

**DISPOSITION OF PUBLIC COMMENTS ON PROPOSED
POLICY STATEMENT ANM-115-05-14, FRONT ROW HIC**

	Commenter	Comment	Disposition
1	Tom Knott	I would like to comment in favor of this policy statement. It carefully summarizes the key points needed to ensure front row occupant protection, and provides easily understood criteria for applicants. “.. clarify the sentence ..’The policy is not directed toward other seats.’ I think this is meant to differentiate between specialized seating such as crew, flight attendant, or side facing, ... the subject policy does apply toward all seating in general, the row-to-row being a specialized case covered in more detail by the earlier Policy.”	This policy provides acceptable methods of compliance for front row seats, only. Other seats, such as row-to-row, are covered in the referenced statement of policy.
2	Greg Budinger Director – Engineering Standards Chief Engineer Northwest Airlines	“The 3rd paragraph on page 2 under the title of Policy states to limit the evaluation for the head impact criterion to that strictly covered by the test in 25.562(b)(1). NWA believes the testing should be per 25.562(b)(2).”	The FAA agrees. The policy now refers to section 25.562(b) as is done in section (c)(5) of the regulation.
3		“...the first bullet point discussing front row seat setbacks for HIC is unclear to NWA. Is the setback measurement taken from the seat reference point of a deformed seat?”	The FAA has clarified the sentence. It addresses this question by defining the setback from the seat reference point by reference to AC 25-17
4		“What is meant by ‘...there is an undisturbed surface (no protrusions) beyond the head strike area traversed by the ATD in a dynamic test...’? Will we need to be concerned with what is on the forward side of the bulkhead (i.e. carts, supporting wall intersections, etc.) in determining if the surface complies with 25.785?”	This sentence has been removed. The policy now references memo ANM-03-115-31 for compliance to section 25.785.
5	NATCA	This proposal lacks a credible legal basis. “...the FAA is exceeding its authority by proposing to amend § 25.562 through adoption of a “Policy Statement” rather than the appropriate rulemaking process.	The FAA does not agree with the statement that it is exceeding its authority. The FAA has the discretionary authority to determine what methods are acceptable for compliance within the bounds of the regulation. This is not a proposal to amend § 25.562 but to define an acceptable method of compliance. It should also be noted that coordination with legal counsel and a public notice and comments period are standard in accordance with our processes.
6		The subject regulation requires in part that: “Each occupant must be protected from serious head injury ...” The regulatory history of this rule, including the fact that “each	The FAA does not agree that this proposal would change the scope and intent of § 25.562(c)(5). This section requires each occupant be protected

		DISPOSITION OF PUBLIC COMMENTS ON PROPOSED POLICY STATEMENT ANM-115-05-14, FRONT ROW HIC

	<p>occupant” was not redefined or otherwise qualified within the preamble to the rule, indicates that no additional explanation was needed because the common meanings of these terms apply.</p> <p>Hence, §25.562 (a) requires “everyone” be protected to the standards prescribed within the rest of §25.562, including §25.562(c)(5). If adopted, this proposal would effectively change the scope and intent of §25.562(c)(5) from “each occupant must be protected from serious head injury...” to “each occupant, other than those males seated in the front row with above average seated heights, must be protected from serious head injury...”. Such a substantive change clearly qualifies as rulemaking.</p>	<p>under the conditions in (b) which only requires testing with the ATD that is similar to a 50% male in stature. The extent of protection that test provides is part of the FAA’s discretionary authority.</p> <p>For the tests addressed by the subject statement of policy, additional reviews or analyses are not needed but this does not specifically limit the protection to that of a 50% male.</p> <p>Therefore rulemaking is not required.</p>
7	<p>While it’s true that a design standard is commonly used to limit the “range of occupancy” considered when covering the intent of “each occupant” for this and other rules, the long accepted human factors industries standard range is from the 5% female on the small side to the 95% male on the large side. This is the interpretation which was established by the FAA as an acceptable means of compliance with §25.562 shortly after the rule was promulgated almost 20 years ago. The proposed “policy” would now allow a reduction in this standard range from the 95% male to an “average” (i.e. 50%) male, but just for those men unlucky enough to be seated in “Front Row Passenger Seats”. This is not only a “significant revision” to the level of safety traditionally provided by §25.562(c)(5), but the meaning of “each occupant” within §25.562(a) would now inexplicably have to vary from seat to seat and threat to threat. Not only was this clearly not the original intent, this interpretation is clearly not “fairly encompassed within the regulation”, as the rule would now have no meaning without the proposed policy.</p> <p>In fact, if adopted this policy could set a precedent for any other requirement applicable to “each occupant” being similarly reduced in scope. The most obvious extension would be application of this new interpretation to all seats and threats covered by §25.562. But why stop there, what about the requirements to make oxygen dispensers, life preservers, and emergency exits available to “each occupant”? If this proposal is the</p>	<p>As noted by the commenter, precedent exists which establishes that ‘each’ does not mean everyone but moreover a range of occupants. This is a commonly accepted practice.</p> <p>There is no change in the definition for “the range of occupants”. The FAA will continue to use the established 5% female to 95% male range. What this policy does is simplify the certification process <u>for front row seats</u> to no further evaluation beyond what will be tested under the requirement of 25.562(b).</p> <p>This variation does not reduce the level of protection to that of a 50% male, it recognizes that the burden or ability to produce/certify these seats based on current methodology does not warrant detailed examination of test results for persons greater in stature than the ATD.</p> <p>If the test dummy (i.e., 50% male representation) hits a bulkhead and has HIC < 1000 or misses (i.e., HIC = 0) then the level of protection provided to those occupants larger than a 50% male has simply not been evaluated, as it would be for other aspects of the regulation such as lumbar load, and structural substantiation. This approach is similar to what is done for row-to-row seats as the referenced guidance.</p>

		DISPOSITION OF PUBLIC COMMENTS ON PROPOSED POLICY STATEMENT ANM-115-05-14, FRONT ROW HIC	
		reckless abuse of governmental discretion that it appears to be, it leaves those NATCA Bargaining Unit Employees which FAA Management will require to follow the policy, in an untenable, litigious, and perhaps even libelous position. NATCA will take any and all practical action to protect the interests of those employees	Lastly, the FAA has no intent of allowing this evaluation to extend to other areas in cabin compliance. The regulations covering the noted examples do not include acceptable performance criteria addressed by the 50% male. In addition, if data are presented which show that the level of risk mitigation outlined in this policy is not commensurate with the burden to certify front row seats, this policy may be revised as it is non-binding on the FAA.
8		<p>This proposal is not in the public interest. The difference in torso height between the 50% male and 95% male is only around two to three inches. Therefore it's hard to imagine the logic used by the FAA to conclude that the cost savings of reducing the setback of a seat from a partition a few inches warrants exposing roughly half the affected male passengers to a preventable potentially fatal head injury.</p> <p>Even if the cost of locating seats with an adequate setback were prohibitive, there are still the relatively inexpensive options of providing effective bulkhead padding or suitable passenger restraints (e.g. shoulder harnesses (approx. \$150/seat) or air bags (approx. \$300/seat)). Given a utilization of 3000 flights per year, a penny a flight would pay for a shoulder harness within its five year useful life.</p> <p>If the FAA decides it's somehow not even worth a penny a flight, NATCA contends another option would be to place restrictions on the seated height of occupants assigned to the front row seats, just as restrictions are currently placed on the occupants in exit row seats. This would have minimal impact on the airlines while protecting "each occupant" of a "Front Row Passenger Seat" from serious head injury as intended and required by §25.562(c)(5).</p> <p>Given a credible economic analysis, it's unlikely this FAA proposal would be found to be in the public interest even if proposed in the more appropriate form of a regulatory amendment. After all, the FAA found the proper application of this rule to be in the public interest when codified and most airplane manufacturers have complied with the 95% male standard during the almost twenty years hence.</p> <p>It appears that those within the FAA</p>	<p>As noted in the previous comment, this policy would not 'expose' half of the effected male passengers.</p> <p>The costs associated with locating seats with adequate seatback is often raised by airlines as a 'few inches' of floor space is very valuable, affecting airline cost which are heavily reliant on seat per - mile operations.</p> <p>The FAA does not disagree that there may be relatively inexpensive options of providing effective bulkhead padding or suitable restraints as noted by NATCA. These methods have been approved and accepted by the FAA.</p> <p>The cost per flight is not an FAA decision but an airline decision as the buyer of an airplane with a specified seat layout. Airlines may choose to use the methods identified by NATCA. In fact, the FAA agrees that these methods may be preferable because the level of protection would be known and perhaps provide a higher level of safety than addressed by the regulation and may even increase valuable floor space. <u>However this is a business decision on behalf of the Industry.</u></p> <p>It should be noted, again, that the methods provide by this policy are only one means, other means are included in the discussion or background of this policy.</p> <p>The FAA has determined that this proposed acceptable method of compliance is within the bounds of the regulation and reiterates that although</p>

		DISPOSITION OF PUBLIC COMMENTS ON PROPOSED POLICY STATEMENT ANM-115-05-14, FRONT ROW HIC

		responsible for making this proposal have shown little regard for either public law or public safety. If they go forward with adoption of this proposal at a time when technology is allowing such dramatic improvements in aircraft and automobile passenger impact protection, NATCA recommends they prepare to do a much better job of explaining why reducing the level of safety via the subject "Policy Statement" is both legal and in the public interest.	this proposal streamlines the seat certification process there are other options such as lap belts/shoulder harnesses, also not required by § 25.562, which are more costly yet may provide an enhanced level of safety.
9	Elizabeth A. Pasztor Director, Certification Regulatory Affairs Boeing Commercial Airplanes	Requested Change 1: Divide the section titled "Policy" into two sections: "Discussion" and "Policy." Rationale: The "Policy" section of the policy statement as originally drafted contains more than the policy, as it provides explanation and justification that makes it confusing as to what the actual policy is. Boeing suggests that the information be split in two different sections as indicated. By doing so, the "Policy" section will contain just what the policy is - stated in the most clear and concise way possible to eliminate potential confusion.	The FAA agrees to add a subsection to clearly delineate the background or the discussion from the methods of compliance.
10		Requested Change 2: Correct the reference in the third paragraph of the proposed "Policy" section. Rationale: We suspect that the reference to §25.562 (b)(1) was meant to be §25.562(b), since subparagraph (b)(1) is specific to the down test. We suggest correcting this apparent inadvertent error in the proposal.	The FAA agrees.
11		Requested Change 3: Include introductory text to the methods of compliance "bullets." Rationale: For clarity, we suggest adding the following text immediately before the "bullets" delineating the methods of compliance: Any of the following methods is an acceptable means to demonstrate HIC protection for occupants in front row seats, and demonstrate compliance to § 25.562(a) and § 25.562(c)(5): Placing this text prior to the bulleted information, rather than after it (as in the proposal), will benefit the reader.	The FAA agrees..
12		Requested Change 4: Re-order the Policy section "bullets" as indicated in our Enclosure #2. Rationale: Our proposed reordering of the	The FAA does not see that the order of the methods provided is inherent to the clarify of the policy but will include the requested change.

		DISPOSITION OF PUBLIC COMMENTS ON PROPOSED POLICY STATEMENT ANM-115-05-14, FRONT ROW HIC

		policy section “bullets” will provide more clarity in the acceptable methods of compliance and make clear when testing is and is not required.	
13		<p>Requested Change 5: Revise the information in the first bullet under the Policy section (see the third bullet in our mark-up, Enclosure #2) as follows:</p> <ul style="list-style-type: none"> • “In lieu of a dynamic test for HIC or head path arc, seats may be installed 45 inches or more for 'premier' (business, first) class seats or 42 inches or more for economy class seats from the potential contact point as measured from the seat reference point to the vertical plane at the aft most potential contact point. For the purposes of this policy, the seat reference point is as defined in paragraph 81.b.(c) of AC 25-17, dated July 17, 1991. Additionally, for the purposes of this policy, “the aft most potential contact point” is determined by a review of the drawings (or hardware as necessary) to determine what is in the head path arc without having to test for the head path arc and does not have to account for items installed that are clearly outside of the assumed head path arc.” <p>Rationale: in this revision, we suggest</p> <ul style="list-style-type: none"> · Delete the phrase “... based on the relative stiffness, and displacement characteristics of these seats...” since there is no policy or guidance on how to determine “relative stiffness.” The wording the proposed policy could lead to the subjective determination that a relative stiffness finding needs to be made in order to apply the policy. · Include clarifying words to note how the "aft most potential contact point" is determined. As worded in the proposed policy, it could lead one to believe that the applicant must demonstrate or analyze the Hybrid II ATD arc to determine potential strike zones. We assume that was not the FAA’s intent in this policy. · Clarify the “term seat reference point (SRP)” to be that as defined in Advisory Circular AC 25-17 (“Transport Airplane Cabin Interiors Crashworthiness Handbook”), which we believe was the FAA’s intent. This change will ensure that there is no confusion with SRP as defined in SAE Aerospace 	<p>The FAA agrees with the proposed rewording as it addresses multiple comments received to define the seat reference point and the unknown term of relative stiffness.</p> <p>However, the wording “..does not have to account for items installed that are clearly outside of the assumed head path arc,” may appear to contradict wording provide later in the policy for compliance with § 25.785 and will not be included.</p> <p>In addition, the policy would need to account for seats which are of a radically different design which would be extremely flexible and thereby obviously provide contact with a bulkhead which would result in a clear non-compliance to the regulation.</p> <p>Therefore the following text will be included: “..for seats which follow a design philosophy that includes the use of metallic components in the primary load path from the seat beams through the seat legs.” This text is clear and provides a limitation to those seats which this data is based upon.</p>

		DISPOSITION OF PUBLIC COMMENTS ON PROPOSED POLICY STATEMENT ANM-115-05-14, FRONT ROW HIC	
		Standard (AS) 8049, as they are two different things.	
14		<p>Requested Change 6: Clarify the portion of the proposed policy that states:</p> <p>" Neither this policy, nor the regulation on which this policy is based, provides a means to evaluate a specific level of protection for occupants greater in stature than the Hybrid II 50th percentile adult male ATD. Accordingly, the FAA has determined that it is sufficient to demonstrate only that there is an undisturbed surface (no protrusions) beyond the head strike area traversed by the ATD in a dynamic test condition in order to comply with each occupant criteria of § 25.785. "</p> <p>Rationale: This sentence seems to apply when head path data provided by a test is available, yet the policy statement provides that when a test is conducted, "no additional analyses would be required." This additional note and guidance lends confusion to the policy, as it does not provide comprehensive policy for §25.785 and conflicts with "no additional analyses required." While we have not provided specific suggested re-wording of this portion, we suggest that it be removed or revised to comprehensively address §25.785 for the various scenarios given for the §25.562 means of compliance.</p>	<p>The FAA has revised the existing to "Neither this policy, nor the regulation on which this policy is based, defines a means to evaluate a specific level of HIC protection for occupants greater in stature than the Hybrid II 50th percentile adult male ATD. In addition, this does not address compliance with § 25.785".</p> <p>This policy statement focuses on the means to comply with § 25.562(c)(5) as related to front row seats. The focus is therefore on the assessment of compliance for head injury protection as related to the cost of certification for front row seats, not for compliance with § 25.785. Therefore the definition of the range for compliance with 25.785 is not changed by this policy.</p>
15		<p>Requested Change 7: Delete the statement that the proposed policy will "increase the ability of manufacturers to implement the proposed rulemaking activity across all aircraft make and models."</p> <p>Rationale: We assume that the "proposed rulemaking activity" referred to in the statement is the 16G seat retrofit rule. Although we consider that the release of this policy will contribute to the ability of manufacturers to implement the 16G retrofit rule, we also consider, however, that this policy alone does not provide the level of relief necessary for manufacturers to implement (cost effectively) the 16G seat retrofit rule across all makes and models. Boeing's comments submitted to the 16G retrofit rule are still applicable and the cost/benefit analysis must accurately account for all aspects of implementation of the proposed rule to provide for a rule that minimizes the impact on industry without compromising the safety benefit.</p>	<p>The FAA has removed this statement to avoid misinterpretation. The intent of this statement was to communicate that the release of this policy will contribute to the ability of manufacturers to implement the "Improved Seats in Air Carrier Transport Category Airplanes" final rule.</p>

		DISPOSITION OF PUBLIC COMMENTS ON PROPOSED POLICY STATEMENT ANM-115-05-14, FRONT ROW HIC	
16		<p>Requested Change 8: Revise the "Implementation" section to allow use of previously approved methods of compliance (MOC).</p> <p>Rationale: The use of existing documented MOC on new applications (even after this policy is released) should be allowed. Continued use of an existing MOC, rather than applying a new MOC, may provide an economic benefit, as the new MOC may be more restrictive and thus more costly</p>	<p>The FAA partially agrees. The policy identifies a list of previously used methods of compliance on page two under the "Relevant Past Practice" section. The policy clearly states that these previously used methods will continue to be acceptable. A sentence has been added to the "Methods of Compliance" section to re-iterate this point.</p>
17	Philippe de Gouttes Manager Aviation Regulations Product Integrity Division Airbus	<p>Summary section: The clarification of the term "Front row seat" in the Summary is important and helpful. It should be extended to First Class and Business Class installations, where credenzas or ottoman seats (either qualified to 9 or 16g depending on the mounting principles) are mounted in front of the seat. Such installations cannot be considered as common "row to row" seating.</p>	<p>The FAA disagrees. Although we recognize that these "pod seats" are not the typical row-to-row seating, we did not envision them in the development of this policy. The front row definition therefore does not apply to multiple rows of "pod seats".</p>
18		<p>Policy section: The third paragraph in this section states: "To reduce the high costs associated with meeting the head impact requirements for front row seats, this policy limits the range of occupant evaluation for the head impact criterion to that strictly covered by the test in § 25.562(b)(1)." The test described under § 25.562(b)(1) is the 14g downward test, which is not the critical one in respect to head injury criteria estimation. Therefore the reference in the policy text should mention § 25.562(b)(2) or just in general reference tests under § 25.562(b).</p>	<p>The FAA agrees the policy has been revised to reference § 25.562(b) as noted in previous comments.</p>
19		<p>The first bullet after the fourth paragraph says: "Specifically, instead of a test for HIC at the front row, place the seats 45 inches or more for 'premier' (business, first) class seats or 42 inches or more for economy class seats, based on the relative stiffness and displacement characteristics of these seats, from..." This sentence leaves room for further interpretation. The "relative stiffness and displacement characteristics" seems to be considered as state of the art of the current and future seat design so that the referenced dimensions (42" and 45") can be used in the same way, as the 35" head strike radius for 9g seats. It is understood, that "stiffness and displacement" has not to be substantiated somehow through extra data.</p>	<p>The FAA agrees with the understanding provided by Airbus but has revised this section as noted in addressing a similar comment from Boeing.</p>
20		<p>General comment: This proposed Memorandum provides clarification about compliance methods to § 25.562(c)(5) at front row passenger seats. The rule § 25.562(c)(5) specifies that head impacts on equipment parts</p>	<p>The basis for this proposed method of compliance is the higher costs of certification associated with front row seats due to unique design requirements and installation which</p>

		DISPOSITION OF PUBLIC COMMENTS ON PROPOSED POLICY STATEMENT ANM-115-05-14, FRONT ROW HIC

		<p>in general wherever they occur must result in a HIC below 1000. The rule does not make any difference on which subject, either on a bulkhead in front of the seated person or on a back of the seat in front, a HIC might be generated. Therefore, in terms of clarification and consistency, .. the message of this Memorandum should be extended beyond front row passenger seats to the general application and justification of HIC scenarios according to § 25.562(c)(5),”</p>	<p>lead to a significantly higher costs per seat (as compared to row to row). If the costs are not higher for certifying these seats then there would be no reason to provide allowance for this policy to any seats.</p> <p>This policy is therefore not applicable to all seats.</p>
21	Tom Barth Technical Director AmSafe Aviation	<p>AmSafe is dominant in providing the key element of restraining the occupant to satisfy the injury requirements. Our experience in working across the range of seat suppliers, aircraft manufacturers, and operators has highlighted trends confirmed by this proposed policy that will raise future problems regardless of the interpretation of the regulatory intent. No matter which way the regulation is interpreted, the compliance methods must be based on clear and well established assumptions.</p> <p>The proposed policy is justified on financial arguments which do not address the majority expense and safety assumptions which are unfounded. If allowed to progress, the gap between intended safety and design practice will be too wide to ignore. Addressing these issues will then cost the industry more in the long run than it saves in the short term. The specific comments to the policy are framed around a series of questions that must be answered prior to making such a fundamental change in the compliance approach.</p> <p>The third paragraph of the Policy section states a reasonable underlying principal – risk management. It is argued that overall safety will be increased by the combined affect of</p> <ul style="list-style-type: none"> a) lower cost for small percentage of seats taking unequal resources; b) implementing SNPRM 67 FR 62294 to address all passenger and flight attendant seats. Achieving these two items are to automatically increase safety, justifying a lack of consideration for tall occupants. However, this fundamental connection is far from established, which leads to the first question. 	<p>As AmSafe has framed their comments to this policy as a series of questions, the FAA response will be based on answers to said questions.</p> <p>The FAA does not contest nor support AmSafe’s thoughts on the current state of the Industry. However, the FAA disagrees that there is a lack of consideration for tall occupants, only an unspecified level of acceptability for tall occupants, except to avoid protrusions.</p> <p>The rule does not define the acceptable level of HIC for occupants taller than a 50% ATD. This is defined through policy. For row to row seats the level of acceptability does not specify that HIC<1000 but uses HIC lite to assess critical areas of potential impact.</p>
22		<p>First Question: Why has the primary cost driver of cabin layout not been considered? Will the costs cited be significantly affected? Event a) attributes the expense to unique seat design and HIC test costs. However, most HIC compliant long pitch seats are certified</p>	<p>In proposing this policy the FAA considered the cost drivers of cabin layout but they were not specifically identified as an example in the policy. The potential loss of an additional 3 inches after performing a headpath test</p>

DISPOSITION OF PUBLIC COMMENTS ON PROPOSED POLICY STATEMENT ANM-115-05-14, FRONT ROW HIC		
		<p>via “no contact” using a headpath test or analysis, not a HIC test. Also, much of the unique design is to accommodate in arm tray tables and IFE, not HIC considerations. Clearly the cost of a HIC test is not the primary driver, but rather the affect of the policy on cabin layout. The three extra inches obtained by neglecting the 95% occupant size and given to the benefit of cabin flexibility is the true benefit, but whose implications have not been addressed.</p>
		<p>could possibly result in a loss of a row of seats for every bulkhead in an interior layout.</p> <p>A loss of a row of seats is a major continuing cost impact to Airline revenue.</p>
23	<p>Second Question: What official mechanism exists to ensure that costs saved from front row certification will be used for quicker implementation of SNPRM 67 FR 62294? Justifying neglect of the 95th% occupant is also based on a significant reduction in certification cost will stimulate compliance to the SNPRM. However, it lacks a mechanism to achieve this benefit which destabilizes the position that a safety benefit will actually be realized and the principal of risk management justified.</p>	<p>There is no official mechanism to ensure that costs saved will be used for quicker implementation. The proposed policy states that it will increase the <i>ability</i> of manufacturers to implement the SNPRM.</p> <p>The proposed policy does not state that there will be a significant reduction in costs, however based on the efforts put forth by Industry in support of seat streamlining to proceed in this direction the costs would have to be significant. The principle of risk management deals with balancing the cost burden with mitigating risk, which is what this policy does.</p>
24	<p>Third Question: As this policy is based on relative benefit on the macro scale, what is the net affect of the policy on the macro scale, and have these assumptions been considered?</p> <p>The affect of this policy is a clear support of the “No Contact” compliance method. The majority of interior layouts will adopt this configuration not just for front row, but for business and premium class as well. This will, as the policy suggests, also transfer to the retro fit aircraft as well.</p> <p>There are two fundamental issues that must be addressed. First, if the “No Contact” compliance method is the key to lower cost certification, then one must assume that it will be often employed, which eliminates the a primary justification for this policy (that only a minor number of seats are affected).</p> <p>Finally, the assumptions for the original “no contact” policy should be reviewed in detail. The original basis for allowing compliance, even for an average size passenger, by eliminating any assessment of injury is not sufficient when applied as a basic method instead of an occasional exception.</p>	<p>The FAA does not disagree that a clear affect of this policy is support of the no contact compliance method and that this may drive a majority of interior layouts to having large setbacks for front row seats.</p> <p>The FAA disagrees with the logic that “No Contact” compliance method is the key to lower costs. There are three methods of compliance specifically listed, only one of which, is no contact. These methods eliminate both added analyses and tests which result in lowered costs.</p> <p>Again the FAA does not argue with the noted reference data. However the data do not change the outcome of head impact before or after the release of this policy. ‘No contact’ methods have been acceptable in the past and the FAA has not asked that HIC be measured for a 95% male in the past and therefore not established what level is acceptable. Establishing a set value of acceptability for this rule would need to be done by rulemaking.</p>

		DISPOSITION OF PUBLIC COMMENTS ON PROPOSED POLICY STATEMENT ANM-115-05-14, FRONT ROW HIC

		This is of concern, considering that the most current published data on this subject suggests that long pitch seats pose a head impact risk (please refer to the proceedings of The Fourth Triennial International Fire & Cabin Safety Research Conference).	
25		I would like to say that policy with such far reaching impact must be substantiated on clear, solid footing. It's unfortunate that points central to the justification (noted above) have escaped open scrutiny. Failure to assess the affect of cabin layout on the general safety will take the industry down a road of unknown consequence.	If information is presented to the FAA which counters the potential loss of a seat row in terms of costs and risk mitigation, the FAA may re-evaluate the acceptability of this method of compliance.
26	ATA	The only comment received by the Air Transport Association (ATA) was from Mr. Mark Boes, Managing Director, Aircraft Engineering, American Airlines. Mr. Boes stated, "American Airlines supports the comments previously submitted by GAMA."	See Disposition GAMA comments
27	Walt DeRosier, GAMA, for the Industry members of the HR1000 16g seat committee	Industry believes that the proposed policy should be simplified by making it generic and applicable for front-row seat configurations in all Transport Category Airplanes (including business aircraft). The terms "premier" and "economy" are commonly used in air carrier operations and do not translate well into the business airplane cabin configurations.	The FAA agrees that this policy is applicable to all Transport Category (Part 25) airplanes with § 25.562(c)(5) in their certification basis, the wording will be revised accordingly (see additional GAMA comments)
28		<p>Industry encourages the FAA to revise the draft method of compliance to 14 CFR 25.562(a) and (c)(5) to the following:</p> <p>a. No HIC test is required if a seat is placed 45 inches or more from the potential point of head contact, as measured from the seat reference point to the vertical plane located at the aft most potential contact point of the surface ahead of it.</p> <p>b. Alternatively, if you perform the test to determine the head path arc of the hybrid II ATD and the seat is installed such that no contact would occur; additional analyses for different size persons (such as adding 3 inches to account for a 95th percentile occupant) would not be required.</p> <p>c. Lastly, when the test is performed and contact does occur, if the measured HIC must not exceed 1000 units, additional substantiation for different size persons would not be required.</p>	<p>Note: the proposed policy statement did not refer to § 25.562(a)</p> <p>a. The FAA agrees that the terms used in this paragraph of the policy may not translate well into the business airplane configurations. However, although GAMA represents the Industry for the 16g seat effort, the recommendation is more conservative and would effect the cost justification for these seats. The FAA will therefore leave the option in but clarify the use of 'economy' class seat setback. Per the GAMA recommendation all business airplane configuration should therefore be expected to use 45 inches.</p> <p>b. The added wording here proposed by GAMA in parenthesis is more detail than needed. The FAA has added a statement 'or repositioning of seats' to the applicable method.</p> <p>c. Again, the FAA does not see the need to provide the specific wording</p>

		DISPOSITION OF PUBLIC COMMENTS ON PROPOSED POLICY STATEMENT ANM-115-05-14, FRONT ROW HIC

			suggested by GAMA, the section states that no additional substantiation would be needed. Note: both of these statements may conflict with the need to comply with § 25.785
29		Industry proposes that the discussion on page 3, paragraph 1, and sentence 3 be changed as follows to better define what is an “undisturbed surface (no protrusions)” “Accordingly, the FAA has determined that it is sufficient to demonstrate only that beyond the head trajectory traversed by the ATD in a dynamic test condition the seat and adjacent part of the airplane shall not have sharp edges, or sharp projections that could injure an occupant while seated or moving around the airplane. This is currently being done in order to comply with § 25.562(a) and 25.785.” “Undisturbed surface” and “protrusions” are highly subjective terms and will most likely produce varying interpretations of what is an acceptable protrusion and how far beyond the head strike area traversed by the ATD will need to be evaluated for compliance. Therefore, the proposed revision provides for greater clarity and utilizes a current method of compliance.	See disposition to comment 4.
30		Industry requests the FAA evaluate the effect of this proposed policy on draft AC 25.562-1B to ensure that both documents are consistent in the acceptable methods of compliance for addressing 25.562(a) and 25.562(c)(5).	The FAA agrees to address the methods of compliance in this policy in the AC.
31		Industry requests that reference to the seat retrofit rule (SNPRM “Improved Seats in Air Carrier Transport Category Airplanes”) be removed from the proposed Policy Statement as the issue is unrelated to the demonstration of compliance to §25.562. This type of discussion would be more appropriate in any future Policy Statement pertaining to the seat retrofit rule. It is not necessary to link this policy change to the imposition of the additional burden of seat retrofit to gain positive benefits to society.	See disposition to Comment 15
32		While this new policy is a good step forward, we wish to take this opportunity to emphasize other areas where further streamlining is possible. The industry believes that further benefits could be realized if the following recommended enhancements were incorporated into the proposed Policy Statement: a. As the proposed policy recognizes the	a. See disposition to Comment 20. b. As noted, this policy deals with HIC compliance, and because there is no recommendation regarding the relation between these methods and compliance to § 25.562 (c)(6) femur impact will not be addressed in this policy.

		DISPOSITION OF PUBLIC COMMENTS ON PROPOSED POLICY STATEMENT ANM-115-05-14, FRONT ROW HIC	

		<p>burden and high cost of HIC compliance and the benefit that the proposed policy will have on front row seating compliance demonstration,</p> <p>the same or significantly increased benefit could be seen by extending the proposal to row-to-row seating configurations.</p> <p>b. This policy deals specifically with the issue of range of occupant for HIC compliance; further benefits could result if the policy also addressed the femur requirements of 25.562(c)(6).</p>	
--	--	--	--