

	Comr	nent		Comment summary	Suggested resolution	Comment is an	Comment is	EASA	
NR	Author	Section, table, figure	Page			is a suggestion*	is an objection**	comment disposition	
1	Alberto Giorda Engineering Mgr. and DOA Head of Office of Airworthiness (Meridiana Maintenance S.p.A)	2	3	As a general comment Certification Memorandum subject seems quite generic because embrace a wide range of configuration scenarios	configuration applicability should be improved because, for example, most common case for a/c's Operators, is 0 LOPA configuration, i.e. without pax. seats only but with other monuments, toilets and overhead bins still in place. For this case at least a re- classification as "minor" following substantiations also proposed below should be considered.	Yes		Not accepted	The sc pax / f The po 21.A.S whose case b In reg decide this ty minim
2	Alberto Giorda Engineering Mgr. and DOA Head of Office of Airworthiness (Meridiana Maintenance S.p.A)	3.1	4	Reason for which this Change to Type Certificate may be classified as major is eventually for "other characteristics affecting airworthiness of the product" i.e. when as per GM 21.A.91 an adjustment of the TCB is required through a dedicated SC as per 21.A.16B	This aspect should be reflected in para. 3.1 that only refer to point 3.2 (Operational Characteristics) and 3.3 (Mass & Balance) that, according to my opinion have a negligible impact	Yes		Not accepted	The co referr includ and 3. Please
3	Alberto Giorda Engineering Mgr. and DOA Head of Office of Airworthiness (Meridiana Maintenance S.p.A)	3.2	4	<ul> <li>In Para. 3.2 is written about restrictions on seats occupancy or use of stowage facilities and they are considered as a "change to airworthiness limitations of the airplane".</li> <li>Considering CS25 (included also as a reference in para 1.2) and particularly Appendix H Para. H25.4 is there available ALS definition whose constituent items are: <ol> <li>Structural Modification or inspection intervals and related procedures as result of 25.571 Damage Tolerance Assessment (which for 21.A.91 purpose impacts on structural strength)</li> <li>EWIS replacement due dates.</li> <li>LOV</li> <li>CMR to demonstrate compliance to 25.1309 as per AC 25-19</li> </ol> </li> </ul>	It is recommended to remove reference to ALS, which indeed needs EASA approval and therefore an impact on ALS revert a change to major, but restrictions on seat occupancy and on usage of stowage facilities seem inconsistent with ALS definition		Yes	Not accepted	Please cabin layout sugge not af to GM



cope of the CM is to clarify that changes that may require a 'no no cargo in the cabin' limitation should be classified as major. ossibility to use the reclassification process described in GM 91 is not addressed in the CM but remains an available option e use needs to be discussed and agreed with EASA on a case-bybasis.

ards to the list of examples provided in the CM, EASA has ed to highlight the removal of all seats from the cabin because pe of change may have a significant impact on W&B and num take-off weight.

omment is noted. However, the content of this CM is not ing to an adjustment of the Type Certification Basis (TCB) ling any potential SC and therefore not reflected in chapter 3.2 .3 of this CM.

refer as well to EASA response to comment no.1.

note that CS-25 is listed in chapter 1.2 because it covers all related certification requirements for any change of a cabin t. It seems that the comment received together with its sted resolution is a misconception as appendix H Para. H25.4 is fected by this CM. This is the reason that the CM is referencing 1 21.A.91 and not to CS 25 Appendix H.



NR	Comr	nent Section, table, figure	Page	Comment summary	Suggested resolution	Comment is an observation or is a suggestion*	Comment is substantive or is an objection**	EASA comment disposition	
4	Alberto Giorda Engineering Mgr. and DOA Head of Office of Airworthiness (Meridiana Maintenance S.p.A)	3.2	4	In Para 3.2 there's generically written about "operating limitations" that would revert change to major because affecting Operational Characteristics of the product as per already mentioned 21.A.91. CS 25.1503 through 25.1533 and 25.1583 gives a clear definition of Operating Limitations which seems inconsistent with safety topics of this Change to Type certificate. In same Para. is also mentioned possibility to amend AFM including additional Operating procedures; As per CS 25.1585 and related AMC Operating Procedures are classified as normal/non normal/emergency procedures, they are strictly related to Flight Crew, i.e. crew responsible for conduct of flight, and they generally refer to direct interface between pilots and a/c systems. In point (b) of 25.1585 it's also specified that "Information or procedures not directly related to airworthiness or not under the control of the (flight) crew, must not be included" So in our case AFM amendment of an Operating Procedure may be limited to very remote cases of cabins unattended when pilot must act as a prime actor in an emergency situation involving cabin environment.	<ul> <li>Para. 3.2 should be renamed and reviewed specifying that reason for which this change may revert to major is not generically related to "Operational Characteristics" but may be due to a Special Condition issued by the Agency justified, as per point 21.A.16B(a)2 because of "unconventional use of the product".</li> <li>Should be also specified in which cases SC may be applicable, because for example configuration of 0 Pax seats but with all other monuments and overhead bins installed, and normally attended by a sufficient Cabin Crew capable to guarantee direct view of the entire cabin as per 25.785 (h)2 should be considered as a minor change because:</li> <li>Movement along the cabin remains unchanged if overhead bins are available if handrail is there in installed</li> <li>Cabin Crew evacuation means remain unchanged because their seats are embedded in toilets or cabinets walls nearside emergency exits.</li> <li>Emergency equipment and their related stowage facilities remain unchanged</li> <li>Cabin Crew Manual may be updated according to this modified scenario out of Part 21 requirements and in rare case where an involvement of Flight Crew is needed AFM amendment may be treated as minor as per GM 21.A.263(c)4.</li> <li>Vice versa wide removal of galleys and or monuments together with pax. seats and/or overhead bins, requiring an unconventional relocation and or accessibility of cabin emergency equipment, together with repositioning of cabin attendants through adequate seats in adequate location may require additional investigation/assessment involving EASA Cabin Safety experts, justifying issuance of specific SC and so reverting change to major.</li> </ul>		Yes	Not accepted	If all s const may b introd



seats are removed, no passengers can be transported which titute a limitation to a passenger aircraft. In addition, the aircraft be outside of the approved operational envelope which may duce additional limitations.



	Comr	nent		Comment summary	Suggested resolution	Comment is an	Comment is	EASA	
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5	Alberto Giorda Engineering Mgr. and DOA Head of Office of Airworthiness (Meridiana Maintenance S.p.A)	3.3	5	<ul> <li>Para. 3.3 describes appreciable effect of this type of change on mass &amp; Balance.</li> <li>Check if basic empty weight and related centre of gravity of a changed product is within AFM approved Envelope (to avoid "real" operating limitation as per 25 1519 to be approved by the Agency) is a standard DOA classification procedure.</li> <li>For large aeroplanes weight reduction for a seat shipset removal in worst scenario is around 2,5 - 3 tons for a narrow body high density 6 abreast. Average Basic Empty weight for this type of a/c is around 41 – 43 tons with minimum Envelope BEW of 37 – 37,5 tons. So effect of mass on pax seats shipset removal is straightforward for wing mounted engines a/c's, while for tail engines a/c's (for example old Md80's) use of ballast is already required in case of empty flights.</li> <li>Negligibility on W&amp; B became more evident for wide body</li> </ul>	Para. 3.3 should be reviewed because in large aeroplanes influence on W&B for "incomplete cabin" is rare and in any case check of W&B is already within normal DOA classification procedure, so provision in 3.3 seems with low added value	Yes		Not accepted	Please
6	Mark Lynch Head of Engineering GECAS	This Comment Review Document		In this comment response documents EASA request that the following two questions are answered with a "yes" or a "no": Comment is an observation or is a suggestion? Comment is substantive or is an objection? How do you answer an "or" question with yes / no?		Observation	Neither	Noted	Please comm 001. W



e refer to the second part of EASA response to comment no.1.

e note that this is a common EASA CRD template and the nent is not related to the content of the proposed CM-CS-010-We will address this comment separately.



	Comr	ment		Comment summary	Suggested resolution	Comment is an	Comment is	EASA	
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7	Mark Lynch Head of Engineering GECAS	General		This proposal is akin to cracking a nut with a sledgehammer by mandating STCs for one off usage, simple cabin changes. Can a less intrusive and costly solution be found to alleviate safety concerns and facilitate a genuine industry need? EASA has correctly identified that there is a need to modify the interior of aircraft <u>not in commercial</u> <u>service for ferry to maintenance facilities</u> . Passengers on board these aircraft, if any, will be limited to airline personnel and owners representatives who have a greater knowledge of aircraft, systems and operations. Is it really necessary to use the STC process and issue flight manual amendments to inform such people of obvious operation limitations? Has EASA got evidence of incidents & accidents involving aircraft with modified cabin interiors in non- commercial service or evidence of such configurations being used in commercial service?	<ol> <li>Exclude aircraft not being used for passenger transportaion from this CM and authorise the DOA to make such a declaration in their minor modification, or</li> <li>Authorise the DOA to include in their minor mod an operational notification to be available to crew and passengers detailing guidance on the use of the cabin with seats removed, and limiting the aircraft to non- commercial services, or</li> <li>Advise on the fitment of a decal in plane view within the cabin or entranceway detailing any restrictions as part of the minor mod</li> </ol>	Suggestion	Substantive	Not accepted	The ap with ir provid
8	Mark Lynch Head of Engineering GECAS	2	3	An Incomplete Cabin is not defined	Define incomplete cabin or highlight that this CM is only applicable to aircraft to be used for passenger transportation.	Suggestion	Substantive	Not accepted	The sc chang the wi config compl
9	Mark Lynch Head of Engineering GECAS	3.3	5	The mass and location of interior parts can be readily determined and a DOA can easily established whether a change has an effect on the mass and balance limitations of an aircraft. That should be the function of the DOA when carrying out the classification of the mod.	The CM should advise that if the DOA can readily establish the mass and balance effects and confirm that these effects to not have an appreciable effect on mass or balance limitations then they should be able to classify the modification as minor.	Suggestion	Substantive	Not accepted	Please
10	Mark Lynch Head of Engineering GECAS	3.2	4	An aircraft with a fully complete cabin may operate with no cabin crew or passengers carried, but with no additional restriction on usage of stowage facilities. In this case how is the early detection of smoke or fire any different from that of a modified cabin with no passengers or cabin crew present.	This Certification Memorandum is providing a higher safety threshold on aircraft with incomplete cabins than on those with complete cabins carrying out the same operations when no passenger / cabin crew are carried.	Observation	Objection	Noted	The pu equipp compa cabin o cabin, facilitio occupa
11	Mark Lynch Head of Engineering GECAS	3.2	4	EASA notes that the usual way to introduce the required limitations is by inserting them into an aircraft flight manual supplement. However, EASA notes that this is not the only acceptable way. A Flight manual Supplement drives an STC application. This leads to unacceptable leadtime's for industry.	Can EASA clarify in the CM what are the other acceptable ways to introduce limitations and avoid the need for an STC for this reason alone?	Suggestion	Substantive	Not accepted	The sc to a m is not develo As exp would



ppropriate tool for one off usage flights (e.g. placement flights ncomplete aircraft between different Leasing customers) is led by EASA under the provisions of 'Permit to Fly'.

cope of this CM is to provide clarification on classification of es and is intentionally not providing a specific definition due to ide range of potential incomplete passenger cabin urations (this may include fully equipped aircraft with missing iance documentation up to "green" aircraft configurations.)

e refer to EASA response to comment no.1.

urpose of this CM is to provide the same safety level of a fully ped passenger cabin with passengers and cabin crew on board ared to an incomplete passenger cabin with no passengers and crew on board. Please note that for an incomplete passenger , limitations need to be introduced for e.g. the use of stowage ies due to the missing of early detection of smoke and/or seat ancy as highlighted in chapter 3.2.

cope of this CM is to provide clarification on the aspects that lead najor classification of changes incorporating incomplete cabins. It the scope of this CM to clarify how a competent applicant can op similar projects.

plained in EASA response to comment no.7, a 'Permit to Fly' be an alternative approach.



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12	AIRBUS Jean-Yves CAUSSE Rulemaking & Relations with Foreign Authorities Airworthiness & Certification - EIAIX	3.4	5/5	This certification memo departs from current Airbus process agreed with EASA.	<ul> <li>The §3.4 should be replaced to describe the Airbus and EASA currently agreed practice for "incomplete cabin" which is:         <ul> <li>One first administrative MAJOR change per a/c programme:                 <ul> <li>to identify the minimum scope of what shall be installed for delivery</li> <li>To define the limitation and installation of the associated placard on the inner and outer side of the cockpit door.</li> <li>Placard wording:</li></ul></li></ul></li></ul>	Yes	Yes	Partially accepted	Please EASA a change cabin i added provid major
13	BOEING Carlos A. Guzman, P.E. Systems Engineer BCA – Aviation Safety and Regulatory Affairs		Page: 3 Paragraph: Section 2 "Background"; last paragraph	THE PROPOSED TEXT STATES: "EASA has considered this practice and has concluded that it is not acceptable. A design change to allow flights to take place with an incomplete passenger cabin should therefore be classified as a 'major change'." REQUESTED CHANGE: "EASA has considered this practice and has concluded that it is not acceptable without consideration of other design aspects and effects on intended airplane operation. A design change to allow flights to take place with an incomplete passenger cabin may require the change should therefore be classified as a 'major change'. The change should be evaluated in accordance with regulatory agency approved major / minor criteria."	JUSTIFICATION: In general, we agree with the EASA position that changes to allow flights with an incomplete passenger cabin should be classified as a major change; however, there may be some unique circumstances where the change is so inconsequential that it could be considered a minor change in accordance with regulatory agency approved major / minor criteria. For example an incomplete passenger cabin without seats that has already been approved as a major change and the next airplane which is similar but has an additional deletion or change of PSU panels might be considered a minor criteria) since the airworthiness limitations in that situation are not affected when considering the change from the previously approved type design.		Yes	Partially agreed	EASA a Howev in GM option case-b A char The Cf existin
14	BOEING Carlos A. Guzman, P.E. Systems Engineer BCA – Aviation Safety and Regulatory Affairs		Page: 4 Paragraph: Section 3.2 "operational considerations "; last paragraph	THE PROPOSED TEXT STATES: "The usual way to introduce the required limitations is by inserting them into an aircraft flight manual supplement, however, EASA does not consider that this is the only acceptable way." REQUESTED CHANGE: "The usual One way to introduce the required limitations is by inserting them into an aircraft flight manual supplement, however, EASA does not consider that this is the only acceptable way. Placarding may be an acceptable alternative"	JUSTIFICATION: 14 CFR and CS 25.1541 require the airplane to contain specific markings and placards "required for the safe operation if there are unusual design, operating, or handling characteristics". Restrictions such as zero occupancy are covered by the requirements of 25.1541 and placarding has been an acceptable method for communicating the restriction as approved by the FAA for many years.	Yes		Partially agreed	Please that 2 passer A char as the



refer to EASA response to comment 11.

agrees that the first change has to be classified as a major e. However, also subsequent changes for incomplete passenger need to be classified as a major change. Additional MSNs can be to the applicability of a major change by a minor change ded this change fits into the envelope of the already approved change.

agrees to the principal provided within the JUSTIFICATION.

ver, the possibility to use the reclassification process described 21.A.91 is not addressed in the CM but remains an available whose use needs to be discussed and agreed with EASA on a y-case basis.

nge to the text as proposed by the commenter is not envisaged. M is aiming for clarification on 21.A.91 and is not changing any ng Part 21 requirement or guidance.

e refer to EASA response to comment no.11. It has to be noted 5.1541 is not solely covering the aspects of an incomplete nger cabin as addressed in this CM.

nge to the text as proposed by the commenter is not envisaged proposed change does not provide additional clarification.



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15	BOEING Carlos A. Guzman, P.E. Systems Engineer BCA – Aviation Safety and Regulatory Affairs		Page: 5 Paragraph: Section 3.4 "Conclusions"	THE PROPOSED TEXT STATES: "For the reasons outlined above, EASA considers that a design change which is needed for flights with incomplete passenger cabin should be considered to be a 'major change', in accordance with 21.A.91." REQUESTED CHANGE: "For the reasons outlined above, EASA considers that a Design changes which is needed for flights with in an incomplete passenger cabin for flight should be considered other Part 25 design requirements and effects on intended airplane operation prior to making a major / minor determination be a 'major change', in accordance with 21.A.91."	JUSTIFICATION: Similar justification as in comment 1. A change could be determined major or minor per 21.A.91.		Yes	Partially agreed	EASA (pleas A cha
16	EMBRAER Luciana Beltra Regulations & Flight Standards Embraer S.A.	2	3 and 5	The background section refers to both "incomplete passenger cabin" and a cabin that " may not fully satisfy the applicable airworthiness requirements for passenger transportation" as if they are the same thing. If the proposed cabin configuration truly does not comply with the applicable airworthiness requirements and limitations are necessary to show compliance, then treating the proposed configuration as a major change is justified. If the cabin is merely "incomplete," meaning that work remains to reach the final configuration, yet the interim configuration requires no additional limitations, then it is a minor change in accordance with 21.A.91. The conclusion in 3.4 makes a similar statement that is not supported by the definition of minor change.	<ul> <li>Embraer suggests the following changes:</li> <li>2. Background</li> <li>EASA understands</li> <li>EASA is aware</li> <li>However, it has also been noticed that in some cases, the design changes to permit aeroplanes to fly with incomplete passenger cabins requiring additional limitations have been classified as 'minor changes'.</li> <li>EASA has considered this practice and has concluded that it is not acceptable. A design change to allow flights to take place with an incomplete passenger cabin that requires additional limitations pecifications should therefore be classified as a 'major change'.</li> <li>3.4 Conclusions</li> <li>For the reasons outlined above, EASA considers that a design change which is needed for flights with incomplete passenger cabin that requires additional limitations to show compliance to show compliance to the applicable certification specification stopplete passenger cabin that requires additional limitations to show complete passenger cabin that requires additional limitations to show complete passenger cabin that requires additional limitations to show complete passenger cabin that requires additional limitations to show complete passenger cabin that requires additional limitations to show compliance to the applicable certification specifications should be considered to be a 'major change', in accordance with 21.A.91.</li> </ul>	No	Yes	Not accepted	Please the cc descri For th furthe CM.
17	EMBRAER Luciana Beltra Regulations & Flight Standards Embraer S.A.	3.2	4	While the firm handhold example in Section 3.2 is merely illustrative, Embraer notes that use of seatbacks is not the only manner to comply with firm handhold requirements and hence removal of seats does not always require additional limitations on cabin access.		Y	N	Noted	EASA



agrees to the principal provided within the JUSTIFICATION se refer to EASA response to comment no.13).

nge to the text as proposed by the commenter is not envisaged.

e note that chapter 2 is providing background information on ontent of this CM only whereas chapter 3.2 is providing a iption of any potential additional limitation.

is reason the proposed additional wording does not provide er clarity as they have been addressed in other sections of this

concur with the comment made.



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18	EMBRAER Luciana Beltra Regulations & Flight Standards Embraer S.A.	3.2	4	In the fourth paragraph of Section 3.2, the CM proposes that having no occupants in the cabin would require limitations on use of stowage facilities because of a loss of smoke/fire detection capability, but how is this different than a fully compliant airplane being ferried or repositioned with no passengers or cabin crew aboard? Since smoke or fire originating in cabin stowage is almost always caused by passenger carry-on baggage, having no passengers aboard already adequately addresses the risk and a specific limitation on stowage use when flying with an empty cabin is not necessary.	This example should be removed.	Ν	Y	Not accepted	Havin of sto restri- of the
19	EMBRAER Luciana Beltra Regulations & Flight Standards Embraer S.A.			While the applicability of this CM is presumably limited to incomplete cabins that are addressed through approved design changes, it would be helpful to clarify that inoperative items handled through master minimum equipment lists, and the associated maintenance and operational limitations, are not affected by this CM.	There should be something added to make clear that this CM does not apply to inoperative equipment that is addressed through the master minimum equipment list, or any of the associated maintenance or operational procedures, similar to what is already included about permit to fly.	Y	Ν	Not accepted	The C comm MME
20	Fokker Services Ron Huisman Airworthiness/Certific ation Engineer Office of Airworthiness	Par. 2	3	The proposed text "A design change to allow flights to take place with an incomplete passenger cabin should therefore be classified as a 'major change'." suggests that there are no alternative considerations. This is contradicted at several places in the text (e.g. paragraph 3.3)	Fokker Services suggests the following text: "A design change to allow flights to take place with an incomplete passenger cabin may need to be classified as a 'major change', depending on the considerations on operational characteristics and mass and balance characteristics".	No	Yes	Not accepted	Section incom Alterr with t conce A cha
21	Fokker Services Ron Huisman Airworthiness/Certific ation Engineer Office of Airworthiness	Par. 3.2	4	The proposed text "If limitations are imposed that restrict cabin occupants from moving freely within the cabin, or if there will be no cabin occupants at all, the early detection of a smoke/fire in one of the facilities cannot be assured." may be applicable in certain configurations, however from an operational point of view this is not different from e.g. a repositioning flight with only flight crew on board, for which no further restrictions apply.	Fokker Services suggests to change the text as follows: "If limitations are imposed that restrict occupants from moving freely within the cabin, the early detection of a smoke/fire in one of the facilities cannot be assured."	No	Yes	Not accepted	Please A cha introc scena
22	Fokker Services Ron Huisman Airworthiness/Certific ation Engineer Office of Airworthiness	Par. 3.2	4	The reference to Section 3.3 (V) of GM 21.A.91, if "the change alters the Airworthiness Limitations or the Operating Limitations", then the change should be classified as a 'major change' is not correct since this criterion has been deleted from GM 21.A.91 with EDD 2016/007/R, dated 26-04-2016. Although there may be an intention to re-introduce this criterion in GM 21.A.91, the reference is in- appropriate as long as there is no formal publication.	If restrictions need to be introduced, Fokker Services suggests to make the correct reference by writing: "The reference to Section 3.4 (f) of GM 21.A.91 if "the design change introduces or affects functions where the failure effect is classified catastrophic or hazardous" then the change should be classified as a 'major change' ". If it can be argued that there is no catastrophic or hazardous failure effect, the design change does not automatically need to be classified as a 'major change'.	No	Yes	Partially agreed	The re Sectic Please chapt chang



ng no passengers on board does not necessarily exclude the use owage facilities. Hence if the use of stowage facilities is not icted, there is an increased risk that a fire developing inside any e stowage facilities is not timely detected.

CM does not address inoperative equipment. As stated by the menter, inoperative equipment is properly addressed via existing

on 3.2 and 3.3 of the CM clarify why a change introducing an nplete cabin should be classified as major.

natives for placements flights of aircraft not in full compliance the applicable requirements are provided by the permit to Fly ept. (see also response to comment 7).

ange to the text as proposed by the commenter is not envisaged.

se refer to EASA response to comment no.18.

ange to the text as proposed by the commenter cannot be duced as having no cabin occupants in the cabin is a realistic ario for an incomplete passenger cabin.

reference to Section 3.3 (V) of GM 21.A.91 will be changed to on 3.4 (e) of GM 21.A.91.

se note that the regulation was updated which will be reflected in ter 1.2, i.e. EDD2019/018/R has been added. For this reasons, a ge to the text as proposed by the commenter is not envisaged.



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23	Fokker Services Ron Huisman Airworthiness/Certific ation Engineer Office of Airworthiness	Par. 3.2	4	Fokker Services objects to the proposed text stating that the need for any limitation would result in a 'major change' in the paragraph "The need for any limitations would depend on the particular intended cabin configuration. As discussed above, an incomplete passenger cabin that does not fully comply with the airworthiness requirements for passenger transportation would reduce the safety of the occupants, so there would be a need for some appropriate limitations to be developed and agreed with EASA as part of the 'major change' approval process." This paragraph does not cater for any other classification than 'major' or 'minor'.	Fokker Services suggests the last sentence of this paragraph to be rephrased as follows: "so there would be a need for some appropriate limitations to be developed as part of the approval process."	No	Yes	Not accepted	Please Howev classifi For the comm
24	Fokker Services Ron Huisman Airworthiness/Certific ation Engineer Office of Airworthiness	Par. 3.3	5	The mass and balance characteristics need certainly be considered, however if it can be concluded that the aeroplane remains within the TCH published W&B limits and Centre of Gravity envelope, there is no need to classify the design change as 'major change' regarding this aspect. Even if ballast would need to be installed, classification of 'minor change' may be possible if installing ballast is standard practice for the specific aeroplane type/model and already catered for in the appropriate TCH published manuals.	Although the text of paragraph 3.3 with respect to the comment is correct, Fokker Services suggests write the following: "If a large part of the cabin equipment is removed, this could have an appreciable effect on the mass and balance of the aeroplane. If there are no instructions in the appropriate TCH published manuals for W&B and C. of G. envelope corrections, it would disqualify the change from being classified as 'minor'"	No	Yes	Not accepted	The ex envelo minor A chai
25	Fokker Services Ron Huisman Airworthiness/Certific ation Engineer Office of Airworthiness	Par. 3.4	5	The conclusion "EASA considers that a design change which is needed for flights with incomplete passenger cabin should be considered to be a 'major change', in accordance with 21.A.91." suggests that there are no alternative considerations.	Fokker Services suggests the following text: "EASA considers that a design change which is needed for flights with incomplete passenger cabin shall be duly considered in accordance with 21.A.91, to establish, depending on the considerations on operational characteristics and mass and balance characteristics" whether the change should qualify as a 'major change' ".	No	Yes	Not accepted	Please A char



EASA response
refer to EASA response to comment 13.
ver, it is the intention of this CM to highlight the major ication if the conditions in chapter 3.2 and 3.3 are met.
e above reasons, a change to the text as proposed by the enter is not envisaged.
vistence of TCH published manuals for W&B and C. of G. ope corrections is not a justification for a change classification as
nge to the text as proposed by the commenter is not envisaged.
e refer to EASA response to comment 20.
nge to the text as proposed by the commenter is not envisaged.



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26	Clayton P. Henderson (MRAeS)	all	all	<ul> <li>Referenced Documentation</li> <li>* Part 21 IR 748/2012, 21.A.90B(b) - Points 21.A.91 to 21.A.109 not (currently) being applicable to Standard changes,</li> <li>* EASA AMC &amp; GM to Part-M, Annex to ED Decision 2013/005/R (Page 11 / 23),</li> <li>* Associated approved Type Certificate Data Sheet (TCDS),</li> <li>* CAMO responsibility for Layout of Passenger Accommodation (LOPA) definition.</li> <li><b>Operational observation</b></li> <li>My understanding is that the Commander of an aircraft must be satisfied before that aircraft takes off, that the load carried is of such weight and so distributed and secured that it may safely be carried on the intended flight (i.e. Load Sheet verification).</li> <li>Now, any assessment of that aircraft's ability to comply must be based on the information as to its performance approved by the state of design and contained in the Flight Manual for that particular aircraft.</li> <li><b>Maintenance consideration</b></li> <li>Any deviation from the aircraft's established interior configuration document (being an engineering diagram of the aircraft's cabin interior that includes, but is not limited to, locations of passenger and flight attendant seats, emergency equipment, exits, lavatories, and galleys) is usually issued via an approved CAMO organisation (who may/may not liaise with TC Holder). Thus defining any given interior design/layout, supporting Certificate of Release to Service issue as the master document - establishing interior components and installation operational criteria (if required) for any given flight.</li> </ul>	Conclusion 'Major' design change needed for flights with incomplete passenger cabin (in accordance with 21.A.91), will only result in unnecessary administration and additional cost. Especially, considering that all relevant data is currently available within Type Certificate Holder's (TCH) Operational Supporting Data (OSD) to cover such standard changes?			Not accepted	Pleas



se refer to EASA response to comment no.13 and 20.