational requirements that would create a large workstatement for the airplane manufacturers that has not been accounted for in the cost benefit analysis. By adding our recommended paragraph (d), the rule would clearly state that, regardless of operational requirements to have or not to have a door, the boundaries of the flightdeck on a cargo airplane (regardless of size/passenger count) would not be required to be upgraded to intrusion and ballistic requirements. This would also harmonize this CS section with 14 CFR §25.795.
response	*Not accepted*
	Based on the structure of our regulations, the applicability is defined differently in the EASA rule compared to FAA rule but a change in operation rules would have the same effect: — In FAA rule, 25.795 (a) applies when the airplane is required to have a flight deck door as per operational rules. This will be true, regardless of what FAR 25.795 (d) says. Operational requirement FAR 121.313(f) today requires that there be a flight deck door, and this is the only part in the US rules that does so. All-cargo airplanes are not required to have a flight deck door at all. If FAR 121 is amended one day to cover all-cargo aeroplane, FAR 25.795 (a) would become applicable to new Type certified cargo aeroplane, regardless of what FAR 25.795 (d) says. But the retroactive requirements for existing fleets would not be defined in FAR 25 but in FAR 121 itself. — In EASA rule, the proposed CS-25.795 (a) does not exclude all-cargo aeroplanes but applicability of this paragraph is restricted to aeroplanes required to have a 'secure' flight deck door. According to EU OPS 1.1255, a secure flight deck door is requested for 'passenger-carrying aeroplanes' only, which excludes also all-cargo aeroplanes. If the European operational requirement evolves and changes the applicability by rending mandatory the secure flight deck door for cargo aeroplanes, then EU OPS 1.1255 (b) would become applicable to them and thus there would be a need to have a flight deck door meeting the 'retroactive airworthiness operational requirements'. The retroactive requirements are not in CS-25. Currently, for most of the European countries, they correspond to JAR 26 and they do not cover the bulkheads and accessible boundaries but only the flight deck door. So in conclusion, the paragraph (d) as written by FAA does not have a 'protective' effect on applicability of the requirement 25.795 (a) on boundaries in case of operational requirement applicability change. Whatever the wording is to exclude cargo, any operation requirement evolution will not render CS-25.795 (a) mandatory except if a retroactive design requirement deliberately refers to it. Note that there is a new rulemaking task aimed at transposing the retroactive requirements included in JAR 26 into the European regulatory framework. This

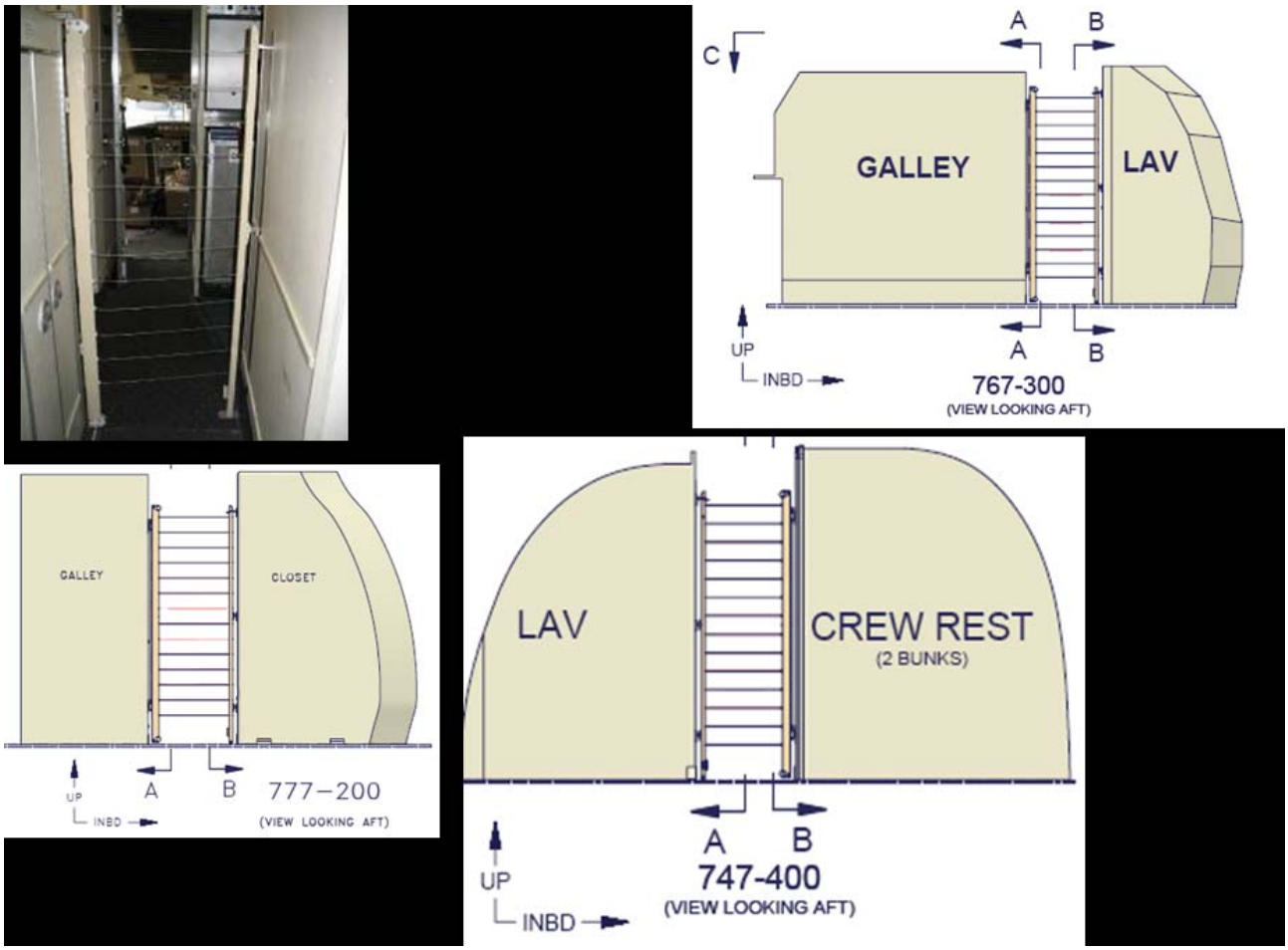
	is the task 21.039 (k).

resulting text	CS 25.795 (b) (3) […] (iv) Paragraphs (b)(3)(i) through (iii) of this paragraph do not apply to components that are redundant and separated in accordance with paragraph (c)(2) of this paragraph ~~section~~ or are installed remotely from the cargo compartment. Editorial change on AMC 25.795: AMC 25.795[…] AMC 25.795(b)(1) Flight deck smoke protection. Reference documentation: Federal Aviation Administration Advisory Circular (AC) 25.795-3, Flight deck Protection (smoke and fumes), issue date 24 October 2008. AMC 25.795(b)(2) Passenger cabin smoke protection. Reference documentation: Federal Aviation Administration Advisory Circular (AC) 25.795-4, Passenger Cabin Smoke Protection, issue date 24 October 2008. AMC 25.795(b)(3) Cargo compartment fire suppression. Reference documentation: Federal Aviation Administration Advisory Circular (AC) 25.795-5, Cargo Compartment Fire Suppression, issue date 24 October 2008. AMC 25.795(c)(1) Least risk bomb location. Reference documentation: Federal Aviation Administration Advisory Circular (AC) 25.795-6, Least Risk Bomb Location, issue date 24 October 2008. AMC 25.795(c)(2) Survivability of systems. Reference documentation: Federal Aviation Administration Advisory Circular (AC) 25.795-7, Survivability of Systems, issue date 24 October 2008. AMC 25.795(c)(3) Interior design to facilitate searches. Reference documentation: Federal Aviation Administration Advisory Circular (AC) 25.795-8, Interior design to facilitate searches, issue date 24 October 2008.

Appendix A — Attachments

EAX_M07005989_v1.pdf
Attachment #1 to comment #15

EAX_M07005460_v1.pdf
Attachment #2 to comment #15



Attachment #3 to comment #24