


EASA	COMMENT RESPONSE DOCUMENT
	<p>EASA PAD No. 14-130</p> <p>[Published on 04 August 2014 and officially closed for comments on 18 August 2014]</p>

Commenter 1: CHC Helikopter Service AS – Murray Timms – 07.08.2014

Comment # 1

Please note that in the current issue of the Proposed Airworthiness Directive No. 14-130 it states: "S-92A with MTOW less than 18.590 lb/8.432 kg, or with 3 or 5 floats".

It is suggested that in order to convey the correct meaning this should be amended to read: "S-92A with MTOW less than 18,590 lb/8,432 kg, and with 3 or 5 floats".

EASA response:

Comment #1: EASA agree. AD will be changed accordingly.

Commenter 2: Bell Helicopter Textron Canada Limited – Michael Deer – 15.08.2014

Comment # 2

Bell Helicopter Textron Canada Limited has the following comments against the EASA Proposed AD No. 14-130 regarding the introduction of a sea state limitation in flight manual supplements for the Bell 430/230/222 models:

1. Correct BHTCL models are; 222, 222U, 222B, 230 and 430.
2. EASA states that the PAD is being proposed due to a similar PAD on European products. Because EASA is not the State of Design for the North American products, EASA is requested to coordinate the need for an AD with the State of Design authorities and let the determination of an unsafe condition lie with the State of Design authority.
3. The EADA PAD confuses "Emergency Flotation Systems (EFS)" and "ditching". Several times in the PAD the term EFS is used in conjunction with ditching. In fact, per the certification requirements ditching approval per CS 29.801 is optional, meaning that an EFS can be certified without a ditching approval. Ditching approval is generally required throughout the world through operating regulations when operating in hostile environments (Ref. EASA Ops CAT.IDE.H.320). If operating in non-hostile environments the helicopter must be designed for landing on water, but specific ditching approval is optional. Mixing ditching with EFS will cause confusion for operations in non-hostile environments where ditching is not required.
4. CS-29 does not require a Sea State Limitation be specified. The PAD states that prior to 2006 certification guidance materials did not contain references to sea

state limitations in the RFM. On review of the current guidance material (AC 29-2C, Change 4), it proposes that information about the demonstrated sea state limitations be included in the RFM, but it is not clear that this be an airworthiness limitation. It has been BHTCL's practice to include this information in the general information section of the RFMS. The Bell 222, 222U, 222B, 230 & 430 EFS Flight Manual Supplements all contain information regarding sea state in the general information sections. Operators can use this information in planning their operations based on applicable operating regulations.

5. Due to the differences in operating requirements for hostile and non-hostile environments, it is more appropriate use the operating regulations to specify the sea state limits and how those sea state limits are to be predicted and applied.
6. The PAD makes reference to equipment requirements. The equipment required for ditching certification is covered under C5 29.563, 1411, 1415 and 1561. The equipment requirements specified in the PAD do not fully cover the requirements in the C5-29 sections and could cause operators to believe the aircraft is approved for ditching once the specified equipment has been installed with EF5 without consideration of the additional information contained in C5-29. The equipment may also be in contradiction with the operational equipment requirements and thus should not be included in the PAD.
7. Including the sea state as a limitation in the RFM can cause confusion in the operational environment. Sea state is not consistent with regular and irregular wave patterns, and can vary as environmental conditions change over time from an initial dispatch location to a destination. The sea state should be an operational dispatch limitation based on predicted sea state for the predicated route and included in the operational regulations for hostile environments.
8. Including a hard sea state limitation may cause unintended consequences preventing dispatch in all conceivable scenarios. Risk should be assessed based on the operational need - 5AR or emergency rescue operations being an example of this. Having a sea state limitation could translate into prohibiting life saving flights.

To establish the appropriate method to communicate the sea state requirements in the operational environment, EASA is requested to establish whether C5-29 be updated to include a requirement to specify the sea state as an airworthiness limitation or if it is more appropriate in operating regulations through the rulemaking process.

EASA response:

Comment # 1: EASA agree. List of affected models to be updated.

Comment # 2: EASA agree. The initiative has been coordinated with the State of Design Authorities who did not raise objections to the EASA determination. No changes have been made to the Final AD in response to this comment.

Comment # 3: EASA disagree. EASA is aware of the difference between EFS and ditching as the EFS is one of the elements normally required for ditching. The directive and the defined flight manual amendment make clear what is to be known as regard the EFS performance and what is required for ditching. No changes have been made to the Final AD in response to this comment.

Comment # 4: EASA partially agree. CS 29 requires floatation time and trim under reasonably probable water conditions. AC 29.2C section AC 29.801 b. (6) (i) stipulates: " The information pertinent to the limitations applicable to the ditching approval should include the range of sea state conditions that has been demonstrated for water entry and flotation stability."

This may not be strictly applicable to aircraft with a certification basis preceding these amendments of the rule and the related acceptable mean of compliance. The AD is intended at providing a consistent and clearly readable set of information for all product approved for ditching and engaged in offshore operations.

No changes have been made to the Final AD in response to this comment.

Comment # 5: EASA partially agree. This AD is intended to address a potentially unsafe condition with the existing regulations. The capabilities of the aircraft to cope with different operational conditions is a matter of airworthiness while the air operations regulation is expected to define what is required to operate in the different scenarios and how they are to be predicted when planning the flight.

No changes have been made to the Final AD in response to this comment.

Comment # 6: EASA disagree. CS 29.563 deals with structural ditching provisions; CS 29.1411 and CS 29.1415 are quoted in CS 29.801, CS 29.1561 deals with safety equipment marking and placard. The directive and the related flight manual amendment is not intended at defining the certification basis of the equipment required for ditching and does not make reference to that. The comment is not understood when it refers to the equipment requirements specified in the PAD.

No changes have been made to the Final AD in response to this comment.

Comment # 7: EASA partially agree. An operational dispatch limitation, as correctly stated by the commenter, is a matter that pertains to the operational domain. The AD is intended at making the operator aware of the aircraft capability which, if exceeded might cause an unsafe condition.

No changes have been made to the Final AD in response to this comment.

Comment # 8: EASA disagree. The comment is shared as regards the need to conduct a risk assessment before the decision to dispatch the aircraft is taken, considering the kind of operation and the associated level of acceptable risk. The AD is not introducing an additional limitation but only makes the operator aware of the aircraft capability and the associated risk in case of the need to make a ditching in association to sea state beyond those capabilities.

No changes have been made to the Final AD in response to this comment.

Final Comment: EASA disagree. In line with the EASA response to comment #4, this is to emphasize that the acceptable means of compliance to CS 29 already stipulate that sea state capability is to be defined as operating limitation. The wording used in the AD is intended at transferring the message of what the aircraft is capable of, rather than establishing a hard limitation.

Commenter 3: Bell Helicopter Textron Inc. – W. A. Randall – 14.08.2014

Comment # 3

Bell Helicopter Textron Incorporated has the following comments regarding the EASA Proposed AD No. 14-130 on the introduction of a sea state limitation in flight manual supplements for the Bell 212/214B/214ST/412 models:

1. The 412CF should be removed from the applicability section of the PAD as it is only utilized in Canada.
2. USA H1 NE should be removed from the TCDS section as none of the applicable aircraft are on that specific TCDS.
3. EASA states that the PAD is being proposed due to a similar PAD on European products. Because EASA is not the State of Design for the North American products, EASA is requested to coordinate the need for an AD with the State of Design authorities and let the determination of an unsafe condition lie with the State of Design authority.
4. The EASA PAD confuses "Emergency Flotation Systems (EFS)" and "ditching". Several times in the PAD the term EFS is used in conjunction with ditching. In fact, in the certification requirements, ditching approval per CS 29.801 is optional, meaning that an EFS can be certified without a ditching approval. Throughout the world, ditching approval is generally required through operating regulations when operating in hostile environments (Ref. EASA Ops CAT.IDE.H.320). If operating in non-hostile environments the helicopter must be designed for landing on water, but specific ditching approval is optional. Mixing ditching with EFS will cause confusion for operations in non-hostile environments where ditching is not required.
5. CS-29 does not require a Sea State Limitation be specified. The PAD states that prior to 2006 certification guidance materials did not contain references to sea state limitations in the RFM. On review of the current guidance material (AC 29-2C, Change 4), it proposes that information about the demonstrated sea state limitations be included in the RFM, but it is not clear that this be an airworthiness limitation.

6. Due to the differences in operating requirements for hostile and non-hostile environments, it is more appropriate use the operating regulations to specify the sea state limits and how those sea state limits are to be predicted and applied.
 7. The PAD makes reference to equipment requirements. The equipment required for ditching certification is covered under CS 29.1411, 1415 and 1561. The equipment requirements specified in the PAD do not fully cover the requirements in the CS-29 sections and could cause operators to believe the aircraft is approved for ditching once the specified equipment has been installed with an EFS without consideration of the additional information contained in CS-29. The equipment may also be in contradiction with the operational equipment requirements and thus should not be included in the PAD.
 8. Including the sea state as a limitation in the RFM can cause confusion in the operational environment. Sea state is not consistent and can vary as environmental conditions change over time from an initial dispatch location to a destination. The sea state should be an operational dispatch limitation based on predicted sea state for the predicated route and included in the operational regulations for hostile environments.
 9. Including a hard sea state limitation may cause unintended consequences preventing dispatch in all conceivable scenarios. Risk should be assessed based on the operational need - SAR or emergency rescue operations being an example of this. Having a sea state limitation could translate into prohibiting life- saving flights.
- To establish the appropriate method to communicate the sea state requirements in the operational environment, EASA is requested to establish whether CS-29 be updated to include a requirement to specify the sea state as an airworthiness limitation or if it is more appropriate in operating regulations through the rulemaking process.

EASA response:

Comment # 1: EASA agree. List of affected models to be updated.

Comment # 2: EASA agree. List of affected TCDSs to be updated.

Comment # 3: EASA agree. The initiative has been coordinated with the State of Design Authorities who did not raise objections to the EASA determination.

No changes have been made to the Final AD in response to this comment.

Comment # 4: EASA disagree. EASA are aware of the difference between EFS and ditching as the EFS is one of the elements normally required for ditching. The directive and the defined flight manual amendment make clear what is to be known regarding the EFS performance and what is required for ditching.

No changes have been made to the Final AD in response to this comment.

Comment # 5: EASA partially agree. CS 29 requires flotation time and trim under reasonably probable water conditions. AC 29.2C section AC 29.801 b.(6)(i) stipulates: " The information pertinent to the limitations applicable to the ditching approval should include the range of sea state conditions that has been demonstrated for water entry and flotation stability."

This may not be strictly applicable to aircraft with a certification basis preceding these amendments of the rule and the related acceptable means of compliance. The AD is intended at providing a consistent and clearly readable set of information for all products approved for ditching and engaged in offshore operations.

No changes have been made to the Final AD in response to this comment.

Comment # 6: EASA partially agree. This AD is intended to address a potentially unsafe condition with the existing regulations. The capabilities of the aircraft to cope with different operational conditions is a matter of airworthiness while the air operations regulation is expected to define what is required to operate in the different scenarios and how they are to be predicted when planning the flight.

No changes have been made to the Final AD in response to this comment.

Comment # 7: EASA disagree. CS 29.1411 and CS 29.1415 are quoted in CS 29.801, CS 29.1561 deals with safety equipment marking and placard. The directive and the related flight manual amendment is not intended at defining the certification basis of the equipment required for ditching and does not make reference to that. The comment is not understood when it refers to the equipment requirements specified in the PAD.

No changes have been made to the Final AD in response to this comment.

Comment # 8: EASA partially agree. An operational dispatch limitation, as correctly stated by the commenter, is a matter that pertains to the operational domain. The AD is intended at making the operator aware of the aircraft capability which, if exceeded, might cause an unsafe condition.

No changes have been made to the Final AD in response to this comment.

Comment # 9 EASA disagree. The comment is shared as regards the need to conduct a risk assessment before the decision to dispatch the aircraft is taken, considering the kind of operation and the associated level of acceptable risk. The AD is not introducing an additional limitation but only makes the operator aware of the aircraft capability and the associated risk in case of the need to make a ditching in association to sea state beyond those capabilities.

No changes have been made to the Final AD in response to this comment.

Final Comment: EASA disagree. In line with the EASA response to comment #5, this is to emphasize that the acceptable means of compliance to CS 29 already stipulate that sea state capability is to be defined as operating limitation. The wording used in the AD is intended at transferring the message of what the aircraft is capable of, rather than establishing a hard limitation.

No changes have been made to the Final AD in response to this comment.