

## DISPOSITION OF PUBLIC COMMENTS

AC 25-17A, Change 1, *Transport Airplane Cabin Interiors Crashworthiness Handbook*

Prepared by [John Sheldon](#), ANM-115

No.	Comment	Requested Change	Disposition
<b>Commenter: Private Citizen</b>			
1.	<p>The proposed change is much appreciated and I fully support. There is one improvement I would like to suggest. The width of the head strike zone is defined as between the centerlines of the armrests. Seats that are wider than usual, and/or have armrests that are wider than usual, could include regions in the head strike zone that are not likely to even be contacted by an occupant. Since there is no practical way to ensure a passenger will always be seated centered in a seat, other than the armrests, the seat width is not a realistic variable to control. Armrests, on the other hand, do positively limit the side-to-side position of the occupant and therefore “excess width” of a wider armrest should be excluded from the head strike zone.</p>	<p>My suggestion is to define the side boundaries as the lesser of the arm rest centerline or 2 inches from the inner edge of the armrest. This should be a fair compromise (i.e., an arm rest wider than 4 inches is considered “excess”).</p>	<p>The requested change is outside the scope of the head strike zone direction clarification and would change the zone. We will retain this comment, however, and consider it when we perform a major revision to this AC.</p>

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<b>Commenter: Ad HOC SAE Industry comments</b>			
1.	An error (procedural or typographical) has been noted in paragraph b(3) in Sections 81 through 86 on pages 46, 59, 72, 85, and 98 and 112.	For the sections that address Amendment 25-64 and prior, the references under paragraph (3) stating “Appendix 13 may be used with any test method used to demonstrate compliance with the §§ 25.785(b) and (d) blunt force trauma requirements for items within the head strike zone” should refer instead to §§25.785(a) and (c) at the appropriate amendment levels.	We agree and have made the corrections
2.	An error (procedural or typographical) has been noted in paragraph b(3) in Sections 82 through 88 on pages 59, 72, 85, 98, 112, 126, 140.	When modifying the wording in paragraph (3) for all amendment levels except for 25-0, the following sentence from the current revision was deleted - “Appendix 13 of this AC contains the complete policy memorandum.” Without this statement, it is not clear what is contained in Appendix 13.	We agree and have made the corrections.

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3.	Recommend paragraph b(3) in Sections 81 through 88 on pages 46, 59, 72, 85, 98, 112, 126, 140 be changed as follows:	<p>The test methods described in <b>Appendix 13</b> may be used <del>with any test method used</del> <b>①</b> to demonstrate compliance with <b>the §§ 25.785(b) and (d) for both</b> <b>②</b> blunt force trauma <b>requirements and formation of post-impact sharp and injurious edges and features</b> for items <b>within the head strike zone defined in Figure 8#-2</b> <b>③</b>.</p> <p><b>①</b> The intent of the sentence is met without the additional wording.</p> <p><b>②</b> The sentence only mentions the use of the test methods in Appendix 13 for evaluation of blunt force trauma, however sharp and injuries edges and features formed as a result of the impact tests must also be addressed.</p> <p><b>③</b> § 25.785(a) at Amendment 25-64, and § 25.785(b) at Amendment 25-72 includes § 25.562, which has a headstrike zone different than the headstrike zone referenced here. Referring to the figure will clarify which headstrike zone is being referred to.</p>	<p>We agree and have made the following corrections:</p> <p>“The test methods described in Appendix 13 may be used to demonstrate compliance with the §§ 25.785(b) and (d) for both blunt force trauma and formation of post-impact sharp or injurious edges or features for items within the head strike zone as defined in figure 8#-2.”</p>

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4.	Recommend paragraph b(8) in Sections 86 through 88 on pages 112, 126, and 140 be changed as follows:	<b>Compliance with § 25.562(c)(5) can be used to show compliance to § 25.785(c)(2) <a href="#">for those areas struck by the ATD head during dynamic testing.</a> See AC 25.562-1B, “Dynamic Evaluation of Seat Restraint Systems and Occupant Protection on Transport Airplanes.”</b>	We agree and have made the clarification.
5.	Recommend paragraph b(5) in Sections 81 through 88 on pages 49, 59, 72, 85, 98, 112, 126, and 140 be changed as follows:	If the padding is easily removed <a href="#">during flight</a> , there should be acceptable placarding requiring the padding be in place during taxi, takeoff and landing.	The requested change is outside the scope of the head strike zone direction clarification. We will retain this comment, however, and consider it when we perform a major revision to this AC.
6.	Recommend paragraph b(5) in Sections 81 through 88 be changed as follows:	<p>Industry recommends a significant revision to the paragraph based on the following Industry positions. Note that this proposal is to address the inertial loads defined in §25.561(b)(3), and does not intend to modify the existing guidance defining potential head impact areas under §25.562 inertial loads.</p> <p>Position #1: The headstrike zone should be based on occupant size and the inertial load applied.</p> <p><u>Rationale:</u> Armrests and seat bottom cushion edges have minimal effect on the load applied to the occupant (either inertial load or restraining load) and should not be used to define the headstrike zone.</p> <p>The occupant does not articulate farther laterally if the armrests are spaced farther apart. Computer modelling of passenger seat dynamic load</p>	<p>The requested change is outside the scope of the head strike zone direction clarification and would change the zone. Significant changes to the zone would require the FAA to make a comprehensive assessment of the entire zone, including if the 35 inch limit is valid considering actual head paths from § 25.562 tests. The “Purpose” discussion in the proposed AC refers to whether items close to the occupant’s head, on the occupant’s seat, should be included in the head strike zone. It does not define objects close to the occupant’s head as being non-injurious. We will retain this comment, however, and consider it when we perform a major revision to this AC.</p> <p>An exception specifically for the inside limit of the head strike zone is addressed below in</p>

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		<p>conditions performed by Industry members consistently shows that armrests are not tall enough relative to the seated occupant to significantly influence the direction of occupant articulation, as the occupant will bend over the armrest and the head path will follow the direction of inertial load. The results of the Industry’s computer modelling are available to the FAA if desired.</p> <p>The zone near the occupant in which headstrikes are not considered likely to cause serious injury does not expand or contract due to seat cushion width (see Position #3 for more details).</p> <p>Position #2: Occupant head travel will be parallel with the airplane longitudinal axis under emergency landing conditions unless there are significant forces acting upon the upper torso (restraints, significant body contact with hard structure, etc.).</p> <p><u>Rationale:</u> Industry concurs with the following wording in the “PURPOSE” section of the draft change.</p> <p>“Protecting the occupant’s head from serious injury requires determination of the zone that the head could strike, i.e., the head strike zone. Because inertial forces will cause the head to travel along the longitudinal axis of the airplane when showing compliance for the inertia forces</p>	no. 7.

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		<p>specified in §§ 25.561 and 25.562, the head strike zone should be oriented in the same direction (the airplane longitudinal axis) as the forces are applied. The guidance in the previous release of this AC did not specify this to be the case, so some applicants misinterpreted the head strike direction to be aligned with the seat, regardless of angle of installation of the seat, which is not consistent with § 25.785, which is protection of occupants in the emergency landing conditions specified in §§ 25.561 and 25.562.”</p> <p>In addition to the regulatory inertia forces specified, the SAE Seat Committee ad-hoc working group also investigated what the impact orientation was for transport aviation aircraft undergoing an emergency landing condition that was severe (hull loss) but survivable. Previous research on the subject was used in the development of § 25.562 and documented in FAA Report DOT/FAA/CT-82/69, “Transport Aircraft Crash Dynamics” from 1982. The findings in that report were that impacts are either symmetrical or if unsymmetrical, and yaw is within <math>\pm 10</math> degrees. The survivable accidents around the airport were less severe than the other types of impacts, where the fatalities and serious injuries outnumber the minor/none. The most common scenarios for survivable accidents were:</p> <ul style="list-style-type: none"> <li>• Ground to ground (runway overrun)</li> </ul>	

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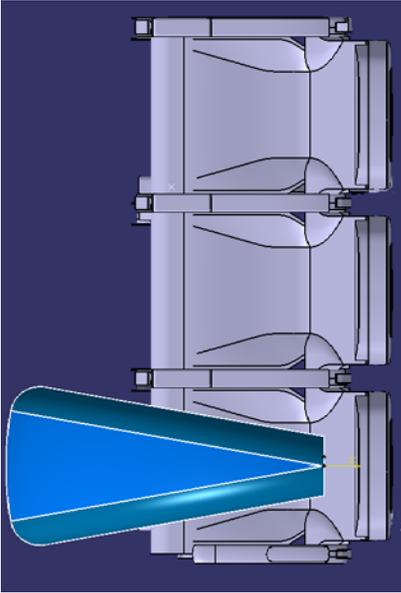
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		<ul style="list-style-type: none"> <li>• air to ground (hard landings)</li> <li>• air to ground (other types of impacts).</li> </ul> <p>As this research was from 1982, more recent survivable emergency landings were reviewed, dating back to 1999. Industry's determination is that the findings in the FAA report are still valid, with the airplane either experiencing a runway overrun or landing short of the runway being the most common survivable emergency landing scenarios (70%).</p> <ul style="list-style-type: none"> <li>• Runway overrun = 23 occurrences</li> <li>• Landing short of runway = 6 occurrences</li> <li>• Veering off runway = 5 occurrences</li> <li>• Other (Approach, etc.) = 7 occurrences</li> </ul> <p>Due to the prevalence of the aircraft aligned with the runway before the emergency landing, Industry concurs with the FAA that the aircraft yaw angle at impact is typically less than 10 degrees relative to the airplane longitudinal axis for serious but survivable accidents.</p> <p>To accommodate previous FAA comments regarding the width of the headstrike zone in relation to seat backs, Industry agrees that the entire width of the seat back should be considered when evaluating potential head strike surfaces.</p> <p><u>Proposal:</u> The width of the head strike zone is</p>	

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		<p>bounded by a 95<sup>th</sup> percentile male head form moved along the 35 inch line segment yawed <math>\pm 10</math> degrees from the airplane longitudinal axis. The 95<sup>th</sup> percentile male is the largest occupant size used in evaluating injury potential for §25.785.</p>  <p>For seat back surfaces, the entire width of the seat back will be considered when evaluating potential headstrike areas.</p> <p>Position #3: Surfaces close to the occupant are not considered likely to cause serious injury to the occupant's head.</p> <p><u>Rationale:</u> Industry concurs with the following</p>	

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		<p>wording in the “PURPOSE” section of the draft change.</p> <p>“Additionally, a literal interpretation of the head strike zone depicted in AC 25-17A would include portions of the occupant’s own seat very close to the seat back and seat bottom cushions. This part of the zone is not considered likely to cause serious injury to the occupant’s head and has been removed for clarification.”</p> <p>Under the applicable inertial loads, the occupant sitting height will prevent the head to contact nearby surfaces, and the short distance between the occupant and nearby surfaces do not allow significant head contact velocity.</p> <p>Deceleration under §25.561 inertial loads is calculated to be less than 15 ft/sec, based on the following parameters.</p> <ul style="list-style-type: none"> <li>a) The inertial load has a triangular pulse shape.</li> <li>b) The slope of the pulse is the same as the one defined in §25.562(b)(2).</li> <li>c) The peak of the triangular pulse shape is 9g.</li> </ul> <p>A triangular pulse shape has been established through decades of research to be the appropriate pulse shape for emergency landing inertial loads. Using the same slope as that defined in §25.562(b)(2) has been an accepted practice in defining dynamic test conditions in demonstrating</p>	

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		<p>compliance to EASA Special Conditions for inflatable restraints.</p> <p>Industry has performed multiple dynamic tests at sled deceleration speeds less than &lt;15 ft/sec to evaluate potential blunt trauma to the head, however most of the tests performed to date were to evaluate the head impact severity of seatback surfaces or vertical surfaces, which typically result in HIC results less than 400. Of the few dynamic tests at this velocity range where the ATD head contacts a horizontal rigid surface, HIC results are still significantly less than 1000. One example is a dynamic test with a sled initial velocity of 14.8 ft/sec and a triangular deceleration pulse with a similar deceleration slope to §25.562(b)(2) but with a peak of 10.6g. The ATD head contacted the horizontal surface of a metal support structure and did not travel further. There is no visible deflection or breakage of the support structure and therefore is considered a rigid surface. The HIC result was less than 550. More details of the tests noted above can be provided if needed.</p> <p>With regards to surfaces being sufficiently robust to withstand low velocity impacts without generating sharp or injurious edges or features, typical industry construction of seats and interior items are required to meet additional requirements, either regulatory or from the operator, that require durable materials. Requirements such as</p>	

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		§25.785(k), abuse and cycle loading, and additional customer concerns (warranty issues, normal wear and tear, etc.), drive designs that do not fracture in-service. At impact velocities <15 ft/sec, these materials and constructions will not create sharp and injurious edges and features that would cause serious injuries. However, if an interior surface close to the seated occupant is unique (plate glass, crystal, etc.) and suspected of being easily broken under low velocity impacts, impact testing may be necessary to demonstrate a sufficient level of impact resistance.	

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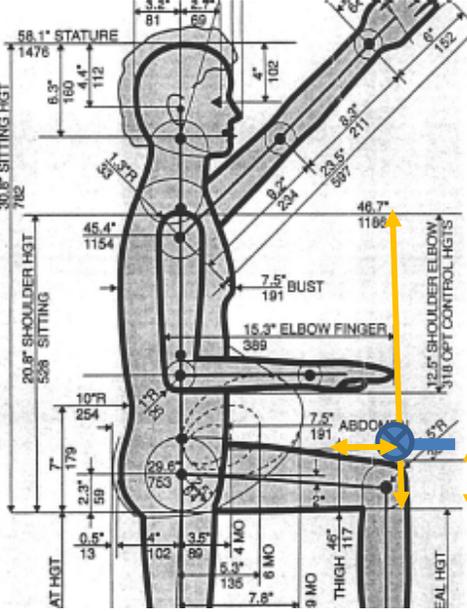
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7.	Recommend paragraph b(5) in Sections 81 through 88 be changed as follows:	<p><u>Proposal:</u> Instead of using the seat cushion edge to limit the headstrike zone (see Position #1), Industry proposes using the sitting 5% female as the basis for this limit, as the 5% female is typically the smallest occupant size used in evaluating injury potential for §25.785. Two vertical measurements were chosen to calculate this limit: shoulder height, and thigh height. The shoulder height is chosen as it is slightly below the head, therefore surfaces closer than this distance would not be contacted by the head. The thigh height is subtracted as the occupant typically pivots about a point near the top of the thigh and not at the ischial tuberosities.</p> <p>5% female anthropometric measurements:</p> <p>Shoulder (21.14 inches) – thigh (5 inches) + buttock to mid-torso (4.73) = 20.87 inches ≈ 20.5 inches</p> <p>Reference: “The Measure of Man &amp; Woman”, Henry Dreyfuss Associates, 2002</p>	<p>We agree with changing the limit from the forward edge of the seat cushion to a fixed dimension of 20.5 inches. For simplicity, we will call this the shoulder height of the seated 5% female. We do not agree that the head strike plane should start at a plane 20.5 inches forward of the CRP and have left this portion of the head strike arc unchanged. We have made the following change:</p> <p>“The striking radius of the head (head strike zone) is considered to be a zone whose length is bounded between an arc at the shoulder height of the 5<sup>th</sup> percentile female occupant (20.5-inches) and an arc at the limit of the head path (35-inches) whose centers are at the intersection of the plane of the uncompressed top of the seat cushion with the plane of the uncompressed front of the back cushion; commonly referred to as the cushion reference point (CRP), as shown in figure 8X-2.”</p>

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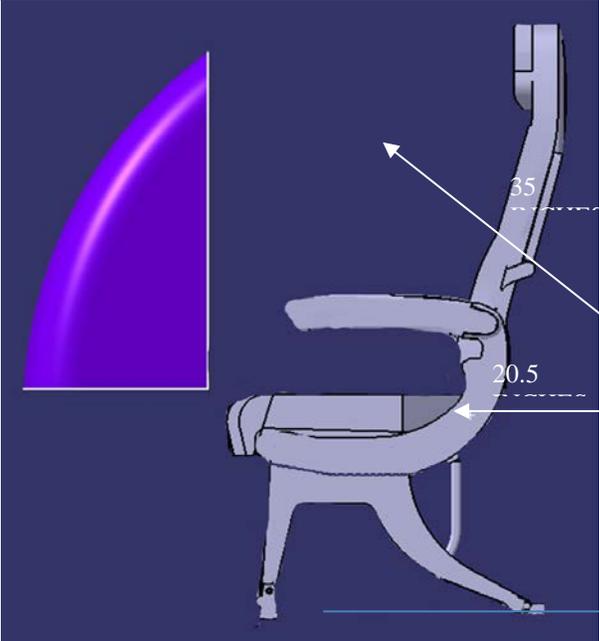
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<b>Committer: Ad HOC SAE Industry comments</b>			
		 <p>Therefore, items less than 20.5 inches forward of the CRP are not considered likely to cause serious injury to the occupant’s head. A figure of the modified headstrike zone is shown below.</p>	

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		 <p data-bbox="730 1027 1360 1166">Position #4: Headstrike zone guidance should be definitive as to the criteria for items within the headstrike zone, and the criteria for items outside the headstrike zone.</p> <p data-bbox="730 1190 1360 1433"><u>Rationale:</u> The headstrike zone defines where the occupant's head is likely to travel under the inertial loads of an emergency landing. Wording such as "slightly outside" in reference to the headstrike zone leads to confusion as to what is "slightly", leading to differing interpretations and therefore inconsistency in the application of</p>	

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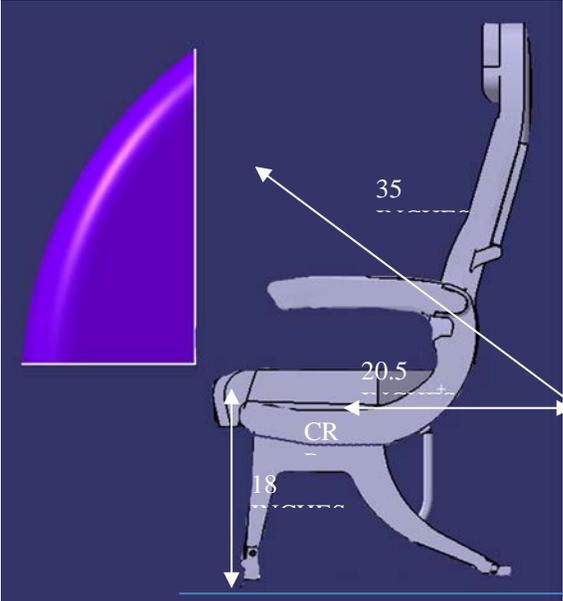
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		<p>guidance.</p> <p><u>Proposal:</u> Compliance to §25.785(k) is sufficient to evaluate surfaces outside the headstrike zone.</p> <p>Based upon the four Industry positions described, recommended wording changes to paragraph (b)(5) is as follows.</p> <p>The striking radius of the head (<b>head strike zone</b>) is considered to be <b>a zone whose length is bounded by the following:</b></p> <p>A 35 inch arc radius with the arc center located at the seat Cushion Reference Point (CRP), with the arc length spanning a distance from vertical to a height of 18 inches from the floor (see Figure 8#-2). The CRP is <del>n arc at the forward edge of the seat bottom cushion and an arc at the limit of the head path (35 inches) whose centers are</del> at the intersection of the plane of the uncompressed top of the seat cushion with the plane of the uncompressed front of the back cushion; commonly referred to as the cushion reference point (CRP), <del>as shown in figure 82-2.</del> Previously this was referred to as seat reference point (SRP). However, with the advent of dynamic seat testing the definition for SRP was changed (refer to current version of AS8049). The CRP is located midpoint between lap belt anchor points. <b>The head strike zone extends in the direction parallel to the airplane longitudinal axis. The width of the head</b></p>	

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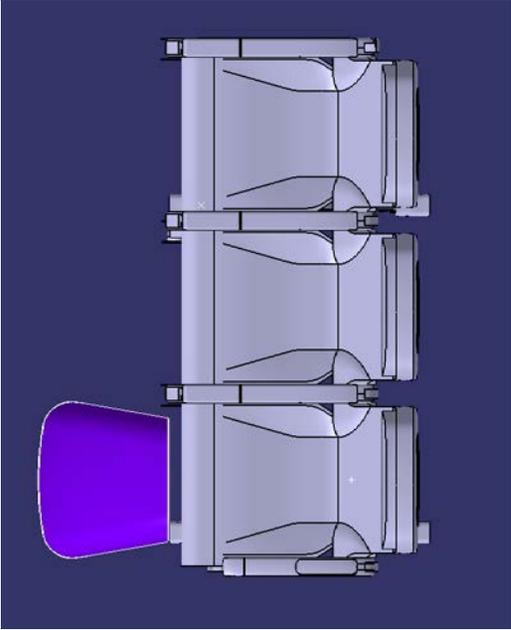
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		<p><del>strike zone is bounded by a vertical plane through the intersection of the centerlines of each armrest and the CRP as shown in figure 82-2.</del></p> <p>A 95<sup>th</sup> percentile male headform moved along a 35 inch line segment yawed <math>\pm 10</math> degrees from the airplane longitudinal axis as shown in figure 8#-2. The 95<sup>th</sup> percentile male headform for this analysis is a circle with a diameter of 6.5 inches (16.5 cm). A vertical plane 20.5 inches forward of the CRP.</p> 	

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		 <p data-bbox="730 1011 1367 1438">Typical installations to be considered are bulkheads, cabinets, tables, <del>and</del> passenger evacuation slide covers, <a href="#">interior furniture, and sidewalls</a>. The installation should not contain any pointed corners or sharp edges. <a href="#">If an interior surface close to the seated occupant is unique (plate glass, crystal, etc.) and suspected of generating edges and features that could cause serious injuries or impede egress under low velocity impacts, impact testing may be necessary to demonstrate a sufficient level of impact resistance. For seat back surfaces, the head strike</a></p>	

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		<p><a href="#">zone is defined by the 35 inch arc radius and the width of the seatback.</a></p> <p>The testing used to demonstrate that the installation is not injurious must take into account whether the system (e.g., seatback mounted telephone) is allowed to be used during taxi, takeoff and landing. If the system is allowed to be used during these phases of operation, the testing must consider the system in both the deployed and stowed position (e.g., seatback mounted telephone in or out of the cradle).</p> <p>If the sidewall configuration is such that it is potentially hazardous in a combination of forward and side loads, it should be substantiated even if it might be slightly outside of the <b>head strike zone</b>. <a href="#">Any surface less than 18-inches above the floor need not be considered.</a> Surfaces within the <b>head strike zone</b> may be padded with energy absorbing material, such as one-inch of either Ensolite (Type AH, AHC, IV3, HHC or HH), Klegecell or Airex 4070. Foam rubber is not satisfactory since it is an energy storing material. If the padding is easily removed <u>during flight</u>, there should be acceptable placarding requiring the padding be in place during taxi, takeoff and landing. (Amendment 25-0)</p>	

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<b>Commenter: Boeing</b>			
1.	<p>Page 46, para. (5);                      Page 59, para. (5);                      Page 72, para. (6);                      Page 85, para. (6);                      Page 98, para. (6);                      Page 112, para. (8);                      Page 126, para. (8);                      Page 140, para. (8)</p> <p>Energy absorbing materials listed in the proposed updated AC are not current; some are no longer offered, and others now have multiple variations.</p>	<ul style="list-style-type: none"> <li>• Ensolite types AH, AHC, HHC and HH are no longer offered, IV3 is the only approved type currently marketed. Therefore, please remove all except IV3.</li> <li>• Klegecell is available in various product types. Please specify which type is acceptable:                             <ul style="list-style-type: none"> <li>▪ DIAB Klegecell® R 100 Rigid, Closed Cell PVC Foam Core Material</li> <li>▪ DIAB Klegecell® R 130 Rigid, Closed Cell PVC Foam Core Material</li> <li>▪ DIAB Klegecell® R 200 Rigid, Closed Cell PVC Foam Core Material</li> <li>▪ DIAB Klegecell® R 260 Rigid, Closed Cell PVC Foam Core Material</li> <li>▪ DIAB Klegecell® R 45 Rigid, Closed Cell PVC Foam Core Material</li> <li>▪ DIAB Klegecell® R 60 Rigid, Closed Cell PVC Foam Core Material</li> <li>▪ DIAB Klegecell® R 75 Rigid, Closed Cell PVC Foam Core Material</li> <li>▪ DIAB Klegecell® TR 100 High-</li> </ul> </li> </ul>	<p>The requested change is outside the scope of the head strike zone direction clarification and. It would also effectively eliminate previously accepted methods of compliance. We will retain this comment, however, and consider it when we perform a major revision to this AC.</p>

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		<p>performance Expanded Polymer Foam Core Material</p> <ul style="list-style-type: none"> <li>▪ DIAB Klegecell® TR 130 High-performance Expanded Polymer Foam Core Material</li> <li>▪ DIAB Klegecell® TR 55 High-performance Expanded Polymer Foam Core Material</li> <li>▪ DIAB Klegecell® TR 75 High-performance Expanded Polymer Foam Core Material</li> </ul> <ul style="list-style-type: none"> <li>• Airex 4070 is no longer produced, please remove from list.</li> </ul> <p>Revise material options to match availability.</p>	

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2.	<p>Page 46, para. (5)  Page 59, para. (5)  Page 72, para. (6)  Page 85, para. (6)  Page 98, para. (6)  Page 112, para. (8)  Page 126, para. (8)  Page 140, para. (8)</p> <p>The proposed text states:  “...If the sidewall configuration is such that it is potentially hazardous in a combination of forward and side loads, it should be substantiated even if it might be slightly outside of the head strike zone. Any surface less than 18-inches above the floor need not be considered....”</p>	<p>This clause was written to address potential hazards on “sidewall configuration [...] in a combination of forward and side loads;” however, it is inconsistently levied on configurations that are not adjacent to sidewalls. We request that the original intent be emphasized and clarified as follows:  “...If the sidewall configuration is such that it is potentially hazardous in a combination of forward and side loads, it should be substantiated even if it might be slightly outside of the head strike zone. <b><u>Features other than the airplane sidewall that are outside of the head strike zone need not be considered.</u></b> Any surface less than 18-inches above the floor need not be considered.”</p> <p>Our suggested change will ensure uniform interpretation and eliminate subjective evaluation.</p>	<p>We do not agree with the comment that potentially hazardous interior features (other than sidewalls) slightly outside of the head strike zone need not be considered. The intent of the statement is potentially hazardous features be substantiated even though they may be slightly outside the head strike zone.</p> <p>We have revised the sentence to read, “If a surface or interior feature is such that it is potentially hazardous in a combination of forward and side loads, it should be substantiated even if it might be slightly outside of the head strike zone.”</p>

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<b>Commenter: Boeing</b>			
3.	Page 47, FIGURE 81-2; Page 60, FIGURE 82-2; Page 73, FIGURE 83-2; Page 86, FIGURE 84-2; Page 99, FIGURE 85-2; Page 113, FIGURE 86-2; Page 127, FIGURE 87-2; Page 141, FIGURE 88-2;  All head strike zone graphics.	We recommend using graphics that comply with standard drafting conventions, i.e., construct graphics using proper projections to align seat features and head strike zone extremities.  Our recommended suggestion will avoid confusion and limit different interpretation of what the graphic represents.	We disagree and did not change the AC. The figures in the AC do not follow any drafting conventions as they are not intended to be engineering drawings. The intent of the figures is clear.

## DISPOSITION OF PUBLIC COMMENTS

AC 25-17A, Change 1, *Transport Airplane Cabin Interiors Crashworthiness Handbook*

Prepared by [John Sheldon](#), ANM-115

No.	Comment	Requested Change	Disposition
<b>Commenter: Embraer</b>			
1.		Regarding the consideration on head strike zones, on page 140 - (8) Paragraph (d)(2), the width of the head strike zone should be bounded by a vertical plane through the intersection of inboard lines of each armrest and the CRP. It should be considered standardization of this requirement since seats typically identified as “economy” class seats may have small armrest width when compared to those identified as first or business class resulting in larger area of evaluation for this category of seat if centerline of armrest is used to define head strike zone. In addition, potential head paths are not dependent on armrest width so it makes little sense to tie the possible head strike zone to anything other than the inner limit of each armrest. This also would be consistent with the seat designs without armrests and therefore the width of the head strike zone would be limited by the vertical plane intersection of the seat pan / cushion width and the CRP.	The requested change is outside the scope of the head strike zone direction clarification and would change the zone. We will retain this comment, however, and consider it when we perform a major revision to this AC.
2.		Furthermore, Embraer would also like to suggest a harmonization with EASA Certification Memorandum. EASA is proposing an amendment to issue a certification memorandum of the requirement 25.815 width of Aisle. This guidance (EASA Certification Memorandum - CS - 007) has the objective to clarify that the Aisle must be defined with no encroach during all phases of flight. Some manufactures and operators figured out that the compliance could be demonstrated during TT&L	The requested change is outside the scope of the head strike zone direction clarification. We will retain this comment, however, and consider it when we perform a major revision to this AC. See FAA policy PS-ANM-25.815-01 for FAA position on aisle width.

**DISPOSITION OF PUBLIC COMMENTS**

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Prepared by [John Sheldon](#), ANM-115

No.	Comment	Requested Change	Disposition
<b>Commenter: Embraer</b>			
		<p>phases only.</p> <p>Despite that, EASA is issuing criteria for minor obstructions to be accepted from deployable items from seats. Only deployable tables and video monitors following certain rules are acceptable to encroach into aisle only in phases of flight other than TT&amp;L.</p> <p>EMBRAER suggests the full adoption and incorporation of the EASA CM - CS - 007 in the AC 25-17A revision with the following improvement in the criterion for the deployable table defined in the EASA CM - CS - 007 as follows:</p> <ul style="list-style-type: none"> <li>• Text of EASA CM- CS- 007:</li> </ul> <p>3. EASA CERTIFICATION POLICY</p> <p>3.1. EASA POLICY</p> <p>( ... )</p> <p>3) Tables</p> <p>a. Encroachment into the minimum aisle width envelope defined by CS 25.815 is considered acceptable on all seat rows.</p> <p>b. If a deployable table encroaches into the minimum aisle width envelope required by 25.815, all the following conditions should be met:</p> <p>i) The hinge mechanism of a deployed in-armrest table may have a length up to 102 mm (4") and a height up to 51 mm (2"), measured from the top of the seat armrest, but should not protrude into the aisle beyond the armrest.</p> <p>ii) A table leaf with a thickness of maximum 25 mm</p>	

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<b>Commenter: Embraer</b>			
		<p>(1 ") may rest on an armrest but should not protrude into the aisle beyond the armrest.</p> <ul style="list-style-type: none"><li>• EMBRAER improvement proposal: iii) In-arm rest table are typically design to slide from aft to forward directions for passenger comfort, the forward position can protrude slight into the aisle (for example when a seat abreast change occurs), but can be easily push away. The criterion for restore the minimum aisle width envelope required by CS 25.815 through the application of a force on the video monitor not greater than 45 N (10 lbf) in at least one direction could be applied in this case.</li></ul>	