COMMENT RESPONSE DOCUMENT (CRD) TO NOTICE OF PROPOSED AMENDMENT (NPA) 2009-02G

for an Agency Opinion on a Commission Regulation establishing the Implementing Rules for air operations of Community operators

and

draft Decision of the Executive Director of the European Aviation Safety Agency on Acceptable Means of Compliance and Guidance Material related to the Implementing Rules for air operations of Community operators

"Regulatory Impact Assessment"

CRD c.1 – Comments received on NPA 2009-02g

I. Comments received on NPA 2009-02g

(General Comments) -

comment *39* comment by: *Geoff Parvin*

The proposal offers no tangible benefit to the flying community. All you are doing is increasing everybodys cost and restricting the freedom of movement. The question that should be asked is how many engine failures have there been that have prompted ditching in the Channel or other bodies of water.

comment *57* comment by: *Chris Fox*

NO-2009-02G proposes requirements that are frequently disproportionate for simple light helicopters operated privately. In some cases the requirements would be technically impossible to comply with (e.g. floats cannot be retrofitted to Robinson R22 helicopters).

It therefore fails to comply with the expressed wish of the European Parliament that rules should be *"proportionate and commensurate to the complexity of the respective category of aircraft and operation"*

This RIA ignores the cost of compliance for light helicopters - see specific comments below.

There is no safety case offered to justify these proposals.

Blind compliance with ICAO requirements is not appropriate for privately-operated light helicopters, as this kind of operation is not covered by ICAO. In addition, ICAO provides a simple and robust mechanism for filing differences where appropriate.

comment *115* comment by: *jim reeve*

i am a s ppl h with 50 hours.the equipment you propose mandatory fit for my hughes 300a will be heavy and expensive (around £35000).this is not almost nothing as you claim! the extra weight in a small heli will be grossly detrimental to flight safety,and will cause accidents.these proposals will reduce safety not increase it.

comment *162* comment by: *Elvington Park Ltd*

The proposed requirement for Helicopters to carry floats while over water fails to equitably balance all relevant risk factors,

1 Typically most non CAT and many CAT Helicopters are over water Less than 1% of hours flown, the deterioration in flight performance by 5-10% in range and speed with decreased power to weight and handling performance reduction through an increase in drag and weight when floats are carried, this must result in a global reduction in flight safety, offsetting any apparent safety

benefit of floats,

2 It is not practicable to fit floats to many Helicopters and the cost where floats can be fitted is not in proportion to clamed benefit particularly in view of point 1.

Floats cannot easily be detached and re fitted or it may not be practicable to do so and even if they could this may not avoid the safety problems of performance reduction described in point 1,

comment *180* comment by: *peter barker*

1. I have fully read the detailed comments submitted by the Helicopter Club of Great Britain (HCGB) and agree with every comment made.

2. I attended the HCGB annual general meeting at which there was much discussion regarding the proposed new EASA rules; the following is a very brief summary:

i) There was 100% support for the comments submitted by HCGB to EASA.

ii) There was great concern that EASA, in putting forward the proposed new rules, has demonstrated a fundamental lack knowledge regarding the operation of light helicopters.

iii) In considering the submission by HCGB, members were anxious that EASA should recognise that the HCGB represents a third of all UK and Irish helicopter owners, and several hundred UK and Irish helicopter pilots, and should give proper weight to the HCGB submission.

iv) The proposed new rules were considered to be unfair and discriminatory to UK pilots, in that, Britain and Ireland are island countries unlike the countries of mainland Europe.

3. With regard to item 2 ii) above it is imperative that, when considering rules relating to light helicopters, EASA employs people who have real expertise and experience with them and their operation. In particular, EASA should take special notice of the solid body of experience in the HCGB and consider very seriously the concerns voiced in the HCGB submission.

comment *190* comment by: *bmi*

It is the opinion of bmi that EASA should consider the comments submitted by the United Kingdom CAA and the Association of European Airlines (AEA). bmi concur with the opinions submitted by these organisations.

comment *194* comment by: *Julian darker*

Dear Sir,

As a private helicopter pilot of 62 with 17 years of PPL(H) privileges I have quite a lot of varied experience including owning

a Robinson R22 for 5 years and I well know all the costs involved. I have now gone back to hiring R22 and R44 helicopters and enjoy

flying them all over Britain and parts of Europe and have had 2 trips by R44 to France this year.

I was pleased to read in the LAA magazine that on 3 February 2009 the

European Parliament underpinned the Commission s

initiative (Agenda for a sustainable future in general and business aviation) by voting hugely in favour.

It requires the legislators and implementers to take note of the need to promote GA, ensure a fair deal through

'proportionate regulation', provide access to airports and airspace capacity and generally encourage ,rather than

restrict activity.

In relation to helicopters, all the proposed items would have significant cost implications for no safety reasons that

I can see at all in the private sector and also you don t appear to be applying these additions to fixed wing aircraft

which have just the same engines as the helicos that I fly.

Keep up the Light Touch regulation with as little cost impliations as possible- after all helicopters are expensive

enough without any extra costs!

Julian Darker

comment *197* comment by: *ERA*

European Regions Airline Association Comment

- There are numerous examples of changes leading to cost impact on the airline industry without any obvious safety gain.
- This NPA is the major part of a package of NPAs that have been put out for comment over a similar time frame with an important underlying relationship between them. The particular size of this NPA and the other related individual NPAs has made it almost impossible to fully appreciate or comprehend the changes proposed and obviously their eventual implication on the operators concerned. This unfortunate state of affairs has been compounded by two additional factors not experienced before.

  The first is the addition of the different phraseology in this and the other NPAs that has, unless you're a lawyer, made it very difficult to carry out any meaningful comparison between the new and old regulations. Certain reassurances that have been made regarding this NPA reflecting the latest edition of EU-OPS are not borne out by examples in the NPA. In many aspects fundamental differences have been introduced compared to EU-OPS. There is no legal basis and no safety justification for EASA to fundamentally alter the EU-OPS requirements.

  The second factor concerns the fact that this NPA is a 'catch all' rule encompassing for the first time a wide spectrum from Commercial Air Transport to Ballooning operations. This makes it a leviathan in terms a regulatory document and a monumental multi task operation in extracting the relevant regulation appertaining to Commercial Air Transport operation. Despite the EASA e-tool [arriving on the scene far too late] a co-operative way of working is needed to produce a better regulation. Would it not be an improvement to retain EU-OPS for the moment? This is a regulation already in place for Commercial Air Transport and is accepted by the individual authorities. EASA could then concentrate on the other operators covered by

the IR-OPS that as yet have no common operations rule. Amendments to EU-OPS could be made by individual IR changes to the individual subparts over a period of time? This would enable a greater understanding of the proposed changes, reduce confusion and go some way to resolving the concern amongst smaller operators that they may have missed important fundamental changes that could impact them in the long run.

comment *231* comment by: *Clive Morrell*

The main item in the Regulatory Impact Assessment that I would like to comment on is the suggestion that there would be minor or no additional cost impact on operators. I disagree with this.

Concerning the type of helicopter that I owned (Eurocopter EC 120) the cost alone of fitting emergency flotation equipment would be around €60000. I consider that as a very significant cost.

comment *257* comment by: *British Airways Flight Operations*

British Airways Flight Operations department has been actively involved with the industry working groups which have been assessing NPA 2009-02, both within the United Kingdom and internationally. In general, our opinions about the material presented in NPA 2009-02 agree wholeheartedly with those of the Association of European Airlines (AEA), which, we note, has submitted several hundred comments. We have also worked closely with the UK Civil Aviation Authority, which has also submitted several hundred comments.

We have decided to submit this general comment about NPA 2009-02 so that EASA will be aware, unambiguously, of British Airways' concerns about the material presented in the NPA. It is our opinion that NPA 2009-02 in its entirety is unfit for the purpose for which it is intended and must be withdrawn and reconsidered. The reasons for this conclusion will be discussed below. As well as making this general comment, British Airways has also submitted many individual comments about the NPA, from a number of different sources within the company; however, all should be seen in the light of this opinion: **that NPA 2009-02 in its entirety is unfit for the purpose for which it is intended and must be withdrawn and reconsidered.** In making other comments British Airways does not seek to endorse NPA 2009-02, but rather to limit the damage which would be done to the industry if the material was adopted into implementing rules.

As the Chairman of the EASA Management Board is on record as saying: the Agency has set out to produce idealistic, holistic perfection; regrettably, it has failed in that task. British Airways' first concern is with the structure of the rule material presented. It is undeniably the case that safety proceeds from simplicity, not complexity. Therefore, for EASA to choose to move from a clear and unambiguous set of rules – published in one or two volumes (EU Ops / JAR Ops 1) – to a complicated and diverse set in many volumes causes us great concern. Furthermore, we note it was specifically the Agency's own decision to create a rule set based on the GERT: NPA 2009-02A makes it clear that neither the SSCC nor the AGNA endorsed that decision. We are also aware from conversations with some of the Agency's Rulemaking Officers that they were specifically instructed to use a different rules structure from that which had

gone before "because EASA had to be different." We think such a policy decision - essentially to try to destroy the JAA heritage - by senior personnel from the Rulemaking Directorate (both those formerly employed and those still employed by the Agency) constitutes a serious error of judgment. We believe rules for commercial air transport should be published altogether in one volume, and not mixed with rule material for other types of aviation operations.

Another consequence of the Agency's desire to have one set of rules covering all types of operations is the combination of rule material for aeroplane operations and helicopter operations in the published NPA. Having had experience of the JAA rulemaking processes for Sub Parts D and E, we are aware that helicopter operations were never considered in the development of JAR Ops 1 material, and neither should they have been, by definition. Therefore, to propose rule material which is applicable to both types of operation in one document constitutes a serious mistake, which could give rise to what is called colloquially in English 'the law of unintended consequences'; in this case unintended, adverse, safety consequences. We are aware that one of the arguments the Agency has advanced for putting all rules in one place is the need for legal certainty in rulemaking. We are also aware that the Agency believes the same type of activity should not be regulated in more than one place. However, we believe those arguments are flawed: if rules were to be published separately for 'helicopters' and 'aeroplanes' they would be mutually exclusive and unambiguous, even if they contained similar material.

Many comments will doubtless be received by the Agency expressing disquiet that the material in NPA 2009-02 has departed greatly from EU Ops. We are very concerned that the Agency appears to have forgotten its mission – to promote SAFETY – and strayed into areas of social policy. Much new material has been introduced with no safety justification and with little, if any, meaningful regulatory impact assessment.

Leaving aside the concerns expressed above, much of the material proposed in NPA 2009-02 seems ill thought out and lacking in maturity. We are aware that the Agency has expressed concerns to the European Commission about its resourcing for the rulemaking tasks associated with the extension of scope to Air Operations. Of course, if EASA is really short of resources, it would have made much more sense for the Agency to base its rulemaking on the existing EU Ops material rather than branching off in new directions. We are aware this latter opinion is shared by the European Commission. Furthermore, we would have expected rule material to be presented in a mature form; instead, we see rule proposals which seem like early drafts rather than finished material. It seems ungracious to say "we told you so"; however, the Agency will be aware that the AEA in particular expressed concern about the scope of the work required of the Agency versus the amount of time and resource available to it, and suggested the establishment of stakeholder working groups to help with the rulemaking tasks. Of course, those suggestions were firmly declined.

Throughout the rulemaking processes which lead to the publication of NPA 2009-02 *et al* various bodies have been engaged with EASA to offer help with its task and, latterly, to express concerns about the direction in which the rulemaking was proceeding. In particular, the AEA has been very proactive in discussing its thoughts and concerns with the Agency. Furthermore, we know the Agency's Executive Director has recently visited the CEOs of several major

European operators to discuss issues of concern. Therefore, the Agency should be under no illusions that there is major dissatisfaction among the operators with the direction in which the rulemaking task has proceeded (although we are concerned that some people within the Agency still do not seem to have acknowledged or accepted that fact). Overall however, the Agency has resolutely refused to engage with the operators; has refused to acknowledge that its rulemaking proposals might be flawed; and has failed to understand its responsibilities to the organisations for which it is creating regulations. This lack of accountability is a major cause for concern.

Lastly, we are very concerned that we are being expected to comment on a large amount of new material, to tight timescales, but without all the relevant material having been published. Since EASA has produced a large amount of interdependent material, it is unacceptable for us to be expected to assess that material without all of it being available. The quality of the comments which the Agency receives will undoubtedly be adversely affected thereby, because interested parties are not in possession of all the relevant information.

Therefore, to summarise British Airways' position. We are greatly concerned with the material presented in NPA 2009-02 because:

- It is presented in many volumes in a way which makes it difficult to understand.
- It mixes material for helicopters and aeroplanes in the same document.
- It departs greatly from EU Ops and introduces new material with no safety justification.
- It is ill thought-out and not mature.
- It demonstrates a lack of accountability to operators by the Agency.
- It relies on unpublished material.

In isolation, any of these issues would give us significant cause for concern. Taken together, they lead us to conclude, unreservedly, **that NPA 2009-02 in its entirety is unfit for the purpose for which it is intended and must be withdrawn and reconsidered.** All of the comments which will be entered by British Airways Flight Operations will be suffixed to that effect.

comment *264* comment by: *IAOPA*

Comments from the International Council of Aircraft Owner and Pilot Associations (IAOPA) regarding EASA NPA 2009-02g, Regulatory Impact Assessment

This segment of the NPA forms the basis for all regulations proposed within the entirety of NPA 2009-02. Without a valid impact assessment either the public or stakeholders are not well served. Rather, the proposals are arbitrary and without foundation in fact.

2.3.2.6 Non-complex motorized general aviation

The analysis relies on annual EASA Safety Reviews and other questionable data which by self-admission, are incomplete, sometimes contain poorly categorized data and do not specify or employ useful measures of performance. NPA

2008-17f, *Regulatory Impact Assessment On The Implementing Rules For Flight Crew Licensing (FCL)*(As per Article 7.6 of Regulation (EC) No 216/2008), set the scene for this type of analysis, using the same types of flawed data. In this RIA the measures designed to promote safe general aviation operations were mainly additions to training syllabi and restrictions to operations. These may have little lasting effect over the active life of a pilot, with the more egregious restrictions being honored only in their breech. The more positive approach to safety has been shown to be continuing education into proven trouble areas, e.g., loss of control, low altitude maneuvering and continued visual flight into IMC. Where is the EASA general aviation safety research and education initiative?

As a precursor to research and education, a Europe-wide general aviation statistics program should be designed to capture *all* aspects of general aviation operations and safety data. Only then will a RIA be valid and meaningful.

The largest failing of these data are the lack aircraft activity or exposure data. Without this data it is impossible to determine an accident rate, which will be the primary determinant of the seriousness of overall accident trends. It means little to state a number of accidents when it is not compared with flight hours for that category of aircraft or even number of departures. And, the complete population of a specific aircraft type/purpose classification is necessary to obtain useful inferences.

2.9 Non-Commercial Air Operations With Other Than Complex Motor-Powered Aircraft

This section addresses the consideration of regulatory options and attempts to justify the selection of those options using mathematical inferences based on the largely invalid primary and derived data mentioned above.

The calculations used to justify the decisions are very complex and difficult to understand. These constructs concentrate on requlatory systems and some equipment requirements (ELTs and fire extinguishers) to achieve a desired level of safety. But, since adequate statistical data is unavailable to substantiate the claims made, the impact assessment is of scant value and may even skew the process of achieving operational safety.

Additionally, the analysis does not consider the contributions made as a consequence of previous NPAs regarding flight crew training, aircraft maintenance requirements and operational restrictions. These requirements are actually costs incurred by general aviation operators that degrade the value of their ability of achieve a high degree of utility from the use of their aircraft.

Significantly, the RIA does not consider all factors impacting safety, economics and operational utility of general aviation operations. Without a full analysis, the total impact of these regulatory proposals will remain unknown.

Conclusion

The poor quality of the RIA puts general aviation operators at a disadvantage since the basis for many of the proposed regulations is not founded in fact but

conjecture. This will not serve the cause of growth of general aviation or the progress of air safety for this class of aviation.

Significantly, this fault has been recognized and commented on by the European Commission in its January 2008 paper, An Agenda for Sustainable Future in General and Business Aviation. The agenda includes, in part:

"3.1. Measuring General and Business Aviation

"17. Complete data describing General and Business aviation in Europe is not available and it seems that such data is not being gathered in a systematic and coherent way.

"18. As regards the specific issue of safety, there are no European wide comprehensive statistics on safety of aircraft with maximum take-off mass (MTOM) below 2,250 kg and the partial data available gives only some indication as to the main causes of fatal accidents.
"19. In order to properly regulate any activity, policy makers need to have a clear picture of the situation. This calls for the development at the European level of the basic set of objective and coherent data as well as for close cooperation with all the interested stakeholders.
"20. The Commission has asked the European Civil Aviation Conference (ECAC) to conduct a study on General and Business aviation that would identify the sources of available data and suggest the most efficient way for its future gathering."

Achievement of these goals will greatly improve the state of European general aviation as well as creating possibilities for more appropriate regulations and safer operations.

John Sheehan
IAOPA Secretary General
jshee11@aol.com

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comment *316* comment by: *ANE (Air Nostrum) OPS QM*

There are numerous examples of changes leading to cost impact on the airline industry without any obvious safety gain.

comment *317* comment by: *PPL/IR Europe*

Julian Scarfe
(julian.scarfe@gmail.com)
in comment #310 has expressed the views of PPL/IR Europe

comment *322* comment by: *D.Weatherhead ltd.*

We have owned and operated a Westland Gazelle helicopter G-CBGZ based in England for the past 8 years.
We have read the above documents and believe the proposals are unnecessary and will be expensive to install and operate, also that the proposals do not

distinguish between private and commercial use.

We are members of the Helicopter Club of Great Britain and have read their comments, we wholeheartedly agree with their comments to you. Rather than writing all this out again in a very similar vein PLEASE ACCEPT D.WEATHERHEAD LTD'S INDEPENDENT BACKING to the Helicopter Club of Great Britain comments to you.

comment *323* comment by: *Daryl Willcox*

I fully support all commenrts made by the Helicopter Club of Great Britain and add that these proposals are disproportionate and unecessary when applied to private helicopters.

I would go so far as to say that these proposals, if ther were to be implemented, would prevent many pilots from gaining relevant experience in over-water and night flying (as suitable aircraft would be very

scarce) and therefore the rules would have a potentially negative effect on safety overall.

comment *325* comment by: *AOPA UK*

INTRODUCTION AND SCOPE

AOPA UK suppOliS all efforts the Agency is making in respect of following the principles of' Better Regulation' .

Producing an RIA before proceeding to produce an opinion should ensure that EASA address the issue of proportionality and subsidiarity.

It should be recognised that in order to produce a meaningful RIA, the Agency must have good quality data. It is not acceptable to use extrapolated data from one activity i.e. GA data from IFR statistics held by Eurocontrol and make assumptions relating to VFR activity.

Therefore AOP A UK recommends that EASA carefully consider the responses from GA Associations which have a great deal of specialist knowledge.

Furthermore, AOPA insists that before EASA provides an opinion in respect of rulemaking that detailed safety cases are also provided.

The opinion should be based on 3 criteria-

• The RIA/analysis

• The Safety Case

• The Business Case (economic impact) or small business impact test for SMEs.

During the EASAIF AA Safety Conference in Athens AOPA was happy to learn of the Agency's commitment to following the recommendations from the Article 51 Review: in particular the post implementation review.

TITLE PAGE p. 1

comment *92* comment by: *Charles Barratt*

Just purchased a Robinson R44 Raven 11.

A Clipper that has floats would have been in excess of £50,000 extra!
Who says it will cost almost nothing.
I understand that floats cannot be fitted after?

comment

132 comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

General Comment:

This RIA is patently a document produced to prove the ultimate findings to satisfy a political end. The data used is selective, littered with inconsistencies, poor and/or limited facts, contradictions and presumptions not based on sound data. For EASA to utilise this document to support the requirement for CC Attestation and [significantly]increased CC medical requirements questions the veracity of EASA's competence.

It is not EASA's responsibility to consider commercial advantage between states, nor is it EASA's responsibility to establish rules that are not based upon safety.

comment

166 comment by: *Elvington Park Ltd*

The increase in flight duration of 5-10% caused by the drag/weight impediment of floats results in greater safety risk than any safety benefit gained from the very limited utility of floats,

comment

208 comment by: *Hugh Edeleanu*

The proposals in this respect regarding floats over short stretches of water are totally unnecessary and unworkable. Private fixed wing aeroplanes are allowed to fly over water and there is no significant difference in the risk of failure during flight between a correctly maintained helicopter and a correctly maintained fixed wing aircraft. There is absolutely no safety case whatsoever for this proposal.

The cost implications of the necessary work to comply with these proposed regulations are absolutely out of all proportion with the negligible increase in safety that would apparently follow.

comment

209 comment by: *andy ballantyne*

I am writing to object to these proposed regulations which are absolutely crazy! The cost of completing the appropriate modifications which include the addition of floats as well as the modifications required for night flying are out of all proportion. I know of no instances where these measures would have been effective and if these rulings come into place then this will add a significant unnecessary cost to helicopter operations, including maintenance. I absolutely object to these proposals which are totally unreasonable.

comment *211* comment by: *darren kinslow*

These proposed standards are unreasonable and discriminate against private helicopters. There is also no genuine safety reason that I can see as floats are a troublesome item, add weight to the helicopter, increase drag, increase cost and increase maintenance cost. In the unlikely event of the floats having to be needed these would often prove to be totally ineffectual due to sea conditions etc. I totally appose these proposed rules.

comment *212* comment by: *Linda Champion*

I wish to lodge a seveer compliant against these proposed ridiculous new rules. The requirement to carry a life raft if the flight is more than three minutes from land when flying over water is crazy, This should be at the discretion of the pilot and would obviously also depend upon the time of the year, sea temperature and conditions and swimming ability of the occupants of the helicopter. In the event of ditching in the sea, I severely doubt that a life raft would be of any use in the circumstance. Mandatory floats for private flights over short water crossings are also unworkable and would be prohibitively expensive to retro-fit on most private helicopters. I would object strongly to the implementation of these proposed regulations.

comment *268* comment by: *IACA International Air Carrier Association*

This RIA is patently a document produced to prove the ultimate findings to satisfy a political end. The data used is selective, littered with inconsistencies, poor and/or limited facts, contradictions and presumptions not based on sound data. For EASA to utilise this document to support the requirement for Cabin Crew Attestation and significantly increased Cabin crew medical requirements questions the veracity of EASA's competence.

It is not EASA's responsibility to consider commercial advantage between states, nor is it EASA's responsibility to establish rules that are not based upon safety.

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comment *41* comment by: *Fferm Abergelli*

I wish to object to the new EASA rules proposed as this would create very high costs for basic private helicopters.

Such costs are not sustainable for private operators in view of the low risks of visual flight over water and for night flying, if these rules are enforced then I can see many operators having to sell their aircraft myself included.

comment *105* comment by: *Aerocorp Limited*

The assertion that there would not be significant costs involved in the fitting of floatation and extra night equipment, to non complex helicopters, is patently absurd. Perhaps those responsible for this conclusion may imagine that helicopter owners and operators are idle rich and simply able to dip into a pot of spare cash in order to fund the huge cost of these uncalled for modifications.

We operate two R44s and an S300. The cost to us would be a one-off cost of about €70,000 per machine. Add to this the annual maintenance costs. This is supposing that the designs for all the modifications become available, which is doubtful.

In the case of the Schweizer we operate (at night and over water), no floats are available and the carriage of some of the other equipment is simply not possible.

Add to all this the financial impact of resticting our operations and the end result would certainly be the closure if the entire operation. Is this what EASA is all about?

We don't want you to protect us any more than you already do. We are able to make our own assessments of the risks. We are not carrying fare-paying passengers over water or at night.

You have the options available to you to avoid the damaging impact these changes would bring. Please use them.

LIST OF ACRONYMS p. 7

comment *93* comment by: *Francesco Lugli*

Art.16 : When this difficult subject was considered previously, it was decided that any regulation for Aerial Work (AW) had to include non-commercial operations. Hence the scope of JAR-OPS 4 did not exclude that activity. AW now appears to have been included in the scope of 'Commercial operations other than Commercial Air Transport' thus excluding non-commercial AW. There are no requirements for non-commercial AW other than those contained in Subpart GEN; whilst this category of AW might not be large, it probably should be regulated and also be permitted the derogations from some requirements contained in Subpart GEN.

G. 1. INTRODUCTION & SCOPE - 1.2 Scope of present Regulatory Impact Assessment p. 8-10

comment *178* comment by: *bmi REGIONAL*

It is the opinion of bmi regional that EASA should seriously consider the recently submitted comments made by the CAA and those of the AEA and we align our opinion with those submitted by these organisations.

comment *179* comment by: *David Chisnall*

This Assesmant seems to indicate that the financila impact of these regulations will be low on cost for the user/owner. This is completely false. For an average small helicopter I would estimate the cost of supply and fitting of this equipment to be in the order of £50,000 sterling

G. 1. INTRODUCTION & SCOPE - 1.3 An iterative process for impact assessment - 1.3.7 The present Regulatory Impact Assessment p. 14

comment *35* comment by: *Alan Hardy*

easa.europa have got the costings completely wrong. I have a Robinson 44 and I reckon spending £50K is totally disproportional.

comment *76* comment by: *RCC*

The cost for most private owners would be prohibitive.
The statement is also incorrect *(will cost us almost nothing)* is beyond belief.

comment *95* comment by: *Francesco Lugli*

Art.36 : Because CAT and AW are both also undertaken with non-complex aircraft, a more basic GEN would permit construction of any higher regulation to be undertaken in a much more logical way - without the necessity for the 'notwithstanding' and 'except that' constructs which are now required. Whilst it is accepted that all aircraft will have to comply with a rule for basic GA for non-complex aircraft, attempting to construct requirements in CAT for non-complex aircraft, and requirements for AW with all aircraft, from a GEN text that is addressed at complex (where these aircraft are performing mostly Corporate Transport) as well at non-complex aircraft, is much more difficult.It has long been accepted that the regulation of AW - i.e. the working of aircraft on specific tasks, is of a different order to that where passengers are carried. Most understand that the prime objective for the regulation of AW is the protection of the environment and third parties; the protection of the crew is important but does not approach that required for fare paying passengers - the crew know and understand the risks involved.

Most AW operations are subject to individual risk assessment which will produce a mitigated work regime; attempting to apply the passenger-related requirements that are currently in Annex 6 Part II Section 3 - i.e. for complex aircraft, may not be appropriate. A revision of the model to have only basic GA rules in GEN, would assist in the production of a proportionate regulation for AW when inheritance is taken into consideration.It is suggested that the regulation be re-partitioned so that GEN addresses basic GA with non-complex aircraft; Complex Aircraft, CAT and AW should be addressed in additional requirements that sit, in parallel, above GEN and inheriting from its requirements.

G. 2. REGULATORY IMPACT ASSESSMENT p. 15

comment *24* comment by: *Helicopter Club of Great Britain*

The Helicopter Club of Great Britain represents the owners of approximately 33% of UK and Irish registered helicopters, as well as several hundred UK & Irish helicopter pilots.

Our following objections are primarily based on errors of fact contained in the NPA. As regards the operation and equipment cost of private non-complex helicopters.

In section C.) of this submission reference is made to paragraph numbers in the consultation document. Where objections are an alternative suggestion to the EASA proposal is stated based on the opinions of the HCGB Committee and its members.

A.) Summary of our position

(NPA) NO 2009-02G proposes disproportionate equipment requirements for non-complex helicopters for private use. The proposed measures would have an excessive cost impact for private operators with no evident improvement to safety.

This is in direct conflict with the principles established by the European Commission's Communication "Agenda for Sustainable Future in General and Business (COM(2007) 869 final) and its endorsement by the European Parliament (2008/2134(INI)) and the Council of Ministers. In particular this NPA does not comply with the "application of the principles of subsidiarity and proportionality"1[1]. Furthermore, it ignores the European Parliament's specific demand that the implementing rules must be *"proportionate and commensurate to the complexity of the respective category of aircraft and operation"* 1[2].

B.) Specific comments on sections of the consultation document

This consultation takes no account of the costs of compliance with NPA 2009-02b for private non complex helicopters

Due regard should be taken of these costs, which are not proportionate to private helicopter operations in non complex helicopters.

Our comments to NPA 2009 02b, if implemented, would result in little or no cost to operators, and we urge the Authority to make these changes to its proposals.

1[1] (COM(2007) 869 final), Point 34.

1[2] European Parliament resolution of 3 February 2009 on an Agenda for Sustainable Future in General and Business Aviation (2008/2134(INI), Point 4.

comment *25* comment by: *Mike Pascall*

I am prvate helicopetr pilot and owner of a Roninson R44 Clipper II

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In section C.) of this submission reference is made to paragraph numbers in the consultation document. Where objections are an alternative suggestion to the EASA proposal is stated based on the opinions of HCGB Committee and its members.

A.) Summary of my position

(NPA) NO 2009-02G proposes disproportionate equipment requirements for non-complex helicopters for private use. The proposed measures would have an excessive cost impact for private operators with no evident improvement to safety.

This is in direct conflict with the principles established by the European Commission's Communication "Agenda for Sustainable Future in General and Business (COM(2007) 869 final) and its endorsement by the European Parliament (2008/2134(INI)) and the Council of Ministers. In particular this NPA does not comply with the "application of the principles of subsidiarity and proportionality"[1]. Furthermore, it ignores the European Parliament's specific demand that the implementing rules must be *"proportionate and commensurate to the complexity of the respective category of aircraft and operation"* [2].

B.) Specific comments on sections of the consultation document

This consultation takes no account of the costs of compliance with NPA 2009-02b for private non complex helicopters

Due regard should be taken of these costs, which are not proportionate to private helicopter operations in non complex helicopters.

My comments to NPA 2009 02b, if implemented, would result in little or no cost to operators, and we urge the Authority to make these changes to its proposals.

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[1] (COM(2007) 869 final), Point 34.

[2] European Parliament resolution of 3 February 2009 on an Agenda for Sustainable Future in General and Business Aviation (2008/2134(INI), Point 4.

comment *36* comment by: *Lee Carroll*

My following objections are primarily based on errors of fact contained in the NPA. As regards the operation and equipment cost of private non complex

helicopters.

Under Option A, no account has been taken of the extensive costs to noncomplex private helicopters.

No cost estimates are given in this RIA for private helicopters to comply with option 4A. Costs would be substantial, in some cases exceeding €100,000.

The costs of a non-complex private helicopter complying with NPA 2009-2b would be:

a) Design, installation and modification approval of a second attitude indicator

b) Design, installation and modification approval of a pitot tube heater

c) Design, installation and modification approval of an alternative static pressure source

d) Design, installation and modification approval of emergency flotation equipment

e) Design, installation and modification approval of an automatic ELT

f) Design, installation and modification approval of a replacement ASI calibrated

in MPH, including Pilot Operating Handbook modifications.

For the most popular private non-complex helicopter, the Robinson R44, these costs would be approximately:

a) €7,500

b) €10,000 (this has never been done)

c) €5,000

d) €30,800

e) €7,000

Total 60,300 per non-complex helicopter

There are approximately 1000 such helicopters in the UK and Ireland, so the total cost would be in excess of 60 million Euros (€60,000,000), just for these helicopters.

Should the suggestions given in our comments on NPA 2009-2b be implemented in full, including all the suggested AMCs, the costs would be:

a) €0

b) €0

c) €0

d) €0

e) €0

The Year 2004 cost of emergency floatation equipment alone for various helicopter types is as follows:

Augusta 109 Helicopters		€73.333	Sloane
Enstrom Piston Helicopters	Fixed floats only	€11,280	E. Atlantic
Enstrom turbine		€26,460	"
Eurocopter AS350 and 355 Squirrel: Helicopters		€49,155.	McAlpine

Eurocopter EC120	€60,619.	"
Eurocopter EC135	€102,358	"
Bell 206 Helicopters	€33,332	Sloane
MD 500 Helicopters	€50,000	E. Atlantic
MD 600	€85,999	"
MD 902	€100,000	"
Schweizer 300 & 330:	None available	CSE
Robinson R44: Centre	€30,800	London Heli
Robinson R22	Floats cannot be retro-fitted.	

(Float equipped R22 helicopters are no longer manufactured).

Annual Costs: Floats must be test fired each year, have to be left inflated overnight and then repacked. There is a similar repacking error risk as in parachute repacking. The pressurised bottle has to be refilled, and all pipe and electrical connections inspected. There are considerable ongoing costs and aircraft down time incurred.

It is stated that:

'In summary, the option 4A would have a minor cost impact on operators

Option. 4A would create very high costs for non-complex private helicopters.

Such costs are not proportionate to the low risks of visual flight over water and at night.

The preferred option of the Helicopter Club of Great Britain is option 4C or 4B, the continuance of national regulation. There are no competition considerations as regards private flight. Option 4A is not proportionate, reasonable or safety indicated.

comment *51* comment by: *JSLEE*

I am John Lee 69 years old; I own an Augusta Bell206 and a Cessna310. And have held a private pilots licence for nearly30 years both fixed wing and rotary with 3000 combined hours.

My objections to the proposals contained in NPA2009-02b with regards to capital revenue cost of private non complex helicopters are based on the errors of contained therein

comment *106* comment by: *James Leavesley*

The proposals in NPA no 2009-02g are very costly to any private helicopter owner. Having reviewed the implication of these suggestion I have come to the opinion that I would have to sell my helicopter and give up flying. The costs will make fly even more expensive for the humble PPL pilot. Maybe the legislators want to empty the skys

This my be the intention of thoes drafting the porposed legislation

comment *130* comment by: *Richard Dawson*

I provide my comments as a pilot and owner of a Robinson R44 helicopter which is based in the UK and is used across continental Europe for private flying purposes.

I have read and commented specifically within (NPA) NO 2009-02G.

The proposed regulation which will affect the type of helicopter which I own and operate requires me to upgrade and add on equipment which is entirely unnecessary for safe flight and for my purposes.

The proposed regulation will have a significant cost impact on me and will not improve the safety of my flights.

The needs of owners and pilots of non-complex helicopters being used for private flights within Europe must be considered within the regulation and specific provision should be made.

comment *151* comment by: *Peter Waldron*

The Helicopter of Great Britain represents the owners of 33% of UK and Irish registered helicopters together with several hundred pilots.

There are disproportionate equipment requirements for non-complex helicopters in private use and the proposed amendments would have a huge cost implication for private operators and with no supported improvement to safety.

Consideration needs to be taken of these costs as they are disproportionate.

2. REGULATORY IMPACT ASSESSMENT - 2.1 Approach to impact assessment p. 15

comment *181* comment by: *European Private Helicopter Alliance*

The European Private Helicopter Alliance (EPHA)

This response is from the above named pan European organisation of non commercial, helicopter clubs and private operators of helicopters, and presents these agreed comments as coming from all EPHA members

The European Private Helicopter Alliance membership is as follows:

Germany

Deutscher Hubschrauber Club

Contact: - Konrad Geissler, Chairman, DHC D-86916 Kaufering.Germany

Deutscher Aero Club e.V.-Section Helicopter

Contact: - Konrad Geissler, Chairman D-38108 Braunschweig Germany

Tel 49 81 91 6 42 30 email geissler-kaufering@t-online.de

France

Federation Francaise de Giration

Contact: - Jaques Escaffe, President, rue Launay Jacquet, 91640 Fontenay les Briis France.

Tel 33 1 66 32 36 365 email j.e.la-ronciere@wanadoo.fr

Austria

Helikopters im Osterreichischer Aero Club

Contact: - Wolfgang Tesar, Chairman, 3400 Klostermeuburg, Kaferkreuzgasse 1/7 Austria

Tel 43 676 3077644 email tesar@netway.at

Switzerland

Swiss Helicopter Federation

Contact: - Peter Kune, President, Kasereiweg 15, CH 3627 Heimberg Switzerland

Tel 41 79404-7775 email pk@drfconsulting.ch

United Kingdom

Helicopter Club of Great Britain

Contact: - John Matchett, Chairman, Ryelands House, Aynho, Banbury, Oxon.

OX17 3AT United Kingdom

Tel: 44 1869 810646 email j.james@ryelands.net

The European Private Helicopter Alliance represents many thousands of pilots and private helicopter owners and operators in the above countries.

Our following objections are primarily based on errors of fact contained in the NPA. As regards the operation and equipment cost of private non-complex helicopters.

In section C.) of this submission reference is made to paragraph numbers in the consultation document. Where objections are an alternative suggestion to the EASA proposal is stated based on the opinions of the EPHA.

A.) Summary of our position

(NPA) NO 2009-02G proposes disproportionate equipment requirements for non-complex helicopters for private use. The proposed measures would have an excessive cost impact for private operators with no evident improvement to

safety.

This is in direct conflict with the principles established by the European Commission's Communication "Agenda for Sustainable Future in General and Business (COM(2007) 869 final) and its endorsement by the European Parliament (2008/2134(INI)) and the Council of Ministers. In particular this NPA does not comply with the "application of the principles of subsidiarity and proportionality"1[1]. Furthermore, it ignores the European Parliament's specific demand that the implementing rules must be *"proportionate and commensurate to the complexity of the respective category of aircraft and operation"* 1[2].

B.) Specific comments on sections of the consultation document

This consultation takes no account of the costs of compliance with NPA 2009-02b for private non complex helicopters

Due regard should be taken of these costs, which are not proportionate to private helicopter operations in non complex helicopters.

Our comments to NPA 2009 02b, if implemented, would result in little or no cost to operators, and we urge the Authority to make these changes to its proposals.

1[1] (COM(2007) 869 final), Point 34.

1[2] European Parliament resolution of 3 February 2009 on an Agenda for Sustainable Future in General and Business Aviation (2008/2134(INI), Point 4.

comment *248* comment by: *Aero-Club of Switzerland*

The chosen approach seems to us to be right. Thank your for looking consequently at the same key elements.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.1 Approach to impact assessment - 2.1.1 Qualitative and quantitative assessment p. 15

comment *67* comment by: *Q Aviation Ltd*

The proposals to impose extra equipment such as floats, dingies, extra instumentation and devices (eg heated pilot tubes, extra static ports) on small helicopters is a nonsense.

There's no room, or ability to carry the extra weight and the cost will be ridiculous with no benefit whatsoever.

Costs will run into tens of thousands of Euros, and in some cases it will render some helicopters obsolete.

The new Cabri 2-seater built in France will be one of these.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.1 Approach to impact assessment - 2.1.2 Economic flows p. 16

comment *94* comment by: *Francesco Lugli*

Art.47 : The definition of 'non-complex operations' could be VFR day with an aircraft with a MPSC of 9 or less (with the specific exclusions contained in the appendices); 'local' could be (non-complex) operations within a limited and defined area (which would have an AMC attached) which start and end at the same location within the same day.

The definition and substitution of these terms within the text would permit simplified rules and resolution of the errors of omission and commission seen in the draft.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.1 Approach to impact assessment - 2.1.3 Assessment methodology p. 16-17

comment *249* comment by: *Aero-Club of Switzerland*

We think that the scoring applied is a bit superficial.

Justification: To us it's scientific background is missing.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.2 Organisation of the process p. 17

comment *107* comment by: *James Leavesley*

IT seem that this consultation process has been made a difficult as possible for simple PPL pilots to take part ithe greatest cost imposition will be born us us and it seems as it has been done on the quiet as much a possible

There has been no adverts in teh press aviation or other requesting comments

G. 2. REGULATORY IMPACT ASSESSMENT - 2.2 Organisation of the process - 2.2.2 Consultation of stakeholders p. 18-19

comment *17* comment by: *Helicopter Club of Great Britain*

2.2.2 Consultation with Stakeholders

The Helicopter Club of Great Britain has not been consulted at all, nor were we made aware than such an EASA consultation was in progress. Had we been consulted we would have forcefully argued against the option of full ICAO

compliance, for reasons now contained in our response to NPA 2009-2b.

comment *26* comment by: *Mike Pascall*

2.2.2 Consultation with Stakeholders

The Helicopter Club of Great Britain who represents the owners of approximately 33% of UK and Irish registered helicopters, as well as several hundred UK & Irish helicopter pilots has not been consulted at all, nor were they made aware than such an EASA consultation was in progress. Had they been consulted they have stated that they would have forcefully argued against the option of full ICAO compliance, for reasons now contained in both their and my response to NPA 2009-2b.

comment *52* comment by: *JSLEE*

2.2.2 Consultation with stakeholders.

EASA failed to make the public in general and the aviation community in particular aware that an EASA consultation was in progress, a great many owners/pilots of non complex helicopters have not been informed of the proposals contained NPA2009-2b and therefore have not been given the opportunity of commenting on the proposals.

comment *81* comment by: *Duncan Lee*

Consultation?! as a registered helicopter owner it would not have been difficult to notify me of these proposals!

comment *133* comment by: *Richard Dawson*

I do not believe that the process/schedule recognises all of the key stakeholders nor were they made aware that this consultation was in progress.

As a pilot and owner of a helicopter, I was not consulted with, nor was made aware that this consultation was ongoing.

The body of which I am a member, the Helicopter Club of Great Britain, and which represents one third of the helicopter owners in Great Britain was not aware of the consultation and was not contacted as a key stakeholder.

My comments can now be found within NPA 2009-02b and NPA 2009-02g.

comment *152* comment by: *Peter Waldron*

The Helicopter Club of Great Britain has not been consulted in any way and were not made aware that an EASA consultation was in progress. We would have forcibly contested the option of full ICAO compliance.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.3 Problem analysis p. 19

comment *153* comment by: *Peter Waldron*

As the proposal acknowledges that the statistics stated may not be correct any conclusions are negated.

There can be no basis for the large financial cost to the non-complex private helicopter sector for Option 4A implementation.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.3 Problem analysis - 2.3.2 OPS Safety level in Europe p. 20-35

comment *5* comment by: *Cary Crawley*

With regard to the actual numbers of ballooning accidents across the 31 E.A.S.A. affected States :these figures are a complete work of self-serving fiction. As, most accidents unless strictly and unavoidably "notifiable" are unreported, saving the pilot and operator embarassment and reducing their admission of liability to predatory insurance claims or prosecution and investigation by their N.A.A.s -.each N.A.A. will respond with very varying levels of interest. Furthermore, the majority of ballooning accidents are caused in one form or other by pilot error, either from inadequate training, inadequate training standards or from an unprofessional commercial atitude, outside distracting influences and in some cases, pure bad-luck. Accidents caused by eqipment failure are relatively rare, when balloons are operated in a highly and effectively well regulated maintenance environment. Basket fires are usually caused by modified or poorly maintained equipment and can be then further aggravated by lack of observance of appropriate emergency procedures. If these facts are to be trivialised-why pretend to include any representative figures? It would create a much healthier rule making environment for E.A.S.A. to admit publicly that which it's officers will acknowledge privately-which is that there simply are no honest and accurate figures for the record of ballooning accidents across the 31 affected states-let alone Turkey who may soon also become one of us.

comment *18* comment by: *Helicopter Club of Great Britain*

2.3.2.6 Non-complex motorized general aviation

The proposal acknowledges that the statistics contained in this NPA may not be correct.

Thus there is no basis for the large financial cost to the non-complex private helicopter sector for Option 4A implementation.

comment *27* comment by: *Mike Pascall*

2.3.2.6 Non-complex motorized general aviation

The proposal acknowledges that the statistics contained in this NPA may not be correct.

Thus there is no basis for the large financial cost to the non-complex private helicopter sector for Option 4A implementation.

comment *53* comment by: *JSLEE*

2.3.2.6 Non Complex motorized general aviation

How can the proposals be based on statistics that are acknowledged as being possibly incorrect? The proposals have large financial implications on owners/pilots of non complex helicopters therefore without reliable data there is no basis for Option 4A implementation

comment *59* comment by: *Chris Fox*

Para 2.3.2.6.

It is acknowledged that the statistics presented for General Aviation may be incorrect.

This being the case, it is inappropriate and disproportionate to impose large financial costs on private helicopter operators on the basis of inadequate data.

comment *96* comment by: *Francesco Lugli*

SAR appears to be defined by EASA as "similar service" - i.e. not covered by EASA Parts, and thus subject to national regulation. This has not been notified formally. SAR shall stay a state regulation due to diversity of systems (gov, private, fundation) and geography (sea, mountain, etc).

comment *100* comment by: *Francesco Lugli*

Art 77: From 1968 the Swiss AIB reports 58 occurrences related to technical or maintenance. 25 cases for SP, 28 cases for SE and 5 cases for ME. If we compare to the number of announced occurrences the figures shows : 25 occurrences for SP over a total of 121 representing 21%. 28 occurences for SE over a total of 240 representing 12%. 5 occurences for ME over a total of 29 representing 17%. Single Engine is according to this database the safest type. More, both IHST and EHEST in their respective analysis and research have not come to a result or any recommendations about the performance class type of helicopters. Therefore the choice of the performance class shall be left to the operator, provided he obtain the National Authority AOC required.

From 1968 the Swiss AIB reports 18 flame out occurrences (6 on SP and 12 on SE)(10 CAT - 5 AW - 3GA). Out of these 18, 3 were due to HFACS (ice ingestion

and fuel contamination). Concerning the SE, on the remaining 9, five happends on Bell 204,205,206, three on SA315B and one on AS350. Considering 390 occurences and a total of 4 engine failure on the type in use for AW-HEMS-SAR, that represent only 1% of the total occurences.

From 1968 the Swiss AIB reports 22 occurrence for SAR and HEMS over a total of 390 which represents only the 5.6%. 22 occurrences for more than 325'000 missions accomplished represents 0,0068%. Seven happened on ME and fifthteen on SE and only 2 are related to Technical or maintenance (vibrations and hoist failure both on ME). Considering this, Helicopter Class choice shall be left to the operator, provided he obtain the National Authority AOC required.

There is no justification not allowing Performance Class 2 and 3 helicopter operating in SAR-HEMS-AW-CAT over hostile environement provided the operator obtain the National Authority AOC required.

comment *108* comment by: *James Leavesley*

No consideration has been given to the PPL owner who is unable to offset any ofthe increased cost, which will be substantial, for PPL operators.

The proposals have been drafted with the commercial operator only no allowance has been given to the large private flying owners.

comment *116* comment by: *UK CAA*

Page 25, Paragraph No: *5 (below Table 7- Top-five consequences of fatal accidents in Europe)*

Comment: It is appropriate to use a medical standard for pilots to prevent an accident occurring. However, the chances of an accident occurring are very small. To prescribe a medical standard to mitigate the chance of a cabin crew member becoming incapacitated from a medical cause **during an accident** is inappropriate. The application of a medical standard for this purpose is not appropriate.

The **condition** of the percentage mitigation attributable to the cabin crew is that the **accident has occurred**. The mitigation probability is therefore the probability of the accident occurring multiplied by the cabin crew mitigation.

Justification: For illustration, assuming an accident rate of one in a million flights and a cabin crew mitigation factor of 15% would mean that the probability per flight of a cabin crew member providing mitigation is:

0.0000001 x 0.15 = 0.000000015

This calculation illustrates why the focus is on using a medical standard (for pilots) in order to prevent an accident occurring rather than using a medical standard (for cabin crew) to mitigate the effects of the accident.

comment *134* comment by: *Richard Dawson*

The proposal makes reference that the statistics contained in this NPA may not be correct.

As a result there can be no foundation for owners/pilots of non-complex private helicopters, such as my Robinson R44, having to incur a large cost for Option 4A implementation.

comment *140* comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

Table 6: Primary Causal Factor

Table7: Top 5 consequences of fatal accidents.

This table produces an argument that there are 9.2 accidents/year.10% percent are assumed to be fatal, which produces 27 victims per year. The narrative beneath Table 7 now makes the leap mixing total accidents [around 20/year] x 15% [the average of the 3 elements of table 7] to arrive at 3 accidents per year, thus arriving at 30 [27] x 3= 90 saved non-victims. This cross pollination creates a confusion indicating that cabin crew can save more people than are actually killed. The correct calculation [assuming that this methodology is correct] is 9.2 accidents/year x 15% x 27 = 37. But even this saves more than are killed.

The RIA assumes a 15% contribution factor for CC. This figure appears arbitrary, there is no justification for where this number comes from.

Similarily the CC effect appears to be underplayed. There is no consideration given to the number of accidents which were non-fatal BECAUSE of the contribution of the cabin crew, without whom some fatalities may have occured.

What is the point of this argument –it is accepted that CC are needed for safety purposes, - specifically for evacuation?

comment *141* comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

Table 18: Cost of fatal accidents

This table uses actual values – [Average number of fatal accidents/yr linked to OPS - CAT by large aeroplanesT Table] 0.9 accidents, average number of victims/year linked to OPS = 22. Using the above methodology 0.9x15%x22 = 3 victims saved per year by CC. The statement at the bottom of page 35 should read [according to the RIA methodology “Cabin crews can mitigate the consequences of accidents, [there is no argument with this] by saving not 90 but 3 lives a year. This contradicts the RIA's argument that upto 90 lives can

be saved per year. You cannnot save more passengers than were killed. The arguments in the RIA regarding CC/Victims saved do not stand up to scrutiny.

What is the point of this argument – it is accepted that CC are needed for safety purposese - specifically for evacuation?

comment 149 comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

Table 16: Consequences of accidents 1994-2003 (NTSB)

From the above data it can be observed that:

• Aircraft were normally destroyed only in conjunction with a fatal accident;

• A significant number of injuries occurred with no damage to aircraft: this is the typical case caused by turbulence in flight, this (159), due to OPS causes, represents 36 % of the total 436 accidents; It is assumed that this can be applied to the EU as well.

Comment:

Observations include that where injuries occured with no aircraft damage, caused by Turbulence for example. 159 events are quoted and attributed to OPS causes. However Turbulence is precluded from being an OPS causal factor on the table 5 on page 23

comment 154 comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

p.20 "For the purpose of the present RIA, the Safety Analysis and Research Department of the Agency has made available preliminary data which has then contributed to the "Annual Safety Review 2007" (published in October 2008) and…Furthermore, information originating from the Agency's "Annual Safety Review" 2006, from the UK CAA CAP 776 "Global Fatal Accident Review 1997–2006"28 and from IBAC29 has been used…"

p.22 "…for commercial air transport by aeroplanes with a MTOM > 2.25t. The accident data for EASA Member States is summarised in Table 4 below, as reported in the Agency's Annual Safety Review 2007…"

p.24 "…In order to validate these results, the same approach was applied to data from the UK CAA CAP 776 report…This approach returns a similar result to above…"

Comment:

EASA compares safety data originating from EASA's "Annual Safety Review" 2006 (as indicated on p.89, this includes 12 Member States currently requiring medical attestation) with UK CAA CAP 776 "Global Fatal Accident Review 1997–2006" (Member State without medical attestation). EASA has by this comparison demonstrated that the additional requirements for a medical attestation do not reveal any difference in safety data, hence questioning the safety benefit of the proposed rule.

comment 182 comment by: *European Private Helicopter Alliance*

2.3.2.6 Non-complex motorized general aviation

The proposal acknowledges that the statistics contained in this NPA may not be correct.

Thus there is no basis for the large financial cost to the non-complex private helicopter sector for Option 4A implementation.

comment *269* comment by: *IACA International Air Carrier Association*

p.20 “For the purpose of the present RIA, the Safety Analysis and Research Department of the Agency has made available preliminary data which has then contributed to the “Annual Safety Review 2007” (published in October 2008) and…Furthermore, information originating from the Agency’s “Annual Safety Review” 2006, from the UK CAA CAP 776 “Global Fatal Accident Review 1997–2006”28 and from IBAC29 has been used…”

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Hereby, EASA just demonstrated that the additional requirements for a medical attestation do not reveal any difference in safety data, hence questioning the safety benefit of the proposed rule.

comment *270* comment by: *IACA International Air Carrier Association*

p.22 “…for commercial air transport by aeroplanes with a MTOM > 2.25t. The accident data for EASA Member States is summarised in Table 4 below, as reported in the Agency’s Annual Safety Review 2007…”

EASA compares safety data originating from EASA’s “Annual Safety Review” 2006 (as indicated on p.89, this includes 12 Member States currently requiring medical attestation) with UK CAA CAP 776 “Global Fatal Accident Review 1997–2006” (Member State without medical attestation).

Hereby, EASA just demonstrated that the additional requirements for a medical attestation do not reveal any difference in safety data, hence questioning the safety benefit of the proposed rule.

comment *271* comment by: *IACA International Air Carrier Association*

p.24 “…In order to validate these results, the same approach was applied to data from the UK CAA CAP 776 report…This approach returns a similar result to above…”

EASA compares safety data originating from EASA’s “Annual Safety Review” 2006 (as indicated on p.89, this includes 12 Member States currently requiring medical attestation) with UK CAA CAP 776 “Global Fatal Accident Review 1997–2006” (Member State without medical attestation).

Hereby, EASA just demonstrated that the additional requirements for a medical

attestation do not reveal any difference in safety data, hence questioning the safety benefit of the proposed rule.

comment *272* comment by: *IACA International Air Carrier Association*

p.25 Cabin crews are also trained to quickly execute emergency tasks, such as fire-fighting and evacuation, in order to mitigate the severity of survivable accidents, as in the following cases:…

• At Heathrow airport (UK) on 17 January 2008, when the Boeing 777 G-YMMM, operated by British Airways, landed about 300 metres short of the paved surface33. The aircraft was not repairable after the accident and hence written off, while 136 passengers had being evacuated, under supervision of cabin crew and suffering only minor injuries.

This crash without post-crash fire is not exactly a good example to justify medical attestation.

comment *273* comment by: *IACA International Air Carrier Association*

p.24 "…The latter leads to around 27 victims per year (30 victims per fatal accident x 0.9 fatal accidents related to OPS), following accidents linked to air operation factors…"

Table 6 Primary Causal Factors

This table produces an argument that there are 9.2 accidents/year. 10% are assumed to be fatal, which produces 27 victims per year. The narrative beneath Table 7 now makes the leap mixing total accidents (around 20/year) x 15% (the average of the 3 elements of Table 7) to arrive at 3 accidents per year, thus arriving at 30 (27) x 3 = 90 saved non-victims. This cross pollination creates confusion indicating that cabin crew can save more people than are actually killed ?

What is the point of this argument ? It is accepted and recognised that Cabin Crew are needed for safety purposes, especially for evacuation. With the 90 human lives saved per year, EASA incorrectly attempts to justify the "raison d'être" of cabin crew, which is not questioned by industry.

The issue of the RIA is however the impact assessment of the additional EASA requirements. The 90 lives include to a far extent the lives are saved per the current requirements, i.e. without the EASA proposed additional requirements.

comment *274* comment by: *IACA International Air Carrier Association*

p.25 "…it can be estimated that cabin crews can save, in the EASA Member States, around 90 lives/year…"

Table 6 Primary Causal Factors

This table produces an argument that there are 9.2 accidents/year. 10% are assumed to be fatal, which produces 27 victims per year. The narrative beneath Table 7 now makes the leap mixing total accidents (around 20/year) x

15% (the average of the 3 elements of Table 7) to arrive at 3 accidents per year, thus arriving at 30 (27) x 3 = 90 saved non-victims. This cross pollination creates confusion indicating that cabin crew can save more people than are actually killed ?

What is the point of this argument ? It is accepted and recognised that Cabin Crew are needed for safety purposes, especially for evacuation. With the 90 human lives saved per year, EASA incorrectly attempts to justify the "raison d'être" of cabin crew, which is not questioned by industry.

The issue of the RIA is however the impact assessment of the additional EASA requirements. The 90 lives include to a far extent the lives are saved per the current requirements, i.e. without the EASA proposed additional requirements.

comment *275* comment by: *IACA International Air Carrier Association*

Attachment #1

p.25 "…it is assumed that cabin crews can contribute to mitigate the consequences of around 15% of the accidents occurring to large aeroplanes…"

There is no justification for the 15% other than a very rough categorisation of accidents in categories such as post crash fire / runway excursion/ emergency evacuation difficulties.

A far better approach is to actually look at actual accidents and determine how many lives could possibly have been saved by cabin crew. This analysis has been done by Fons Schaefers (Director Safety and Security at Martinair) who has performed and published similar analyses before. This analysis is attached hereto in pdf-format.

comment *276* comment by: *IACA International Air Carrier Association*

p.33

Table 16: Consequences of accidents 1994-2003 (NTSB)

From the above data it can be observed that:

Aircraft were normally destroyed only in conjunction with a fatal accident;

A significant number of injuries occurred with no damage to aircraft: this is the typical case caused by turbulence in flight, this (159), due to OPS causes, represents 36 % of the total 436 accidents; It is assumed that this can be applied to the EU as well.

Observations include that where injuries occurred with no aircraft damage, caused by Turbulence for example. 159 events are quoted and attributed to OPS causes. However Turbulence is precluded from being an OPS causal factor on the table 5 on page 23

comment *277* comment by: *IACA International Air Carrier Association*

p.35 Table 18

With 0.9 fatal accidents per year, whereof Cabin Crew can mitigate 15% , and

considering 30 victims per fatal accident equates to 4 victims per year that can be saved by Cabin Crew. The statement at the bottom of page 35 shall read (according to the RIA methodology) “Cabin Crew can mitigate the consequence of accidents (no argument here) by saving not 90 but 4 lives a year.”

The arguments in the RIA regarding Cabin Crew and victims saved do not stand up scrutiny.

What is the point of this argument ? It is accepted and recognised that Cabin Crew are needed for safety purposes, especially for evacuation. With the 90 human lives saved per year, EASA incorrectly attempts to justify the “raison d’être” of cabin crew, which is not questioned by industry.

The issue of the RIA is however the impact assessment of the additional EASA requirements. The 90 lives include to a far extent the lives are saved per the current requirements, i.e. without the EASA proposed additional requirements.

comment *313* comment by: *Deutsche Lufthansa AG*

Relevant Text:

2.3.2.2 Commercial Air Transport by large aeroplanes

The presented data are misleading, as they only refer to total numbers of accidents. In a proper risk assessment, occurrence data have to be put in relation to a statistical basis, like “per IFR flights”, “per flight hours”, “per passenger kilometers transported”, or so. There is only one qualitative statement about this in the text (where it states that the number of IFR flights increased), but the figures and tables do neither contain any such rates nor accurate data at all. This misleads the reader because it appears that European CAT is not on a top safety level.

EASA even misses to incorporate its own Annual Safety Review into this RIA, where the excellent safety record of European aviation is presented properly and based on thorough data analysis.

Conclusion:

If EASA itself is not able to make cross-use of valuable work produced by different directorates, such an RIA is unacceptable and questions the whole capability of EASA to adequately evaluate and address the need for regulation of a certain subject. The Regulation Directorate seems to have worked in splendid isolation on the rule proposals.

comment *314* comment by: *Deutsche Lufthansa AG*

Relevant text:

2.3.2.3 Cabin crew contribution to safety

The presented argumentation perfectly describes why there is a current legislation on cabin crews. It perfectly cites two recent accidents where cabin crews were essential to mitigate the severity of the consequences – perfectly under the current legislation of EU-OPS.

There is no chain of arguments to explain why additional regulation (as

proposed by the NPA) is necessary. This paragraph simply describes that the current system is obviously working well.

Conclusion:
No justification for further regulation.

comment *318* comment by: *ETF*

Comment to point 2.3.2.3.

The numbers given on page 25 and 35 are probably too low.

To justify this the NTSB report on survivability of accidents from 1983 to 2001 outlines that in selected survivable accidents from 1970 to 1995 as many as 68 % of the occupants involved in aircraft accidents died as a result of injuries sustained during postcrash fires.

It has been argued by manufacturers that the 90 second evacuation test for certification is only a template. Nevertheless The ATSB report Evacuation Commands for Optimal Passenger Management of 2006 states: "If a fire enters the cabin, there is typically less than two minutes before conditions deteriorate to the extent that human life cannot be supported. Hence, it is essential that the surviving occupants can be evacuated efficiently and expeditiously."

G. 2. REGULATORY IMPACT ASSESSMENT - 2.3 Problem analysis - 2.3.3 Increase and diversification of air traffic p. 36-37

comment *326* comment by: *AOPA UK*

The Agency accepts that General and Business Aviation is a very diverse sector of civil aviation and is, therefore, operationally complex by its nature. With this in mind, the Agency has concluded the new IRs bases on a 'one size fits all' is not the correct approach, and AOP A UK supports this.

The Agency has a larger role than safety and, therefore, it has to create a safety environment that enables the economic and sustained development of all civil aviation. Therefore the paragraph 2.4.2 detailing the Agency's objectives in Table 21 needs to be amended as it only deals with cost-efficiency in regulatory and certification processes.

Whilst it is not necessarily EASA's role to promote civil aviation, it must consider carefully the question of economics as it relates to SMEs.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.3 Problem analysis - 2.3.4 The Regulatory Framework p. 37-39

comment *19* comment by: *Helicopter Club of Great Britain*

2.3.4.3 From JAR-OPS 3 to EASA rules

The statement is made that:

Currently, national rules apply for CAT with helicopters (based on JAR-OPS 3).

It should also be stated that private helicopters are currently subject to national regulations only, and that JAR-OPS for non commercial helicopters was never developed.

comment *28* comment by: *Mike Pascall*

2.3.4.3 From JAR-OPS 3 to EASA rules

The statement is made that:

Currently, national rules apply for CAT with helicopters (based on JAR-OPS 3).

It should also be stated that private helicopters are currently subject to national regulations only, and that JAR-OPS for non commercial helicopters was never developed.

comment *58* comment by: *Chris Fox*

Re Para 2.3.4.3.

JAR-OPS only applies to commercial helicopter operations. Private Helicopter operations have remained subject to national legislation.

It is not appropriate to apply CAT equipment and requirements to Private operations. This is recognised in NPA 2009-02b for fixed wing aircraft; it should also be recognised for helicopters.

comment *68* comment by: *Q Aviation Ltd*

The proposals to impose extra equipment such as floats, dingies, extra instumentation and devices (eg heated pilot tubes, extra static ports) on small helicopters is a nonsense.

There's no room, or ability to carry the extra weight and the cost will be ridiculous with no benefit whatsoever.

Costs will run into tens of thousands of Euros, and in some cases it will render some helicopters obsolete.

The new Cabri 2-seater built in France will be one of these.

comment *80* comment by: *Duncan Lee*

Private helicopters should be subject to national rules only!

comment *135* comment by: *Richard Dawson*

2.3.4.3

The following wording should be added to the statement "*Currently, national rules apply for CAT with helicopters (based on JAR-OPS 3)":* It should also be stated that private helicopters are currently subject to national regulations only, and that JAR-OPS for non commercial helicopters was never developed.

comment *142* comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

Last sentence of paragraph ending .....,but also:

- Undermines the internal market, since operators in States w[h]ere the rules are more stringent may incur additional cost while other operators wil have a considerable advantage.
- Makes it more difficult for the labour to move freely across the 27+4 EASA Member States

Comment:

Basic Regulation Article 2 Objectives: 1 The principle objective of the Regulation is to establish and maintain a high uniform level of civil aviation **Safety** in Europe. The attached statement uses commercial advantage as an argument this, is not in accord with the Basic Regulation that is based upon **Safety**.

Movement across the Member States is not stated as a requirement in the Basic Regulation. Is this an EASA responsibility? It is the responsibility for EASA not to inhibit free movment across the Member States!

Free movement of CC is already achieved by utilising EU-OPS criteria as under EU-OPS 1.995. Should Member States decide to have more restrictive Medical requirements that is their choice, but not one that should be forced on other Member States that meet the basic requirements satisfactorily and **safely.**

comment *155* comment by: *Peter Waldron*

The statement is made that:

Currently national rules apply for CAT with helicopters (based on JAR-OPS 3)

It should be noted that private helicopters are currently subject to national regulations only and that JAR OPS for non commercial helicopters was never developed.

comment *183* comment by: *European Private Helicopter Alliance*

2.3.4.3 From JAR-OPS 3 to EASA rules

The statement is made that:

Currently, national rules apply for CAT with helicopters (based on JAR-OPS 3).

It should also be stated that private helicopters are currently subject to national regulations only, and that JAR-OPS for non commercial helicopters was never developed.

comment *278* comment by: *IACA International Air Carrier Association*

p.39 …the requirements applicable to cabin crews vary significantly depending on the Member States and…

Undermines the internal market, since operators in States were the rules are more stringent may incur additional cost while the other operators will have an unfair commercial advantage;

Per Basic Regulation Article 2, the principal objective of the Regulation is to maintain a high uniform level of civil aviation **safety** in Europe. Here, the RIA uses commercial advantage as an argument, which is not in accordance with the Basic Regulation based on **safety**.

The proposed cabin crew attestation and regular assessment of medical fitness is based on unfair commercial advantages rather than safety considerations.

Basic Regulation Article 2 Objectives: 1 The principle objective of the Regulation is to establish and maintain a high uniform level of civil aviation Safety in Europe. The attached statement uses commercial advantage as an argument this, is not in accord with the Basic Regulation that is based upon Safety.

Movement across the Member States is not stated as a requirement in the Basic Regulation. Is this an EASA responsibility? It is the responsibility for EASA not to inhibit free movement across the Member States!

Free movement of CC is already achieved by utilising EU-OPS criteria as under EU-OPS 1.995. Should Member States decide to have more restrictive Medical requirements is their choice, but not one that should be forced on other Member States that meet the basic requirements satisfactorily and safely.

comment *279* comment by: *IACA International Air Carrier Association*

p.39 …the requirements applicable to cabin crews vary significantly depending on the Member States and…

Makes it more difficult for the labour to freely move across the 27 + 4 EASA Member States.

Per the Basic Regulation Whereas (1) : "…the adoption of common **safety** rules and by measures…should contribute to facilitating the free movement of goods, persons and organisations in the internal market." This states clearly that it is not the responsibility of EASA to establish rules that are not based on safety. Free movement of crew could be achieved by utilising EU-OPS criteria

as under EU-OPS 1.995 (Minimum requirements Cabin Crew).

comment *315* comment by: *Deutsche Lufthansa AG*

Relevant text:

2.3.4.4 Cabin crews

The cabin crew contribution to safety has already been discussed in paragraph 2.3.2.3 **assuming** that there **may** still be room for improving their contribution to accident survivability rates.

Comment:

From the wording used, it clearly appears that there is no data based quantitative argumentation, but only a qualitative assumption.

Proposal:

There is no justification fur further regulation of cabin crews. **Stick to EU-OPS.**

G. 2. REGULATORY IMPACT ASSESSMENT - 2.3 Problem analysis - 2.3.5 Conclusions and justification for EU intervention p. 39

comment *97* comment by: *Francesco Lugli*

Art.84 : Consultations with helicopter experts involved in the drafting of this provision showed that this was directed to certain types and that it would depend on the discretion of the state.The final decision shall remain with the National Authority.Operations over a hostile environment outside a congested area shall be conducted with a Class A or equivalent and Class B helicopters, if the flight time over this area does not exceed 50% of total flight time, and the flight time over areas not enabling a safe forced landing does not exceed 5 minutes.

comment *307* comment by: *Aero-Club of Switzerland*

We fully agree with the statement "reasonably improve the safety of all air operations, including general aviation." We feel, however, that the adverb "reasonably" was sometimes forgotten by the writers of parts of the NPA 2009-02 b: Fire-extinguishers onboard light aircraft and ELT/PLB are our key-words.

Safety of air operations is unfortunately not a synonym of safe air operations: The first sentence deals more with the technical aspects, the second with airmanship. The latter is the key-word for future improvement.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.4 Objectives and indicators - 2.4.2 General objectives and “weights” p. 41

comment 280 comment by: *IACA International Air Carrier Association*

The whole concept of the RIA is flawed. When assessing safety measures, the two basic factors should be safety and economics. Social, environmental and harmonization may also be considered but should not have the same weights.

comment 308 comment by: *Aero-Club of Switzerland*

In 2. (c) the Agency states that it wants to promote cost-efficiency.....at national end European level.

Does this mean that the Agency will compare the efficiency of the 27 + 4 member states and take or propose appropriate measurers when an NAA increases fees and taxes in an unproportionate way?

G. 2. REGULATORY IMPACT ASSESSMENT - 2.4 Objectives and indicators - 2.4.3 Specific objectives p. 41-42

comment 33 comment by: *Ian Evans*

The proposed regulations will not contribute significantly to safety and where non public transport operations are involved simply add an unacceptably onerous burden to operating costs.

This proposed legislation discriminates against non-complex helicopters many of which are privately owned and operated such that the legislation makes no contribution whatsoever to PUBLIC safety

comment 143 comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

Table 20: Specific objectives for air operations

SAF.1 With regard to CC the RIA does not prove that currently operations in the EU are unsafe nor does it prove that it will improve safety. SAF.4 Using the criteria under EU OPS 1.995 there is a uniform level of medical fitness of cabin crews. Individual countries have more stringent requirements than EU OPS 1.995, this is by their internal National regulation or National Employment law and it has not been proven that this improved Safety.

SOC.1 Will not achieve a positive effect on the Aviation employment market, it will have a negative effect and create a barrier to entry for employment as CC because the initial cost and the unnecessarily unproven higher medical standard.

SOC.2 It is not the remit of EASA to promote high quality jobs in the private sector for aviation –The RIA implies that it does.

SOC.3 It is not the remit for EASA to facilitate free movement of cabin crew in the internal market –EASA's brief is establish and maintain a high level of Safety

REG.3 Ensure compliance with ICAO standards. There are no ICAO SARPS relating to CC medical requirements.

REG.4 Achieve appropriate harmonisation with the FAA equivalent rules. The FAA has no medical requirements for CC

comment *281* comment by: *IACA International Air Carrier Association*

SAF.1

With regards to Cabin Crew, the RIA does not prove that currently operations in the EU are unsafe nor does it prove that the NPA will improve safety.

comment *282* comment by: *IACA International Air Carrier Association*

SAF.4

Using the criteria under EU-OPS 1.995, there is a uniform level of medical fitness of cabin crew. Individual countries have more stringent requirements than EU-OPS 1.995, under National regulation of National Employment Law, but never proved these improved safety.

comment *283* comment by: *IACA International Air Carrier Association*

SOC.1

Will not achieve a positive effect on the aviation employment market, on the contrary. The NPA will have a negative effect and creates a barrier to entry for employment as Cabin Crew because the initial cost and the unnecessarily unproven higher medical standard.

comment *284* comment by: *IACA International Air Carrier Association*

SOC.2

It is not the remit of EASA to promote high quality jobs in the private sector for aviation. The RIA implies it does.

comment *285* comment by: *IACA International Air Carrier Association*

SOC.3

It is not the remit of EASA to facilitate free movement of cabin crew in the internal market, by other means than common **safety** rules and measures. EASA's mission to maintain a uniform high level of aviation safety.

comment *286* comment by: *IACA International Air Carrier Association*

REG.3

Ensure compliance with ICAO Standards. There are no ICAO SARPS relating to Cabin Crew medical requirements.

comment *287* comment by: *IACA International Air Carrier Association*

REG.4

Achieve appropriate harmonisation with the FAA equivalent rules. The FAA has no medical requirements for Cabin Crew.

comment *309* comment by: *Aero-Club of Switzerland*

Regulatory harmonisation: REG.3: We think "...and recommended practice" is missing.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.4 Objectives and indicators - 2.4.4 Operational objectives p. 42-44

comment *150* comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

Page 42

2.4.5 Indicators, targets and summary of objectives

Comment:

When reviewing accident statistics (NTSB etc) rates are always presented in terms of accidents per seat mile, or accidents per flight hours flown etc.

This is a rate, and as such can be confidently used as a safety barometer.

The EASA NPA uses the number of fatalities as a measure of safety.

EASA should be striving for no **accidents** not fatalities. One accident (e.g. Tenerife where there are a very high number of fatalities), is, just that; one accident. If in 2010 we have one accident, 2010 is statistically safer than say 2009 ithat had [say]20 accidents – regardless of the number of fatalities.

This matter gets clouded by the fact that FAA NPRMs use financial considerations for safety measures and puts an economic value on passenger life; thus the number of fatalities is influential here in the rulemaking process.

So the bottom line is that justification for safety regulation must be based on statistical accident rates, and not the number of fatalities in isolation of the number of accidents.

Indicators being used are numbers of fatalities per year. If in one year only one aircraft crashes say with 250 fatalities, compared to another year with the loss of 3 aircraft but with a loss of only 200 passengers in total, the data would suggest the 3 crash year would be safer.

Rates would have a better value.

Proposal:

To use accident rate statistics to justify proposals for new regulations.

comment *288* comment by: *IACA International Air Carrier Association*

2.4.5.

When reviewing accident statistics (NTSB etc) rates are always presented in terms of accidents per seat mile, or accidents per flight hours flown etc. This is a rate, and as such can be confidently used as a safety barometer. The EASA NPA uses the number of fatalities as a measure of safety.

EASA should be striving for no accidents not fatalities. One accident (e.g. Tenerife where there are a very high number of fatalities), is just one accident. If in 2010 we have one accident, 2010 is statistically safer than say 2009 that had [say]20 accidents – regardless of the number of fatalities.

This matter gets clouded by the fact that FAA NPRMs use financial considerations for safety measures and puts an economic value on passenger life; thus the number of fatalities is influential here in the rulemaking process.

So the bottom line is that justification for safety regulation must be based on statistical accident rates, and not the number of fatalities in isolation of the number of accidents.

Indicators being used are numbers of fatalities per year. If in one year only one aircraft crashes say with 250 fatalities, compared to another year with the loss of 3 aircraft but with a loss of only 200 passengers in total, the data would suggest the 3 crash year would be safer.

Rates would have a better value.

Proposal: Use accident rate statistics to justify proposals for new regulations.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.5 Options p. 45-46

comment *98* comment by: *Francesco Lugli*

Art.9 : The English language can be a safety issue for a non-native-English-speaking crew, therefore the choice of the language shall be left to the national authority.(b) The operator shall ensure that all operations personnel are able to understand the language in which those parts of the Operations Manual that pertain to their duties and responsibilities are written.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.6 Commercial air transport p. 46

comment *103* comment by: *Jan Brühlmann*

We support the proposition 1C

comment *167* comment by: *HDM Luftrettung gGmbH*

We sustain the proposition 1C

comment *195* comment by: *Ph.Walker*

We support the proposition 1C

comment *251* comment by: *Christian Hölzle*

We support the proposition 1C

comment *260* comment by: *Swiss Helicopter Group*

We support the proposition 1C

G. 2. REGULATORY IMPACT ASSESSMENT - 2.6 Commercial air transport - 2.6.1 Options p. 46

comment *9* comment by: *Heli Gotthard*

We sustain the proposition 1C

comment *11* comment by: *Stefan Huber*

We sustain the proposition 1C

comment *13* comment by: *Air Zermatt*

We sustain the proposition 1C

comment *15* comment by: *Air-Glaciers (pf)*

We sustain the proposition 1C

comment *65* comment by: *Heli Gotthard AG Erstfeld*

2.6 Commercial Air Transport CAT
3 alternative possible
We sustain the proposition 1C

comment *74* comment by: *SHA (AS)*

We sustain the proposition 1C

comment *78* comment by: *Berner Oberländer Helikopter AG BOHAG*

We sustain the proposition 1C

comment *84* comment by: *Heliswiss AG, Belp*

We support the proposition 1C

comment *86* comment by: *Heliswiss*

3 alternative possible

We support the proposition 1C

comment *88* comment by: *Heliswiss NV*

We support the proposition 1C

comment *90* comment by: *Dirk Hatebur*

I support the proposition 1C.

comment *101* comment by: *Catherine Nussbaumer*

We support the proposition 1C

comment *113* comment by: *Walter Mayer, Heliswiss*

We support the proposition 1C

comment *128* comment by: *Pascal DREER*

I support the proposition 1C

comment *163* comment by: *Christophe Baumann*

We support the proposition 1C

comment *169* comment by: *Benedikt SCHLEGEL*

We support the proposition 1C

comment *176* comment by: *Philipp Peterhans*

We support the proposition 1C

comment *205* comment by: *Hans MESSERLI*

We support the proposition 1C

comment *222* comment by: *Trans Héli (pf)*

We sustain the proposition 1C

comment *266* comment by: *Eliticino SA*

We sustain the proposition 1C

G. 2. REGULATORY IMPACT ASSESSMENT - 2.6 Commercial air transport - 2.6.2 Target group and number of entities concerned p. 47-50

comment *311* comment by: *Aero-Club of Switzerland*

"Sailplane operators carrying paying passengers (i.e. CAT)...": Should the Agency not write of "COM"?

The other open question: Is it really a "transport" of a person when he/she wants to make a glider flight just for fun?

The most serious impact of too much regulation of club- and private aviation is what can be described as the minimizing of the fun-factor.

comment *330* comment by: *Asociación Española de Pilotos de Aerostación (AEPA)*

2.6 Commercial Air Transport, (page 48): There are 47 authorized “balloon aerial Works companies” for advertising, aerial photo, filming and sightseeing (touristic) flights. (Not all for every kind of work)

it is known there are at least 8 unauthorized operators.

In conclusion, we think the nearest place for a Balloon Company is the subpart C. OPS.COM.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.6 Commercial air transport - 2.6.4 Environmental Impact p. 52

comment *165* comment by: *Elvington Park Ltd*

The principal of balancing safety regulation with environmental protection was applied in America when it was recognised that the safety benefit of legally requiring that car lights were always on when driven failed to overcome the negative aspects of pollution caused by the increase in fuel consumption resulting from increased electrical load thereafter the lighting requirement was abandoned.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.6 Commercial air transport - 2.6.6 Social Impact p. 55-56

comment *99* comment by: *Francesco Lugli*

Art.5 : Minor changes in OM should be possible without approval of the authority and conform to appendix 3 article 5 page 56.

comment *289* comment by: *IACA International Air Carrier Association*

The EASA NPA is against the UK Disability Discrimination act (DDA)

Part II section 4:

Discrimination against applicants and employees

(1) It is unlawful for an employer to discriminate against a disabled person—

(a) in the arrangements which he makes for the purpose of determining to whom he should offer employment;

(b) in the terms on which he offers that person employment; or

(c) by refusing to offer, or deliberately not offering, him employment.

(2) It is unlawful for an employer to discriminate against a disabled person whom he employs—

(a) in the terms of employment which he affords him;

(b) in the opportunities which he affords him for promotion, a transfer, training or receiving any other benefit;

(c) by refusing to afford him, or deliberately not affording him, any such opportunity; or

(d) by dismissing him, or subjecting him to any other detriment.

...

5 Meaning of “discrimination”

(1) For the purposes of this Part, an employer discriminates against a disabled person if—

(a) for a reason which relates to the disabled person’s disability, he treats him less favourably than he treats or would treat others to whom that reason does not or would not apply; and

(b) he cannot show that the treatment in question is justified.

comment *290* comment by: *IACA International Air Carrier Association*

The EASA NPA contravenes Council Directive 2000/78/EC

Article 1 Purpose

The purpose of this Directive is to lay down a general framework for combating discrimination on the grounds of religion or belief, disability, age or sexual orientation as regards employment and occupation, with a view to putting into effect in the Member States the principle of equal treatment

Concept of discrimination

1. For the purposes of this Directive, the ‘principle of equal treatment’ shall mean that there shall be no direct or indirect discrimination whatsoever on any of the grounds referred to in Article 1.

2. For the purposes of paragraph 1:

(a) direct discrimination shall be taken to occur where one person is treated less favourably than another is, has been or would be treated in a comparable situation, on any of the grounds referred to in Article 1;

G. 2. REGULATORY IMPACT ASSESSMENT - 2.7 Commercial aerial work p. 59

comment *258* comment by: *Southern Cross International*

The impact assessment for Part-OPS does not take into account the effect of the additional financial, administrative, and operational burdens placed on companies that perform aerial work (or commercial operations other than CAT) and compete at a global level.

These burdens place companies such as ourselves at a extreme competitive disadvantage compared to our competitors, the vast majority of which are based outside the EU and operate under minimum or no oversight, especially those based in the USA who are able to operate under Part 91.

comment *329* comment by: *AOPA UK*

Of the three Options outlined in this section, 2B seems to satisfy the needs of the Basic Regulation so long as EASA can achieve a proportionate set of rules - a single engine aircraft engaged in A to A sight seeing trips is not the same as an aircraft conducting high power cable inspections or aircraft engaged in enviromnental work which is different from single engine aircraft engaged in aerial photography. Again, this is different from a civil registered turbine

powered aircraft operating under a military contract!

'One size' does not 'fit all' operations and we (AOPA) would like to hear how EASA plans to achieve proportionality in aerial work rules.

We understand that a number of Annex II are aircraft also engage in aerial work but the document does not deal with this. We believe that the operation and certification/continued airworthiness aspects of aircraft are not the same. But what are the operational differences between Annex II aircraft and EASA CofA aircraft?

2.7 does not deal with Flight Training which, according to the Basic Regulation, is a commercial activity. How does EASA plan to deal with this?

G. 2. REGULATORY IMPACT ASSESSMENT - 2.7 Commercial aerial work - 2.7.1 Options p. 59

comment *10* comment by: *Heli Gotthard*

We sustain the proposition 2B

comment *79* comment by: *Berner Oberländer Helikopter AG BOHAG*

We sustain the proposition 2B

G. 2. REGULATORY IMPACT ASSESSMENT - 2.7 Commercial aerial work - 2.7.2 Target group and number of entities concerned p. 59-61

comment *4* comment by: *Heli-Lift Services*

Sirs. We are one of four companies that hold an AAC(Helicopters) issued by the CAA in the UK, giving them operational control over all agricultural and some of the underslung load operations carried out in the UK.

We have been asking CAA for many years to expand the AAC to encompass all commercial aerial work in the UK and so would welcome option 2 or 3 provided "proportionate rules" were really that and agreed between operator and Authority to cater for the many varying tasks your document has identified.

Without some form of agreed regulation we as operators face many problems with cross border contracts and indeed in our homelands. As an example if we need to move a load- handler onto a mountain and he/she is not directly employed by our company they are classed as commercial air transport needing a full AOC coverage, you can imagine that this in many aerial work situations is almost impossible to comply with, site criteria etc.

Kind Regards

Stuart Ring

comment *198* comment by: *DGAC*

Table 34 has been established as a basis for the demonstration by the Agency that aerial work should be subject to certification.

When looking at a glance to that table, it seems that only one country (FR) has reported differently than the others, reporting “self-declaration” when the others have all reported “approved, certified or authorized”.

When you look deeper into the Table and the conditions of its establishment, you discovers the following bizarre things :

- that country, 1 out of 11, represents by itself more than 67% of the operators considered,
- 4 countries, not the smallest ones (AT; DE, NL and UK) do not appear in the Table because they could not report figures as they do not know how many arial workoperators exist in their country since there is neither any form of approval nor any form of declaration
- some 16 other countries have not answered anything.

To be usable at one glance and for the demonstration to be more accurate, the table should have contained two other columns, one with the title “no certification – no declaration” with at a “?” in the cell for each 4 countries (AT; DE, NL and UK), and a last column with the title “no answer” and an “x” in the cells corresponding to the 16 remaining countries.

This would have enabled assessing the huge gap that has to be crossed to get to a full certification of all aerial work operators. At least this could help the legislator tailor the Cover regulation in that respect.

comment *312* comment by: *new European Helicopter Association*

We sustain the proposition 2B

G. 2. REGULATORY IMPACT ASSESSMENT - 2.7 Commercial aerial work - 2.7.3 Safety Impact p. 61-62

comment *12* comment by: *Stefan Huber*

We sustain the proposition 2B

comment *14* comment by: *Air Zermatt*

We sustain the proposition 2B

comment *66* comment by: *Heli Gotthard AG Erstfeld*

2.7 Commercial Aerial Work

3 alternative possible

We sustain the proposition 2B

comment *85* comment by: *Heliswiss AG, Belp*

We support the proposition 2B

comment *87* comment by: *Heliswiss*

We support the proposition 2B

comment *89* comment by: *Heliswiss NV*

We support the proposition 2B

comment *91* comment by: *Dirk Hatebur*

I support the proposition 2B.

comment *102* comment by: *Catherine Nussbaumer*

We support the proposition 2B

comment *104* comment by: *Jan Brühlmann*

We support the proposition 2B

comment *114* comment by: *Walter Mayer, Heliswiss*

We support the proposition 2B

comment *129* comment by: *Pascal DREER*

I support the proposition 2B

comment *164* comment by: *Christophe Baumann*

We support the proposition 2B

comment *170* comment by: *Benedikt SCHLEGEL*

We support the proposition 2B

comment *177* comment by: *Philipp Peterhans*

We support the proposition 2B

comment *206* comment by: *Hans MESSERLI*

We support the proposition 2B

comment *267* comment by: *Eliticino SA*

We sustain the proposition 2B

G. 2. REGULATORY IMPACT ASSESSMENT - 2.7 Commercial aerial work - 2.7.4 Environmental Impact p. 62

comment *2* comment by: *UK Department for Transport*

test

comment *168* comment by: *HDM Luftrettung gGmbH*

We sustain the proposition 2B

comment *196* comment by: *Ph.Walker*

We support the proposition 2B

comment *252* comment by: *Christian Hölzle*

We support the proposition 2B

comment *261* comment by: *Swiss Helicopter Group*

We support the proposition 2B

G. 2. REGULATORY IMPACT ASSESSMENT - 2.7 Commercial aerial work - 2.7.7 Regulatory harmonisation p. 67-68

comment *16* comment by: *Air-Glaciers (pf)*

We sustain the proposition 2B

comment *75* comment by: *SHA (AS)*

We sustain the proposition 2B

comment *223* comment by: *Trans Héli (pf)*

We sustain the proposition 2B

G. 2. REGULATORY IMPACT ASSESSMENT - 2.8 Non-commercial operations by complex motor-powered aircraft p. 69

comment *328* comment by: *AOPA UK*

Once again we must recognise the complex nature of these operations where, again, the 'one size fits all' approach may be detrimental to this sector.

Complex motor-powered aircraft which could be tenned 'private' i.e. the owner is also the pilot 01' employs a pilot, should not come within the same scope as 'Corporate Aviation' which effectively is a chauffeur service.

The data in Table 42 may not be 100% accurate given that many owner operators of complex motor-powered aircraft are not members of EBAA.

The data in paragraph 2.8.2.2 may need revalidating because it is claimed that about 9% of all aircraft movements recorded by Eurocontrol relate to general and business aviation yet AOPA understands from Eurocontrol that at least 50% of these flights relate to rotary wing operations.

AOPA found this section somewhat muddled because it is dealing with non-commercial operations but also refers to air taxi operations and fractional ownership.

It would be helpful to have throughout the NP A a clear definition of what is commercial and what is not. Referring back to Option 4A, we believe that same approach should be adopted - that is to say based on ICAO SARPs with proportionate 'Light IRs and AMC material'. As that is not an option then we would support your Option 3C as long as EASA can demonstrate the claim that Option 3C is fully in line with the recent ICAO provisions.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.8 Non-commercial operations by complex motor-powered aircraft - 2.8.4 Environmental Impact p. 73

comment *161* comment by: *Elvington Park Ltd*

The proposed requirement for Helicopters to carry floats over water will cause a 5-10% increase in fuel usage as a result of increased drag and weight, therefore a negative environmental impact results,

G. 2. REGULATORY IMPACT ASSESSMENT - 2.8 Non-commercial operations by complex motor-powered aircraft - 2.8.5 Economic Impact p. 74-76

comment *72* comment by: *John Houseman*

I believe that these proposal are not necessary. They would be prohibitively expensive for home built and flown helicopters. Private Pilots and owners of home built helicopters are fully aware of the risks of flying their aircraft and take sensible and affordable precautions.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.9 Non-commercial air operations with other than complex motor-powered aircraft p. 80

comment *20* comment by: *Helicopter Club of Great Britain*

2.9 Non-commercial air operations with other than complex motor-powered aircraft

It is stated that:

'Available studies coming from Member States and other countries however had shown that, among the causal factors linked to aviation accidents for this category of aircraft, the design related failure rate was very low'.

HCGB agrees with this statement. However it shows that there is no justification to incur expenditure of €60,000 per helicopter for unnecessary equipment that would make no difference to safety.

comment *29* comment by: *Mike Pascall*

2.9 Non-commercial air operations with other than complex motor-powered aircraft

It is stated that:

'Available studies coming from Member States and other countries however had shown that, among the causal factors linked to aviation accidents for this category of aircraft, the design related failure rate was very low'.

HCGB agrees with this statement. However it shows that there is no justification to incur expenditure of €60,000 per helicopter for unnecessary equipment that would make no difference to safety.

comment *54* comment by: *JSLEE*

2.9 Non Commercial air operations with other than complex motor powered aircraft.

EASA accepts that the UK and other Member States statistics show aviation accidents in this category of aircraft are very low and not linked to aircraft design. Therefore there is no justification in me incurring £60,000 to£80,000 for equipment that will make no difference to safety.

comment *109* comment by: *James Leavesley*

Your statement " the casual factors linked to aviation accidents for this caregory of aircraft, the design related falure was very low"

If the design wasn't safe, the normal educated PPL pilot wouldn't buy one in the first place, so why increase the costs when your own statments say there is little or low risk

these proposals will be just an increase cost to the PPL owner with no benefit

comment *136* comment by: *Richard Dawson*

Section 2.9 states:

'Available studies coming from Member States and other countries however had shown that, among the causal factors linked to aviation accidents for this category of aircraft, the design related failure rate was very low'.

This statement demonstrates that there is no justification for owners of non-complex privately owned helicopters, such as my R44, to spend £50,000+ on equipment (even if possible) that have no significant safety benefit.

comment *184* comment by: *European Private Helicopter Alliance*

2.9 Non-commercial air operations with other than complex motor-powered aircraft

It is stated that:

'Available studies coming from Member States and other countries however had shown that, among the causal factors linked to aviation accidents for this category of aircraft, the design related failure rate was very low'.

EPHA agrees with this statement. However it shows that there is no justification to incur expenditure of €60,000 per helicopter for unnecessary equipment that would make no difference to safety.

comment *327* comment by: *AOPA UK*

We do not accept the RIA as being an accurate picture of this sector of GA. We do not understand the reference to Fire Extinguishers and ELTs as well as the associated costings - what are you trying to prove? There are other NPAs which seek to deal with life rafts, steerable landing lights etc which would better serve a RIA.

Using the multi criteria analysis, the Agency arrives at Option 4A as its preferred option. Option 4A is also the preferred option of AOPA UK but we have some caveats:-

I. The ICAO SARPs do not always take into account the differences in GA i.e. fixed ELTs for aircraft without a power source;

2. That ICAO SARPs would need to be applied uniformly throughout the 27 Member States - currently there is no harmonised approach which leads to operational constraints and difficulties for our members i.e. ELT -v- PLB where one State accepts the PLB as an alternative to the ELT and another State does not.

3. EASA engages fully with the relevant Associations when developing 'Light IRs and AMC material'.

4. The cost associated with ICAO compliance to GA operators requires a supporting safety/business case.

Option 4C will allow the continued lack of joined-up regulation across Europe which leads to economic and operational problems for many European GA owner/operators.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.9 Non-commercial air operations with other than complex motor-powered aircraft - 2.9.1 Options p. 80-81

comment *60* comment by: *Chris Fox*

Table 53 describes the AMCs for NPA 2009-02b as 'Light'.

In the case of private light helicopter operations this is untrue, as no distinction is made between commercial/complex and private/simple helicopters in NPS 2009-02b.

This means that there would be very significant costs associated with compliance with NPA 2009-02b for private light helicopters, and in some cases compliance would be technically impossible. This would have the effect of making impossible operations that are currently conducted legally and safely - for example, water crossings by R22 helicopters.

comment *69* comment by: *Q Aviation Ltd*

The proposals to impose extra equipment such as floats, dingies, extra instumentation and devices (eg heated pilot tubes, extra static ports) on small helicopters is a nonsense.

There's no room, or ability to carry the extra weight and the cost will be ridiculous with no benefit whatsoever.

Costs will run into tens of thousands of Euros, and in some cases it will render some helicopters obsolete.

The new Cabri 2-seater built in France will be one of these.

comment *156* comment by: *Peter Waldron*

It is stated that:

Available studies coming from Member States and other countries had shown that among the casual factors linked to aviation accidents for this category of aircraft, the design related failure rate was very low.

HCGB agrees with this statement. It shows that there is no justification to incur expenditure of 60,000 Euros per helicopter for unnecessary equipment.

comment *324* comment by: *Joe More*

I am a Professional Helicopter Pilot who flies within the UK and to and from Europe on both Private and CAT flights and believe the introduction of **NPA 2009-02b will be detrimental to my business.** The imposition of the Floatation, Life Raft and ELT proposals would adversely affect my activities through their cost, weight and practicality.

Requiring floatation, life raft and ELT fitment to cross estuaries, lakes, reservoirs, rivers, or to cross to the Isle of Wight and the many Scottish islands would be a grossly disproportionate requirement compared to the risk involved. Also the cost implication would prevent many of my clients from introducing the required equipment.

I am therefore strongly opposed to the proposed regulations, it is simply grossly unreasonable to impose such a heavy burden of compliance when no safety case exists. I thus urge EASA to either withdraw these proposals entirely, amend them as suggested, define a MTOM weight limit below which they would not apply (e.g. 3175Kg), or simply apply the fixed wing proposals to helicopters. Other practical mitigation measures could be exemptions for helicopters under 3000kg MTOM, for non-complex helicopters, or for helicopters in private flight.

My preferred solution is that EASA adopt option 4C

G. 2. REGULATORY IMPACT ASSESSMENT - 2.9 Non-commercial air operations with other than complex motor-powered aircraft - 2.9.2 Target group and number of entities concerned p. 81-82

comment *193* comment by: *British Gliding Association*

These comments are the view of the British Gliding Association.

<![endif]-->
2.9.2 from page 81 identifies that data is not available re non-commercial

non-complex operations. The RIA then goes on to justify application of ICAO SARPs based on supposition.

The BGA understands that good rulemaking can only occur when endemic safety issues are identified and subsequently mitigated through rules. Rather than attempt to understand what safety issue EASA needs to mitigate through application of the NPA 2009-02 operations rules to the operation of non-commercial, non complex aircraft, the rulemaking drafting group appears to use supposition and guesswork to achieve what appears to be a preconceived outcome, ie option 4A.

The BGA believes that this is an entirely inappropriate approach and underlines some of the very significant concerns that industry - including the sailplane community - has over the development and delivery of appropriate and proportionate rulemaking affecting sporting aviation and gliding in particular.

The BGA proposes that EASA rejects this RIA as incomplete and inappropriate. EASA should re-appraise the regulatory impact based on real data rather than inaccurate supposition.

The BGA additionally makes the following specific observations and proposals regarding this RIA;

2.9.2.1 Competent Authorities " …..*The Agency assumes that Member States already have non-commercial operations with other than complex motor-powered aircraft included in their oversight programme. Therefore, Article 10 may not have any impact on NAAs"*

But it will have in some cases. Within the UK, for example, the regulatory oversight of gliding has always been derogated to the British Gliding Association. Any requirement for increased NAA oversight will certainly result in a significant negative economic impact on operators of sailplanes.

2.9.3 Safety Impact

"… the absence of specific OPS requirements, e.g. more specific equipment carriage and specific minimum fuel requirements may have a medium negative impact on safety…"

This is a common misconception. Specific requirements and mandated equipment can increase safety in Commercial Air Transport and other professional flying activity where costs can be recovered through commercial activity. However, in General and Sporting aviation such requirements add directly to the costs for pilots and so reduce the amount of flying practice they can achieve. **Therefore the absence of such requirements can increase safety**.

"Nevertheless, it (4A) could well contribute to the prevention of accidents linked to fuel causal factors."

This is interesting. The BGA is interested in seeing the data used by the drafting group to support this statement.

"Overall, this option (4A) would have the strongest safety impact"

This statement is based on the assumptions made earlier rather than accurate data. The statement should be removed from the proposal.

2.9.5.3 Regulatory cost for the operators (recurrent)

"... *As a result, the total regulatory cost of aero clubs is assumed to be 3.4M€ per year and the total regulatory costs of owner/pilots would amount to 10M€ per year.*

The Agency assumes that Member States already have non-commercial operations with noncomplex aircraft included in their oversight programme. Therefore, no additional costs are assumed for operators."

The inaccurate assumption of pilot/owner costs in the second sentence results in a subsequent incorrect assumption. The statement should be removed from the proposal.

2.9.5.4 Regulatory cost for the operators (non recurrent)

"In case of option 4A, 26,000 motor-powered aircraft would need to be equipped with an ELT. The Agency estimates that installing an ELT may cost on average around 2,000 €. The total investment cost would amount to 52M€.

Assuming that this investment would be depreciated over a period of 5 years, the annual total depreciation costs would amount to 13.0M€.

Private owner/pilots will have to meet the price in full on installation from their own funds. Depreciation does not apply in this case. The statement should be modified accordingly.

2.9.5.6 Additional demand

"Conversely, option 4A will create an additional demand of 13.0M€ per year, and a related additional tax of (20 %) 2.6M€ per year."

Gliding operations are funded from participants taxable earned income. Their spending power is limited. The BGA strongly believes every € spent on additional equipment and ton additional related taxation results in less being spent on the ultimate safety benefit - flying practice. This important point is overlooked within the RIA.

2.9.6 Social Impact

"Option 4A may have a minor positive social impact resulting from the need to invest in retrofit equipment."

The BGA would like this 'minor social impact' to be quantified within the RIA.

2.9.8 Multi Criteria Analysis (MC) and recommended option

"From Table 58 above it can be observed that option 4C is clearly negative, in particular, from the safety perspective. Among the remaining two, option 4A scores significantly higher than 4B.

4A is therefore the preferred option."

The 'safety' issues are based on flawed hypothesis and supposition. The RIA should be rejected by EASA.

comment *200* comment by: *AS Miller*

This RIA is based on many assumptions that are false.

2.9.2.1

"..... *The Agency assumes that Member States already have non-commercial operations with other than complex motor-powered aircraft included in their oversight programme. Therefore, Article 10 may not have any impact on NAAs"*

With regret, this is not correct.

Within the UK, the CAA delegates most of the oversight functions for gliding to the British Gliding Association. This body has a very small professional staff; volunteers shoulder much of the workload and so keep cost low. This has worked well for 60 years. Any requirement for increased NAA oversight would mean higher costs, to be borne by either tax payer or operators.

comment *207* comment by: *Aero-Club of Switzerland*

We think there are too many assumptions in 2.9.2.1 and 2.9.2.2 of the Agency's RIA. It seems unfair to us to base new rules on assumptions, we would like to see hard facts.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.9 Non-commercial air operations with other than complex motor-powered aircraft - 2.9.3 Safety impact p. 82-84

comment *61* comment by: *Chris Fox*

As acknowledged in 2.9.3, there are no reliable European-wide statistics available on which to base a safety case for the requirements proposed.

The acknowledgement that the 'design-related failure rate was very low' undermines the argument for requiring very significant expenditure on additional safety-related equipment in privately-operated simple helicopters

comment *201* comment by: *AS Miller*

This RIA is based on many assumptions that are false.

2.9.3 Safety Impact

The review recommended further study "to investigate the possible correlation between regulatory regime and general aviation fatal accident rates and causal factors." This suggests the need for possible better regulation.

With regret, this is not correct.

It suggests no such thing. These different regimes encompass different fleets of aircraft, operated in different conditions, by different organisations and flown by different groups of pilots. The study would be welcome, of course.

"... the absence of specific OPS requirements, e.g. more specific equipment

carriage and specific minimum fuel requirements may have a medium negative impact on safety…"

With regret, this is not correct.

More specific equipment carriage would add to the costs for pilots and so reduce the amount of flying practice they can achieve. Thus, the absence of such requirements could increase safety.

"Nevertheless, it (4A) could well contribute to the prevention of accidents linked to fuel causal factors."

With regret, this is nothing more than conjecture.

Where is the evidence? This assertion builds on the false assumption at the beginning of this section.

"Overall, this option (4A) would have the strongest safety impact"

With regret, this is not correct.

This assertion builds further false assumptions.

The controlled mechanism for the evolution of the AMCs, leading to collective efforts to improve them, ensures that options 4A and 4B would lead to a sufficient uniformity of safety levels (score 2). Whereas, the same result could not be achieved by option 4C.

With regret, this is not correct.

As indicated above, 4A & 4B could well lead to less safety. There is no assurance that evolution would work in the other direction.

comment *210* comment by: *Aero-Club of Switzerland*

We are of the opinion that the whole paragraph 2.9.3 dealing with non-commercial operations of other than complex motor powered aircraft should be deleted.

Justification: The proposed text contains so many times words like "assume", "assumption", "estimate" that we think it cannot be considered to be a sound base for any decision-making.

Safety onboard does not depend on fire-extinguishers onboad or on ELT of any kind, it depends on good airmanship, on training, on flight experience, as well as on the character and on the mental strength of the crew. The more money has to be spent on equipment the less remains for active flying, that's were we have to attack the main factor from.

comment *310* comment by: *Julian Scarfe*

The Safety impact analysis of section 2.9.3 is fundamentally flawed, and requires a complete rethink by EASA. The analysis falls into the usual trap for regulators of assuming that the introduction of regulation leads to an inevitable reduction in accident rate and consequent increase in safety. It does not.

Regulation often serves only to divert expenditure from high-leverage areas, in which discretionary expenditure has a significant safety benefit, to low-leverage areas in which mandatory expenditure has a much lower safety benefit. Regulation of this sort leads to a net safety disbenefit.

Section 2.9.3 cites, and places considerable weight on the findings of, the CAA's Regulatory Review of General Aviation in the UK. This in fact concludes (page 6-2, my **bold**):

The estimated FAR per 100,000 hours for the group of aircraft in the conventional aeroplane full-regulation category was statistically better than that for aircraft in the devolved and self-regulation groups. However, ***it would not necessarily be correct to attribute this difference solely to the amount of regulation in place*** *as, for example, the FAR for fully regulated helicopters is very similar to self-regulated gliders, paragliders and partially devolved microlights, whilst devolved non public transport ballooning in the UK has a zero fatal accident record. There was no difference, at a 95% level of statistical confidence, between the FARs for the group of aircraft in the devolved and self-regulation categories.* ***Further study would be required to establish any such relationship.***

Moreover, the "full-regulation category" is distinguished primarily from the "devolved and self-regulation groups" in the areas of airworthiness and pilot licensing. Each group obeys the same rules of the air, and for the most part the same operational regulations. It is therefore particularly inappropriate to use this as a basis for the assertion that increasing the burden of **operational** regulation leads to a safety benefit.

Non-commercial operations of non-complex aircraft (NCNC ops) are particularly susceptible to this reversal of safety benefit by overregulation. Three key factors, distinguishing these operations from commercial operations, need to be taken into account in making a safety case for regulation. These are set out in the PPL IR Europe's comments on NPA 2009-02a, but bear repeating here:

1) The requirement for specific and/or quantitative regulation of commercial ops stems from the need to create a level playing field among competitors. E.g. if airline A can decide that an item of safety equipment carried by other airlines is unnecessary, airline A may derive a competitive advantage at the expense of safety, which is clearly unacceptable. Hence for commercial ops, specific requirements are necessary. Free from commercial pressures, NCNC operators are able to exercise judgement appropriate to the risk generally accepted in their application of qualitative requirements.

2) There is an economy-of-scale difference between commercial and NCNC ops, usually apparent in the certification burden. The ELT and lifejacket

example below demonstrates this clearly.

3) NCNC operators have to cope with a greater range of missions and circumstances than commercial operators. Risk management issues are frequently complex and unforeseeable, hence there is a requirement for more flexibility in the regulatory structure, and the need for application of judgement when the circumstances are known.

Mandatory carriage of equipment, as considered in the case of the Fire Extinguisher and ELT, is particularly susceptible to the creation of a safety disbenefit by diverting expenditure into low leverage areas, because of the effect of certification requirements on costs.

For equipment such as an ELT, the burden of meeting the requirements of commercial air transport distort the cost-benefit of certification when applied to GA. Thus a marine-style beacon, such as the McMurdo PLB, may in fact offer considerably better safety benefit for some GA operations than a certificated ELT. Moreover, the difference in cost of in excess of EUR 1000 may be spent on discretionary items that also increase safety.

The UK CAA itself acknowledged this effect about 4 years ago after the introduction of mandatory carriage requirements for ELTs and life jackets for non-commercial flights. On accepting, after significant input from GA groups, that it would be folly for GA aircraft to throw away the uncertificated safety equipment that was actually tailored to its needs and replace it with vastly more expensive certificated equipment designed for the scenarios of commercial air transport survival, it issued appropriate exemptions to maintain the status quo. The exemptions (currently ORS4 No. 744 and 745) remain in force.

The safety case for avoiding quantitative regulation of fuel reserves is less obvious, but nevertheless valid. Ensuring a fuel reserve greater than that most appropriate to the nature of the operation has a safety cost, in terms of operational flexibility and aircraft performance, as well as the environmental impact and pure economic cost of carrying unnecessary fuel. Explicit, quantitative fuel reserves take little account of the nature and circumstances of the operation, and may lead to unnecessary fuel being carried only to satisfy regulatory requirements.

To-date, the UK has not regulated fuel reserves explicitly for non-commercial operations, preferring to allow the commander of an aircraft to make a judgment in full knowledge of the circumstances of the flight, just as the ERs do. No evidence has been presented of significantly greater incidence of fuel starvation accidents in UK operations than, for example, US operations where specific quantitative fuel reserves are required.

As a result of all of these considerations, the safety benefit assessments of the options presented are quite wrong. Safety is best served by recognising the need for flexibility in the application of the ERs to non-commercial operations. The bundling of provisions with quite different safety cases into options like 4A, B and C is unhelpful. **Each** rule to be introduced requires a risk and proportionality assessment as demanded by Art 8(6) of the Basic Regulation.

However, if considered as a group of regulations, option 4A will bring about the reversal of safety benefit, mostly through diversion of costs as described above, and should score a -2.

Option 4B of sub-ICAO provisions is not specific enough to assess, but might rate a 1 if the provisions are applied in a measured way that take account of the factors above.

Option 4C offers the greatest flexibility for NCNC ops, and avoids the safety benefit reversal described above. By allowing effort and resource to be expended in the areas most appropriate to the circumstances of the operation, it should score a 2 for high safety of air operations. In the current assessment it scores low (-2) for "Uniformity of safety level". This is also incorrect. While the **regulation** may be applied non-uniformly in different circumstances by operators and crew, it is the very flexibility of this approach that will lead to a "Uniformity of **safety** level" as decisions can be made to match resource to real risk. It should score at least 2.

EASA entered the arena of regulation in no small part because of the recognition by the EU of the failure of overregulation to achieve its safety goals. EASA must remain true to its mission by offering a solution, not becoming part of the problem.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.9 Non-commercial air operations with other than complex motor-powered aircraft - 2.9.5 p. 84-86 **Economic Impact**

comment *21* comment by: *Helicopter Club of Great Britain*

2.9.5.4 Regulatory cost for the operators (non recurrent)

Under Option A, no account has been taken of the extensive costs to non-complex private helicopters.

No cost estimates are given in this RIA for private helicopters to comply with option 4A. Costs would be substantial, in some cases exceeding €100,000.

The costs of a non-complex private helicopter complying with NPA 2009-2b would be:

a) Design, installation and modification approval of a second attitude indicator

b) Design, installation and modification approval of a pitot tube heater

c) Design, installation and modification approval of an alternative static pressure source

d) Design, installation and modification approval of emergency flotation equipment

e) Design, installation and modification approval of an automatic ELT

f) Design, installation and modification approval of a replacement ASI not calibrated in MPH, including Pilot Operating Handbook modifications.

For the most popular private non-complex helicopter, the Robinson R44, these costs would be approximately:

a) €7,500

b) €10,000 (this has never been done)

c) €5,000

d) €30,800

e) €7,000

Total €60,300 per non-complex helicopter

There are approximately 1000 such helicopters in the UK and Ireland, so the total cost would be in excess of 60 million Euros (€60,000,000), just for these helicopters.

Should the suggestions given in our comments on NPA 2009-2b be implemented in full, including all the suggested AMCs, the costs would be:

a) €0

b) €0

c) €0

d) €0

e) €0

The Year 2004 cost of emergency floatation equipment alone for various helicopter types is as follows:

Augusta 109 Helicopters		€73.333	Sloane
Enstrom Piston Helicopters	Fixed floats only	€11,280	E. Atlantic
Enstrom turbine		€26,460	"
Eurocopter AS350 and 355 Squirrel: Helicopters		€49,155.	McAlpine
Eurocopter EC120		€60,619.	"
Eurocopter EC135		€102,358	"
Bell 206 Helicopters		€33,332	Sloane
MD 500 Helicopters		€50,000	E. Atlantic
MD 600		€85,999	"
MD 902		€100,000	"
Schweizer 300 & 330:		None available	CSE
Robinson R44:		€30,800	London Heli

Centre
Robinson R22 Floats cannot be retro-fitted.
(Float equipped R22 helicopters are no longer manufactured).

Annual Costs: Floats must be test fired each year, have to be left inflated overnight and then repacked. There is a similar repacking error risk as in parachute repacking. The pressurised bottle has to be refilled, and all pipe and electrical connections inspected. There are considerable ongoing costs and aircraft down time incurred.

comment *22* comment by: *Helicopter Club of Great Britain*

2.9.5.6 Summary of economic impact

It is stated that:

'In summary, the option 4A would have a minor cost impact on operators (score -1').

This is simply not true as regards non-complex private helicopters. The costs would be substantial as indicated above. The total costs for helicopters alone would be 2000 x €60,300 = over €120 million.

This justifies a score of -3

No consideration whatsoever has been given to the costs to non-complex private helicopters

There has been no 'tailoring' of these proposals to the low complexity of this sector.

Article 8(6) of the Basic Regulation specifies that the requirements and compliance

demonstration must be proportionate to the complexity of the operations and the risk

involved. This has not been considered for non-complex private helicopters.

comment *30* comment by: *Mike Pascall*

2.9.5.4 Regulatory cost for the operators (non recurrent)

Under Option A, no account has been taken of the extensive costs to non-complex private helicopters.

No cost estimates are given in this RIA for private helicopters to comply with option 4A. Costs would be substantial, in some cases exceeding €100,000.

The costs of a non-complex private helicopter complying with NPA 2009-2b would be:

a) Design, installation and modification approval of a second attitude indicator

b) Design, installation and modification approval of a pitot tube heater

c) Design, installation and modification approval of an alternative static pressure source

d) Design, installation and modification approval of emergency flotation equipment

e) Design, installation and modification approval of an automatic ELT

f) Design, installation and modification approval of a replacement ASI not calibrated

in MPH, including Pilot Operating Handbook modifications.

For the most popular private non-complex helicopter, the Robinson R44, these costs would be approximately:

a) €7,500

b) €10,000 (this has never been done)

c) €5,000

d) €30,800

e) €7,000

Total €60,300 per non-complex helicopter

There are approximately 1000 such helicopters in the UK and Ireland , so the total cost would be in excess of 60 million Euros (€60,000,000), just for these helicopters.

Should the suggestions given in our comments on NPA 2009-2b be implemented in full, including all the suggested AMCs, the costs would be:

a) €0

b) €0

c) €0

d) €0

e) €0

The Year 2004 cost of emergency floatation equipment alone for various helicopter types is as follows:

Augusta 109 €73.333 Sloane Helicopters

Enstrom Piston Fixed floats only €11,280 E. Atlantic Helicopters

Enstrom turbine €26,460"

Eurocopter AS350 and 355 Squirrel: €49,155. McAlpine Helicopters

Eurocopter EC120 €60,619."

Eurocopter EC135 €102,358"

Bell 206 €33,332 Sloane Helicopters

MD 500 €50,000 E. Atlantic Helicopters

MD 600 €85,999"

MD 902 €100,000"

Schweizer 300 & 330: None available CSE

Robinson R44: €30,800 London Heli Centre

Robinson R22 Floats cannot be retro-fitted.

(Float equipped R22 helicopters are no longer manufactured).

Annual Costs: Floats must be test fired each year, have to be left inflated overnight and then repacked. There is a similar repacking error risk as in parachute repacking. The pressurised bottle has to be refilled, and all pipe and electrical connections inspected. There are considerable ongoing costs and aircraft down time incurred.

comment *31* comment by: *Mike Pascall*

2.9.5.6 Summary of economic impact

It is stated that:

'In summary, the option 4A would have a minor cost impact on operators (score -1').

This is simply not true as regards non-complex private helicopters. The costs would be substantial as indicated above.

No consideration whatsoever has been given to the costs to non-complex private helicopters

There has been no 'tailoring' of these proposals to the low complexity of this sector.

Article 8(6) of the Basic Regulation specifies that the requirements and compliance

demonstration must be proportionate to the complexity of the operations and the risk

involved. This has not been considered for non-complex private helicopters.

comment *34* comment by: *Elfan Ap Rees*

I am trying to comment on proposals to require floats,liferafts,additional insrtuments and ELT to privately flown helicopters (NPA 2009-026). I own and fly a light helicopter (Brantly B2B) for which floats are not available ,where there is no space for a liferaft and where the difficulties and costs of certifying and installing the other modifications (e.g. ASI calibrated in knots,automatic ELT ,a second attitude indicator,heated ASI probe ,steerable landing light) would be more than the value of the aircraft (Eu 25,000),amounting to at least EU 40,000. Where the option exists ,e.g. flying routes to avoid water ,the additional fuel cost would also be prohibitive.

Please consider this objection in the consultation process that I understand expires 31st July.

Light private helicopters should be exempt from this proposal because the safety record shows it is not necessary .

Elfan Ap Rees

comment *37* comment by: *Des Russell*

In the world I live in 30,000 - 100,000 euros is not considered a "minor cost impact".

comment *40* comment by: *Peter Winslow*

2.9.5.6
To imply that there are no real cost consequences of this potential legislation to non-complex privately owned helicopters is simply untrue. The cost incurred seems to have no proportionality whatsoever.

comment *55* comment by: *JSLEE*

2.9.5.4 Regulatory cost for owners/pilots

I estimate the capital cost to implement the proposals contained in NPA 2009-2b to my B206.
Would be at least £80,000 and increase my annual cost by £2,000

comment *56* comment by: *JSLEE*

2.9.5.6 Summary of economic impact

EASA states the option 4A would have a minor cost impact.

The figures above indicate otherwise.
Before these proposals contained in NPA 2009-02b are adopted EASA should have to justify that the changes are necessary to improve the safety record of helicopters flying over water. They should have to justify that the considerable cost implications to owners and that they are not disproportionate to the safety benefits. In my own case I estimate the cost of these proposals would be in the region of £80,000. Which is approximately 1/3rd of the value of the helicopter? If I choose not to implement the proposals this may affect the resale value of my helicopter and considerably restrict its use.

comment *62* comment by: *Chris Fox*

Para 2.9.5.4. This takes no account of the very large expenditure required for non-commercial private helicopters, including:

- Fitment of floats (if possible at all)
- Fitment of second AI
- Fitment of heated Pitot
- Fitment of second static source
- Provision and stowaage of life raft
- Replacement of MPH-calibrated ASIs

- Fitment of trainable landing light

These have be estimated elsewhere as amounting to some €60,000 for a Robinson R44.

comment *63* comment by: *Chris Fox*

Para 2.9.5.6

As commented elsewhere, to state that 'option 4A would have a minor cost impact on operators' is simply not true for private light helicopters.

It is not true to state that Option 4A would be proportionate in that it differentiates between complex motor-powered and other than complex motor-powered aircraft. In the case of helicopters, it makes no such distinction.

comment *70* comment by: *Q Aviation Ltd*

The proposals to impose extra equipment such as floats, dingies, extra instumentation and devices (eg heated pilot tubes, extra static ports) on small helicopters is a nonsense.

There's no room, or ability to carry the extra weight and the cost will be ridiculous with no benefit whatsoever.

Costs will run into tens of thousands of Euros, and in some cases it will render some helicopters obsolete.

The new Cabri 2-seater built in France will be one of these.

comment *73* comment by: *Aeromega*

It is, at best, misleading and at worst, a blatent lie for EASA to state that there are only minor additional costs of compliance under option 4A - for an R44, the cost of additional equipment could run to £50,000 - equivalent to an additional 15% of the cost of a new aircraft. For other types it may not even be possible to fit the proposed additional equipment.

comment *77* comment by: *Tony Castro*

I think it is absolutely ludicrous to suggest the cost is not relevant or minimal. The cost is massive in my case - Hughes 500 - possibly over £55k tp £70k to fulfill the new rules in these documents. That is almost 20% of the value of the helicopter itself in my case!!

comment *82* comment by: *Duncan Lee*

Minimal economic impact depends on who's paying for it! ANY cost increase is massivly significant to the bill payer, ME in this case!

comment *83* comment by: *Helifly (UK) Ltd*

Objection to 2.9.5.4

No account has been taken of the costs of implementing the proposals on light, non-complex helicopters. In this class of aircraft there are substantial compliance costs.

The estimated cost for the Robinson R44 that Helifly operates would be £50,000 to implement the proposals outlined in NPA 2009-2b. There would also be on-going maintenance costs for the proposed items. As a business Helifly could not afford to implement these disproportionate proposals and would loose the ability to operate its aircraft privately at night and over water. This seems econonomically unjustified when equipment related accident stats are very low (as EASA themselves accept in 2.9).

Objection to 2.9.5.6

It is not the case that these proposals would have minimal effect on operators. These proposals would cost Helifly £50,000 if the business wished to still operate private positioning flights at night and over water. They would also reduce Self Fly Hire revenues because the PPLs hiring the helicopter would be restricted in the flights they could plan.

By considering all helicopters equally these proposals ignore the fundemental differences between complex (primarily IFR equipped) helicopters and non-complex, light VFR helicopters. The accident statistics in relation to equipment failure do not justify the proposals and there is no parity between light fixed wing aircraft and light helicopters.

comment *110* comment by: *James Leavesley*

If the unwritten desire of this porpose dlegislation is to reduce the number of aircraft benig operated by PPL owners occupiers then it will succeed.

I have asked my maintance engineer for estimated to comply and he considered the total cost for me to confirm would be in the region of £ 85,000 or 100,000 euro.

That is nearly one third of the value of my machine and more than half of older machines.

This legislation would cause me to sell the machine and stop flying. It will all be too expensive to continue. This comment does not take into the current economic climate which I don't believe will continue fro much longer.

If these costs ere to be imposed accross the whole of Europe then, this legislation is either beign sponsered by the maintance companies who will be the ony beneficieries or the enviromental extreemests who want to reduce the

amount of PPL private flying.

If the person who believe that the option 4A will only have "minor cost impact on operators" ask them to purchase my machine, then spend the required amount on compliance and see if they can sell it or find someone willin to pay the rates required to cover the increased costs!! ps let them know it has been hanagered allits life so is in excellent condition

comment *127* comment by: *Ed Sturmer*

Small helicopters - costs astronomical for NO proven safety benefit.

Experience and statistics show no safety benefit to these expensive proposals.

Rough cost to modify helicopter (where that is even possible - where does EASA think a liferaft would go in a Robinson 22?) -
Approx £50,000.

Disproportionate and unnecessary!

comment *137* comment by: *Richard Dawson*

2.9.5.4

Under Option A, no account has been taken of the extensive costs to non-complex private helicopters, such as my R44.

To comply with NPA 2009-2b, it would be neccessary to design, install and get approval for the modification for the following::

a) a second attitude indicator
b) a pitot tube heater
c) an alternative static pressure source
d) emergency flotation equipment
e) an automatic ELT.

I estimate that this could cost £50,000 and may not actually be possible. In addition, there would additional maintenance costs arising e.g. annual testing of flotation equipment, etc. This would have a massive impact on me as an owner and my ability to continue to own/operate the aircraft.

comment *138* comment by: *Richard Dawson*

2.9.5.6

With reference to the statement *'In summary, the option 4A would have a minor cost impact on operators (score -1')."*.....This is not true for non-

complex private helicopters, such as my R44. The costs would be substantial as indicated in previous comment.

It is clear that a whole community of helicopters have been ignored in these proposals - that it is non-complex private helicopters. The proposals MUST be amended to take account of this significant group of aircraft so that we, as owners, are forced to spend up to 25% of the value of the helicopter meeting these unnecessary proposals.

comment *157* comment by: *Peter Waldron*

Under Option A no account has been taken of the exhorbitent costs to non-complex private helicopters.

Costs for a Robinson R44, one of the most popular private non-complex helicopters would total 60,300 Euros. There are approximately 1000 such helictopters in the UK and Ireland with the total cost for all these coming to 60 million Euros. Clearly an astronomical figure.

comment *158* comment by: *Peter Waldron*

The statement that 4A would have a 'minor' impact on operators, in terms of cost, is clearly false in relation to non-complex private helicopters.

comment *185* comment by: *European Private Helicopter Alliance*

2.9.5.4 Regulatory cost for the operators (non recurrent)

Under Option A, no account has been taken of the extensive costs to non-complex private helicopters.

No cost estimates are given in this RIA for private helicopters to comply with option 4A. Costs would be substantial, in some cases exceeding €100,000.

The costs of a non-complex private helicopter complying with NPA 2009-2b would be:

a) Design, installation and modification approval of a second attitude indicator

b) Design, installation and modification approval of a pitot tube heater

c) Design, installation and modification approval of an alternative static pressure source

d) Design, installation and modification approval of emergency flotation equipment

e) Design, installation and modification approval of an automatic ELT

f) Design, installation and modification approval of a replacement ASI not calibrated

in MPH, including Pilot Operating Handbook modifications.

For the most popular private non-complex helicopter, the Robinson R44, these costs would be approximately:

a) €7,500

b) €10,000 (this has never been done)

c) €5,000

d) €30,800

e) €7,000

Total €60,300 per non-complex helicopter

There are approximately 1000 such helicopters just in the UK and Ireland, so the total cost would be in excess of 60 million Euros (€60,000,000), just for these helicopters.

In Europe with over 2000 helicopters the total cost would be over 120 million Euros (€120,000,000)

Should the suggestions given in our comments on NPA 2009-2b be implemented in full, including all the suggested AMCs, the costs would be:

a) €0

b) €0

c) €0

d) €0

e) €0

The Year 2004 cost of emergency floatation equipment alone for various helicopter types is as follows:

Augusta 109 Helicopters		€73.333	Sloane
Enstrom Piston Helicopters	Fixed floats only	€11,280	E. Atlantic
Enstrom turbine		€26,460	"
Eurocopter AS350 and 355 Squirrel: Helicopters		€49,155.	McAlpine
Eurocopter EC120		€60,619.	"
Eurocopter EC135		€102,358	"
Bell 206 Helicopters		€33,332	Sloane
MD 500 Helicopters		€50,000	E. Atlantic
MD 600		€85,999	"
MD 902		€100,000	"
Schweizer 300 & 330:		None available	CSE
Robinson R44:		€30,800	London Heli

Centre
Robinson R22 Floats cannot be retro-fitted.
(Float equipped R22 helicopters are no longer manufactured).

Annual Costs: Floats must be test fired each year, have to be left inflated overnight and then repacked. There is a similar repacking error risk as in parachute repacking. The pressurised bottle has to be refilled, and all pipe and electrical connections inspected. There are considerable ongoing costs and aircraft down time incurred.

comment *186* comment by: *European Private Helicopter Alliance*

2.9.5.6 Summary of economic impact

It is stated that:

'In summary, the option 4A would have a minor cost impact on operators (score -1').

This is simply not true as regards non-complex private helicopters. The costs would be substantial as indicated above. The total costs for helicopters alone would be 2000 x €60,300 = over €120 million.

This justifies a score of -3

No consideration whatsoever has been given to the costs to non-complex private helicopters

There has been no 'tailoring' of these proposals to the low complexity of this sector.

Article 8(6) of the Basic Regulation specifies that the requirements and compliance

demonstration must be proportionate to the complexity of the operations and the risk

involved. This has not been considered for non-complex private helicopters.

comment *202* comment by: *AS Miller*

This RIA is based on many assumptions that are false.

2.9.5.2 Oversight cost

Same error as 2.9.2.1

2.9.2.1 Competent Authorities " …..*The Agency assumes that Member States already have non-commercial operations with other than complex motor-powered aircraft included in their oversight programme. Therefore, Article 10 may not have any impact on NAAs"*

With regret, this is not correct.

Within the UK, the CAA delegates most of the oversight functions for gliding to the British Gliding Association. This body has a very small professional staff; volunteers shoulder much of the workload and so keep cost low. This has

worked well for 60 years. Any requirement for increased NAA oversight would mean higher costs, to be borne by either tax payer or operators.

2.9.5.3 Regulatory cost for the operators (recurrent)

"*... As a result, the total regulatory cost of aero clubs is assumed to be 3.4M€ per year and the total regulatory costs of owner/pilots would amount to 10M€ per year.*

The Agency assumes that Member States already have non-commercial operations with noncomplex aircraft included in their oversight programme. Therefore, no additional costs are assumed for operators."

With regret, this is not correct.

These are massive sums, yet because a false assumption is used in the second sentence, a completely wrong conclusion is asserted.

2.9.5.4 Regulatory cost for the operators (non recurrent)

"In case of option 4A, 26,000 motor-powered aircraft would need to be equipped with an ELT. The Agency estimates that installing an ELT may cost on average around 2,000 €. The total investment cost would amount to 52M€.

Assuming that this investment would be depreciated over a period of 5 years, the annual total depreciation costs would amount to 13.0M€."

With regret, this is not correct.

Owner/pilots may not be able to apply accounting methods such as depreciation; most simply would have to meet the price in full from their own funds.

2.9.5.6 Additional demand

"Conversely, option 4A will create an additional demand of 13.0M€ per year, and a related additional tax of (20 %) 2.6M€ per year."

With regret, this is not correct.

Aeroclubs and owner/pilots are not cash cows, available to be milked as the Commission directs. Each extra € spent on additional equipment on board means one fewer € to be spent on something that actually improves safety, like flying practice. The related additional tax would be €0 per year.

comment *216* comment by: *Aero-Club of Switzerland*

Where do the figures of 2.9.5.3 come from? May we use these figures to "guide" our NAA?

In our view, the oversight of 1 owner/pilot must not exceed 1/2 day, under normal circumstances!

The last senctence of the Agency's text is only correct when the figures used are based on facts and not on assumptions.

comment *218* comment by: *Aero-Club of Switzerland*

To the last sentence in 2.9.5.4: We do not think that private pilot/owners can apply the proposed depreciation rule.

Justification: They have to pay all equipment by themselves.

comment *221* comment by: *William Harford*

All three of these options cannot generate a score of -1 given that options 4B and 4C have no additional cost.

comment *224* comment by: *William Harford*

Surely it is not within EASA's remit to recommend, or seek to justify, a course of action by commending it's tax raising potential.

comment *225* comment by: *William Harford*

This ignores the recurring annual costs of maintaining and recertification of the additional equipment proposed.
The real costs would be greater.

comment *226* comment by: *William Harford*

Additional equipment would create additional and recurring annual costs of maintenance.

comment *227* comment by: *William Harford*

2.9.5.6 cannot be correct as stated. If option 4A is deemed, to have a minor cost impact, an assumption which I would challenge, and so score -1 then options 4B and 4C which are stated to have no cost impact cannot have the same score of -1. Options 4B and 4C must have a score of 0.

comment *228* comment by: *William Harford*

There is no justification for scoring 2 on the "Level Playing Field" item as if all three items are deemed to be identical then logically they should be be removed from the equation. Including them has the effect of distorting the Rounded Weighted Averaage in Table 56 in favour of option 4A, the Agency's preferred option.
This item to be used inconsistently and arbitrarily.

comment *229* comment by: *William Harford*

The real world, first year cost is 52M€, ignoring the recurrent annual costs which the NPA does. It is therefore disingenuous to state the annual cost as only 13M€ when it should be stated as the full 52M€ plus whatever other costs result from the installation of additional equipment.

comment *230* comment by: *William Harford*

Table 56 has been distorted by the inclusion of;

1) The "Contain costs" item.

2) The "Level playing field" item

If 1) above has been based on the annualised depreciated costs of 13M€, as stated in 2.9.5.4 of the NPA, then this figure is incorrect and should be based on the full amount of cost falling on the Operator/Owner in year 1 when they have to pay for the cost of the equipment being installed. The correct figure to use would be 52M€, ie 4 times the 13M€ annualised cost, the resulting score should there be -3.

2) Different criteria have been selected for Table 56 when compared with Table 49 on page 75, dealing with the Non Commercial Operation of Complex Motor Powered Aircraft. Table 49 only uses the Costs and Proportionality as criteria to assess economic impact. Therefore the "Level playing field item should be removed from Table 56.

If the "Contain costs" item is scored as -3, see above, and the "Level playing field" item is removed entirely then the results of Table 56 would show a very different picture. The items in the Column 4A would then read as follows;

Contain costs	-3
Proportionate rules for SMEs	0
Total	-3
Average Score(total/2 quantified parameters)	-1.5
Weighted Average(score x 1 for economy)	-1.5
Rounded Weighted Average	-2

Column 4B would read;

Contain costs	0
Proportionate rules for SMEs	2
Total	2
Average Score(Tot/2 quantified parameters	1

Weighted Average (score x 1 for economy)	1
Rouned Weighted Average	1

Column 4C would read;

Contain costs	0
Proportionate rules for SMEs	2
Total	2
Average Score (Tot/2 quantified parameters)	1
Weighted Average(Score x 1 for economy)	1
Rouned Weighted Average	1

Thus columns 4B and 4C Rounded Weighted Averages remain the same at 1 but column 4A shows a completely different picture with a Rounded Weighted Average of -2.

comment *242* comment by: *European Private Helicopter Alliance*

2.9.5.5.

It should not be within EASA's remit to recommend, or seek to justify, a course of action by commending it's tax raising potential.

This consultation is about aircraft operating rules, not about raising tax.

comment *243* comment by: *European Private Helicopter Alliance*

2.9.5.6

This cannot be correct as stated. If option 4A is deemed, to have a minor cost impact, an assumption we strongly dispute, and so score -1, then options 4B and 4C which are stated to have no cost impact cannot have the same score of -1. Options 4B and 4C must have a score of 0.

comment *244* comment by: *European Private Helicopter Alliance*

2.9.5.6

There is no justification for scoring 2 on the "Level Playing Field" item as if all three items are deemed to be identical then logically they should be be removed from the equation. Including them has the effect of distorting the Rounded Weighted Average in Table 56 in favour of option 4A, the Agency's preferred option.

"Level Playing Field" is not an item in table 49, the criteria for non commercial complex aircraft, and therefore there is no justification for it in table 56. Indeed "Level Playing Field" only has relevance in commercial operations, not non-commercial.

comment *245* comment by: *European Private Helicopter Alliance*

2.9.5.4
2.9.5.6

The real world, first year cost is 52M€, ignoring the recurrent annual costs which the NPA does. It is therefore disingenuous to state the annual cost as only 13M€ when it should be stated as the full 52M€ plus whatever other costs result from the installation of additional equipment. In our view this is a high negative impact, and therefore should score -3 in column 4A of table 56.

For helicopters alone the cost would be 2000 x €60,000 = 120 M€. This is undoubtedly a high negative impact.

A separate table 56 for helicopters would unquestionably score -3 in "Contain Costs" column 4A of table 56.

comment *246* comment by: *European Private Helicopter Alliance*

2.9.5.6

Table 56 has been distorted by the inclusion of;

1) The "Contain costs" item.

2) The "Level playing field" item

If 1) above has been based on the annualised depreciated costs of 13M€, as stated in 2.9.5.4 of the NPA, then this figure is incorrect and should be based on the full amount of cost falling on the Operator/Owner in year 1 when they have to pay for the cost of the equipment being installed. The correct figure to use would be 52M€, ie 4 times the 13M€ annualised cost, the resulting score should therfore be -3.

2) Different criteria have been selected for Table 56 when compared with Table 49 on page 75, dealing with the Non Commercial Operation of Complex Motor Powered Aircraft. Table 49 only uses the Costs and Proportionality as criteria to assess economic impact. Therefore the "Level playing field item should be removed from Table 56.

If the "Contain costs" item is scored as -3, see above, and the "Level playing field" item is removed entirely then the results of Table 56 would show a very different picture. The items in the Column 4A would then read as follows;

Column 4A

Contain costs -3
Proportionate rules for SMEs 0
Total -3
Average Score(total/2
quantified parameters) -1.5
Weighted Average(score
x 1 for economy) -2
Rounded Weighted
Average -2

Column 4B
Contain costs 0
Proportionate rules for SMEs 1
Total 1
Average Score(Tot/2
quantified parameters 1
Weighted Average (score
x 1 for economy) 1
Rouned Weighted
Average 1

Column 4C
Contain costs 0
Proportionate rules for SMEs 2
Total 2
Average Score (Tot/2
quantified parameters) 1
Weighted Average(Score
x 1 for economy) 1
Rouned Weighted
Average 1

Thus columns 4B and 4C Rounded Weighted Averages remain the same at 1 but column 4A shows a completely different picture with a Rounded Weighted Average of -2.

A separate helicopter version of table 56, with “Level Playing Field” removed would undoubtedly result in a similar result

Rounded weighted average:
4A: -2 4B 1 4C 1

comment *250* comment by: *Helicopter Club of Great Britain*

2.9.5.5.

This consultation is about aircraft operating rules, not about raising tax. It should not be within EASA's concern to recommend, or seek to justify, a course of action by commending it's tax raising potential.

comment *253* comment by: *Helicopter Club of Great Britain*

2.9.5.6

There is no justification for scoring 2 on the "Level Playing Field" item as if all three items are deemed to be identical then logically they should be be removed from the equation. Including them has the effect of distorting the Rounded Weighted Average in Table 56 in favour of option 4A, the Agency's preferred option.

“Level Playing Field” is not an item in table 49, the criteria for non commercial complex aircraft, and therefore there is no justification for it in table 56. Indeed “Level Playing Field” only has relevance in commercial operations, not non-commercial.

comment *254* comment by: *Helicopter Club of Great Britain*

2.9.5.4

2.9.5.6

The real world, first year cost, including helicopters at €120M is 172M€, ignoring the recurrent annual costs which the NPA does. It is therefore wrong to say the annual cost is only 13M€ when it should be stated as the full cost.

In our view this is a high negative impact, and therefore should score -3 in column 4A of table 56.

For helicopters alone the cost would be 2000 x €60,000 = 120 M€. This is undoubtedly a high negative impact.

A separate table 56 for helicopters would unquestionably score -3 in “Contain Costs” column 4A of table 56.

comment *255* comment by: *Helicopter Club of Great Britain*

2.9.5.6

Table 56 has been distorted by the inclusion of;

1) The "Contain costs" item.

2) The "Level playing field" item

If 1) above has been based on the annualised depreciated costs of 13M€, as stated in 2.9.5.4 of the NPA, then this figure is incorrect and should be based on the full amount of cost falling on the Operator/Owner in year 1 when they have to pay for the cost of the equipment being installed. The correct figure to

use would be 172M€, with a score of -3.

2) Different criteria have been selected for Table 56 when compared with Table 49 on page 75, dealing with the Non Commercial Operation of Complex Motor Powered Aircraft. Table 49 only uses the Costs and Proportionality as criteria to assess economic impact. Therefore the "Level playing field item should be removed from Table 56.

If the "Contain costs" item is scored as -3, see above, and the "Level playing field" item is removed entirely then the results of Table 56 would show a very different picture. The items in the Column 4A would then read as follows;

Column 4A

Contain costs	-3
Proportionate rules for SMEs	0
Total	-3
Average Score(total/2 quantified parameters)	-1.5
Weighted Average(score x 1 for economy)	-2
Rounded Weighted Average	-2

Column 4B

Contain costs	0
Proportionate rules for SMEs	1
Total	1
Average Score(Tot/2 quantified parameters	1
Weighted Average (score x 1 for economy)	1
Rouned Weighted Average	1

Column 4C

Contain costs	0
Proportionate rules for SMEs	2
Total	2
Average Score (Tot/2 quantified parameters)	1
Weighted Average(Score x 1 for economy)	1
Rouned Weighted Average	1

Thus columns 4B and 4C Rounded Weighted Averages remain the same

at 1 but column 4A shows a completely different picture with a Rounded Weighted Average of -2.

Helicopters Only Table 56

A separate helicopter version of table 56, with “Level Playing Field” removed would undoubtedly result in a similar result

Rounded weighted average:

4A: -2 4B 1 4C 1

comment *263* comment by: *William Harford*

Why does table 56 scoring the economic impact of non complex, non commercial motor powered aircraft contain an additional criterion, namely the Level playing field, when compared with table 49 scoring the non commercial operation of complex motor powered aircraft?

Given that the operation of the aircraft considered in table 56 are non commercial I can not see the relevance of including the Level playing field criterion.

The only effect of including this item is to skew the resultant the un rounded weighted average from a small minus score to a small positive score. The use of criteria to be included or excluded seems entirely arbitrary and without any logic or transparency.

comment *295* comment by: *William Harford*

The "Contain costs" criterion is here made up of an estimated average cost per aircraft using the total number of 52,000 non complex non commercially operated aircraft as stated in 2.9.2.2 pages 81 and 82.

However a significant number 5,200 of these are helicopters and once again an abitrary and discriminatory position has been taken with regard to helicopters and the true additional costs remain un identified.

In order for me to continue to fly my helicopter in the way that I am currently permitted to do so, ie day and night VFR flight and flight over water (usually the 20 nautical mile stretch between Dover and cap Gris Nez), I estimate that it would cost in excess of €40,000 or 10% of the original helicopter purchase price. This can hardly be judged as proportionate.

The scoring of Option 4A for many helicopters would thus read;

Specific Objectives	**Scoring of Options**		
	4A ICAO SARPS	**4B sub ICAO**	**4C only ERs**
Contain Costs	-3	0	0
Level Playing Field – not included, see my previous comment			

Proportionate rules for SMEs	0	1	2
Total	**-3**	**1**	**2**
Average Score (total / 2)	**-1.5**	**0.5**	**1**
Weighted Average	**-1.5**	**0.5**	**1**
Rounded Weighted Average	**-2**	**1**	**1**

A substatially different result for option 4A with 4B and 4C remaining unchanged.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.9 Non-commercial air operations with other than complex motor-powered aircraft - 2.9.6 Social Impact p. 86

comment *71* comment by: *Q Aviation Ltd*

The proposals to impose extra equipment such as floats, dingies, extra instumentation and devices (eg heated pilot tubes, extra static ports) on small helicopters is a nonsense.

There's no room, or ability to carry the extra weight and the cost will be ridiculous with no benefit whatsoever.

Costs will run into tens of thousands of Euros, and in some cases it will render some helicopters obsolete.

The new Cabri 2-seater built in France will be one of these.

comment *203* comment by: *AS Miller*

This RIA is based on many assumptions that are false

2.9.6 Social Impact

"Option 4A may have a minor positive social impact resulting from the need to invest in retrofit equipment."

With regret, this is not correct.

Option 4A would have a distinctly negative social impact on the aeroclub or owner/pilot required to fund this retrofit equipment. Where is the measure of this?

comment *213* comment by: *Aero-Club of Switzerland*

But be assured "they" will find reasons to increase taxes or fees!

And: It just depends on the position we have ourselves to declare what is a positive or a negative impact. A need to invest in retrofit is not positive for most of the members of an aero-club, but very positive for the seller of avionics or fire-extinguishers or any other equipment becoming mandatory.

comment *214* comment by: *Aero-Club of Switzerland*

Another social impact we experienced: Too many regulations, high licencing requirements, complicated airspace structures and high cost contributed to a significant decline in glider flying in our country. This is not directly related with this NPA, but we have to consider it when dealing with new requirements.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.9 Non-commercial air operations with other than complex motor-powered aircraft - 2.9.7 Regulatory harmonisation p. 86-87

comment *215* comment by: *Aero-Club of Switzerland*

Option 4A may be compatible with ICAO SARP. The question is: Are ICAO SARP always reasonable? We think, for private helicopter operations they are not.

May we propose to the Agency to untertake the necessary measures to change this?

G. 2. REGULATORY IMPACT ASSESSMENT - 2.9 Non-commercial air operations with other than complex motor-powered aircraft - 2.9.8 Multi Criteria Analysis (MCA) and recommended option p. 88

comment *23* comment by: *Helicopter Club of Great Britain*

2.9.8 Multi Criteria Analysis (MCA) and recommended option

Option 4A would create very high costs for non-complex private helicopters. Such costs are not proportionate to the low risks of visual flight over water and at night.

The preferred option of the Helicopter Club of Great Britain is option 4C or 4B, the continuance of national regulation. There are no competition considerations as regards private flight.

Option 4A is not proportionate, reasonable or safety indicated.

comment *32* comment by: *Mike Pascall*

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Option 4A would create very high costs for non-complex private helicopters. Such costs are not proportionate to the low risks of visual flight over water and at night.

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Option 4A is not proportionate, reasonable or safety indicated.

comment *64* comment by: *Chris Fox*

Adoption of Option 4A would result in very significant costs for private operators of light helicopters.

These are not supported by any safety case, and is disproportionate to any perceived risk.

My preferred option for this class of aircraft is Option 4C - continued national regulation.

comment *111* comment by: *James Leavesley*

If the unwritten desire of this porpose dlegislation is to reduce the number of aircraft benig operated by PPL owners occupiers then it will succeed.

I have asked my maintance engineer for estimated to comply and he considered the total cost for me to confirm would be in the region of £ 85,000 or 100,000 euro.

That is nearly one third of the value of my machine and more than half of older machines.

This legislation would cause me to sell the machine and stop flying. It will all be too expensive to continue. This comment does not take into the current economic climate which I don't believe will continue fro much longer.

If these costs ere to be imposed accross the whole of Europe then, this legislation is either beign sponsered by the maintance companies who will be the ony beneficieries or the enviromental extreemests who want to reduce the amount of PPL private flying.

If the person who believe that the option 4A will only have "minor cost impact on operators" ask them to purchase my machine, then spend the required amount on compliance and see if they can sell it or find someone willin to pay the rates required to cover the increased costs!! ps let them know it has been hanagered allits life so is in excellent condition

comment *139* comment by: *Richard Dawson*

2.9.8

Option 4A would result in significant cost for non-complex private helicopters, such as my R44. This cost however is not proportionate to the low risks of flying VFR over water or flying visually at night.

It would be better to adopt Option 4C or 4B i.e. for regulation to be administered in the national regulations.

comment *159* comment by: *Peter Waldron*

The Option 4A would create extremely high costs for non-complex private helicopters and would be disproportionate. These costs are not proportionate to the low risks of visual flight over water at night.

The preferred option would be 4C or 4B the continuance or national regulation. There can be no competition considerations as regards private flight.

comment *187* comment by: *European Private Helicopter Alliance*

2.9.8 Multi Criteria Analysis (MCA) and recommended option

Option 4A would create very high costs for non-complex private helicopters. Such costs are not proportionate to the low risks of visual flight over water and at night.

The preferred option of the European Private Helicopter Alliance is option 4C or 4B, the continuance of national regulation. There are no competition considerations as regards private flight. Option 4A is not proportionate, reasonable or safety indicated.

comment *204* comment by: *AS Miller*

This RIA is based on many assumptions that are false.

2.9.8 Multi Criteria Analysis (MC) and recommended option

"From Table 58 above it can be observed that option 4C is clearly negative, in particular, from the safety perspective. Among the remaining two, option 4A scores significantly higher than 4B.

4A is therefore the preferred option."

With regret, this is not correct.

The 'safety' issues have the greatest weighting, yet are the most flawed.

This RIA attempts to justify the imposition of unnecessary spending by aeroclubs and owner/pilots - millions of Euros of unnecessary spending, yet it is based on nothing more than suppositions and assumptions that are clearly wrong.

No credible conclusion can be drawn from this work.

comment *220* comment by: *Aero-Club of Switzerland*

We take note of the figures in table 58. And we see, that the Agency writes of "ICAO Standards AND RECOMMENDED PRACTICES".

G. 2. REGULATORY IMPACT ASSESSMENT - 2.10 Assessment of cabin crew medical fitness p. 89

comment *131* comment by: *AEA*

Risk Assessment

The NPA lacks a data based risk assessment. This should determine the probability of an incapacitation of cabin crew caused by constitutional (i.e. not unforeseeable) medical condition during an occurrence, which would have ended up with less serious consequences if exactly this cabin crew member would have remained fit. The NPA only claims a safety benefit by a very simple qualitative and subjective scoring. We therefore like to complement the RIA as follows.

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Pages 3 and 4 show that from 2002-2007 EASA-Europe had 2.8 accidents with fatalities on 10 mio flights, i.e. 2.8 x 10E-7: this is global top level. Though for 1998-2007, page seven shows the causes of these accidents. In an even generous approach, about 15% of these accidents are from a nature, where cabin crew potentially could have contributed to less serious consequences (e.g. F-POST fire/fumes after impact, RE runway excursion, EVAC evacuation, F-NI fire/fumes no impact, USOS under/overshoot etc.). An incapacitated cabin crew member will however change nothing during a controlled flight into terrain (CFIT) or loss of control inflight.

In result, [15% x 2,8 x 10E-7] ~ [4 x 10E-8] is the potential contribution of cabin crew to safety. Now, how many of these accidents would have ended up with more serious consequences, if a cabin crew member was incapacitated? We assume every 10th, so the probability of such an accident is 4 x 10E-9. **10E-9 is already a level, which according to ICAO standards is classified as being "extremely improbable", thus denying the need for further regulation**.

But let us furthermore assume, cabin crew members are only as healthy as an average German (at this point we only have German statistics on hand, which we consider however to be also a good first approach to the European average). So it is assumed that cabin crews do only follow average society values about health awareness and care, which is considered to be a conservative approach. In 2002, according to the Statistical Yearbook of Health of the German ministry of health, 59,036 people out of a population of 55.862 mio in the age segment of 15-65 have died by causes from the 3 major disease classes cardiovascular, respiratory and digestive systems. These are typical diseases, which may be potentially identified during a medical, but do not necessarily lead to permanent unfitness to fly under current legislation for cabin crews.

So, 1 in 1000 dies from that. Let us assume that 10 in 1000 are suffering so chronically from such a disease that they are anyway considered to be not employable as cabin crew. Let us further assume that 100 in 1000 are suffering more or less, occassionally, from such a disease, but are generally employable. Within these 100 we suppose 10 reporting for duty already not feeling ultimatively well or sensing upcoming uncomfort.

How probable is now that a cabin crew member who a) belongs to the 100 in 1000 suffering from such a disease, and b) does not notice an acut or upcoming unfitness before duty to report sick, and c) actually becomes unfit during flight duty, and d) performs flight duty exactly on that working position on that flight where he/she can contribute to a less serious consequence of an accident?

Lufthansa assigns more than 9000 daily „shifts“ for cabin crew members, on about 1000 flights. Let us assume accoring to 5. above that 900 in 9000 suffer from one of the mentioned diseases. Considering an average sickness quota of 4% (German population, according to Statistical Yearbook of Health of the German ministry of health), 36 per day will report sick due to such a disease. These are however only 90%, because 1 in 10 of the sick, i.e. 4, report for duty despite not feeling ultimatively fit. Let us further assume that another 4 cabin crew members report for duty without having any reasonable indication of an upcoming unfitness, but who may become unfit under stress, e.g. emergency. In total, it can be assumed that 8 out of 9000 daily shifts are performed by a cabin crew member possibly becoming unfit due to constitutional impairment. 8 in 1000 flights means a probability of 8 x 10E-3.

The probability results in 4 x 10E-9 x 8 x 10E-3 = 3,2 x 10E-11 for the combined case of an accident with a cabin crew member being unavailable due to unfitness. Even under conservative assumptions, this case is definitively less probable than 10E-9.

In real life, the level of safety will most probably be even higher:

a. It can be assumed that cabin crew members have a higher level of health than the average population due to their self-image and due to the fact that they need to pass their annual safety training excercise.

b. Even without the requirement of a class 2 medical, there are regular medical assessments in place throughout Europe. Even without being harmonized, these regular assessments also cater for a higher than average level of health, as the rest of the population not subject to any such a professional requirement can be considered to care less for their health (in

average).

c. The a.m. statistics aggregate the age segment from 15-65. The same source offers a split into 15-45 and 45-65. The diseases mentioned only cumulate in the latter. The majority of cabin crew members however belongs to the younger age segment.

The real life risk of an occurrence combining an accident with a cabin crew member being incapacitated by an impairment of physical constitution that was potentially predictable during a medical, and where this missing cabin crew member leads to more severe consequences of that occurrence, can be assumed between 10E-12 and 10E-13. This is based on current legislation and is therefore far beyond the need for additional regulation.

Additionally, it should be noted that the EASA presentation quoted under 2. shows on page 10 that 87% of all accidents with fatalities occur in **general aviation**, 67% of all fatalities are in this segment. Commercial air transport only caters for 6% of all accidents with fatalities, though with 28% of all fatalities due to the higher average number of passengers on board.

Page 12 concludes that EU commercial air transport fixed wing operations shows a "downward trend of accident numbers and rates, in line with rest of the world", and this is based on "Relatively complete data". General aviation Europe however caters for "Majority of the fatal accidents (87%), Majority of the fatalities (65%)", and this only based on "No complete accident data at hand, Causal information incomplete, No historic trends at hand".

Despite all this, cabin crew members in commercial air transport shall be levied now to the same medical level like a PPL holder. On top of this, with the LPL concept, general aviation receives a new element which potentially will further decrease the safety level of general aviation.

Conclusion

As the safety data clearly indicate no need to stricter regulate cabin crew medicals, the only raison d'être for further regulation may be

a. provision of a level playing field for fair competition

b. harmonization of social standards

At first, EASA has been tasked with safety. At second, aviation is a global industry, where a European level playing field alone is not sufficient but may lead to even more disparities to the rest of the world. This puts European air operators at disadvantage. In Europe, many concepts exist on form and conditions for cabin crew medicals. Even society and culture specific aspects play a role in that. Prescriptive rules are therefore supposed to be less effective than a flexible approach.

Additionally, the proposals would result in an economic impact on operators due to the higher costs of the medical and the costs associated with the consequences of permanent unfitness to fly of a cabin crew member.

The **level of safety would not be increased, incurring on additional cost**.

This is unacceptable.

comment 160 comment by: *Deutsche Lufthansa AG*

1. **A. Risk Assessment**
2. The NPA lacks a data based risk assessment. This should determine the probability of an incapacitation of cabin crew caused by constitutional (i.e. not unforeseeable) medical condition during an occurrence, which would have ended up with less serious consequences if exactly this cabin crew member would have remained fit. The NPA only claims a safety benefit by a very simple qualitative and subjective scoring. We therefore like to complement the RIA as follows.
3. For accident statistics and trends we refer to an EASA presentation held on 17th April 2008 during the coordination meeting of EASA with the national accident investigation boards (AIBs).
4. Pages 3 and 4 show that from 2002-2007 EASA-Europe had 2.8 accidents with fatalities on 10 mio flights, i.e. 2.8 x 10E-7: this is global top level. Though for 1998-2007, page seven shows the causes of these accidents. In an even generous approach, about 15% of these accidents are from a nature, where cabin crew potentially could have contributed to less serious consequences (e.g. F-POST fire/fumes after impact, RE runway excursion, EVAC evacuation, F-NI fire/fumes no impact, USOS under/overshoot etc.). An incapacitated cabin crew member will however change nothing during a controlled flight into terrain (CFIT) or loss of control inflight.
5. In result, [15% x 2,8 x 10E-7] ~ [4 x 10E-8] is the potential contribution of cabin crew to safety. Now, how many of these accidents would have ended up with more serious consequences, if a cabin crew member was incapacitated? We assume every 10th, so the probability of such an accident is 4 x 10E-9. **10E-9 is already a level, which according to ICAO standards is classified as being "extremely improbable", thus denying the need for further regulation.**
6. But let us furthermore assume, cabin crew members are only as healthy as an average German (at this point we only have German statistics on hand, which we consider however to be also a good first approach to the European average). So it is assumed that cabin crews do only follow average society values about health awareness and care, which is considered to be a conservative approach. In 2002, according to the Statistical Yearbook of Health of the German ministry of health, 59,036 people out of a population of 55.862 mio in the age segment of 15-65 have died by causes from the 3 major disease classes cardiovascular, respiratory and digestive systems. These are typical diseases, which may be potentially identified during a medical, but do not necessarily lead to permanent unfitness to fly under current legislation for cabin crews.
7. So, 1 in 1000 dies from that. Let us assume that 10 in 1000 are suffering so chronically from such a disease that they are anyway considered to be not employable as cabin crew. Let us further assume that 100 in 1000 are suffering more or less, occassionally, from such a disease, but are generally employable. Within these 100 we suppose 10 reporting for duty already not feeling ultimatively well or sensing upcoming uncomfort.
8. How probable is now that a cabin crew member who a) belongs to the

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9. Lufthansa assigns more than 9000 daily „shifts“ for cabin crew members, on about 1000 flights. Let us assume accoring to 5. above that 900 in 9000 suffer from one of the mentioned diseases. Considering an average sickness quota of 4% (German population, according to Statistical Yearbook of Health of the German ministry of health), 36 per day will report sick due to such a disease. These are however only 90%, because 1 in 10 of the sick, i.e. 4, report for duty despite not feeling ultimatively fit. Let us further assume that another 4 cabin crew members report for duty without having any reasonable indication of an upcoming unfitness, but who may become unfit under stress, e.g. emergency. In total, it can be assumed that 8 out of 9000 daily shifts are performed by a cabin crew member possibly becoming unfit due to constitutional impairment. 8 in 1000 flights means a probability of 8 x 10E-3.
10. **The probability results in 4 x 10E-9 x 8 x 10E-3 = 3,2 x 10E-11** for the combined case of an accident with a cabin crew member being unavailable due to unfitness. Even under conservative assumptions, this case is definitively less probable than 10E-9.
11. In real life, the level of safety will most probably be even higher:
    1. It can be assumed that cabin crew members have a higher level of health than the average population due to their self-image and due to the fact that they need to pass their annual safety training excercise.
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    3. The a.m. statistics aggregate the age segment from 15-65. The same source offers a split into 15-45 and 45-65. The diseases mentioned only cumulate in the latter. The majority of cabin crew members however belongs to the younger age segment.
12. **The real life risk of an occurrence combining an accident with a cabin crew member being incapacitated by an impairment of physical constitution that was potentially predictable during a medical, and where this missing cabin crew member leads to more severe consequences of that occurrence, can be assumed between 10E-12 and 10E-13. This is based on current legislation and is therefore far beyond the need for additional regulation.**
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comment *171* comment by: *KLM*

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accident numbers and rates, in line with rest of the world", and this is based on "Relatively complete data". General aviation Europe however caters for "Majority of the fatal accidents (87%), Majority of the fatalities (65%)", and this only based on "No complete accident data at hand, Causal information incomplete, No historic trends at hand".

Despite all this, cabin crew members in commercial air transport shall be levied now to the same medical level like a PPL holder. On top of this, with the LPL concept, general aviation receives a new element which potentially will further decrease the safety level of general aviation.

Conclusion

As the safety data clearly indicate no need to stricter regulate cabin crew medicals, the only raison d'être for further regulation may be

a. provision of a level playing field for fair competition

b. harmonization of social standards

At first, EASA has been tasked with safety. At second, aviation is a global industry, where a European level playing field alone is not sufficient but may lead to even more disparities to the rest of the world. This puts European air operators at disadvantage. In Europe, many concepts exist on form and conditions for cabin crew medicals. Even society and culture specific aspects play a role in that. Prescriptive rules are therefore supposed to be less effective than a flexible approach.

Additionally, the proposals would result in an economic impact on operators due to the higher costs of the medical and the costs associated with the consequences of permanent unfitness to fly of a cabin crew member.

The **level of safety would not be increased, incurring on additional cost**. This is unacceptable.

comment *189* comment by: *Swiss International Airlines / Bruno Pfister*

Risk Assessment

The NPA lacks a data based risk assessment. This should determine the probability of an incapacitation of cabin crew caused by constitutional (i.e. not

unforeseeable) medical condition during an occurrence, which would have ended up with less serious consequences if exactly this cabin crew member would have remained fit. The NPA only claims a safety benefit by a very simple qualitative and subjective scoring. We therefore like to complement the RIA as follows.

For accident statistics and trends we refer to an EASA presentation held on 17th April 2008 during the coordination meeting of EASA with the national accident investigation boards (AIBs).

Pages 3 and 4 show that from 2002-2007 EASA-Europe had 2.8 accidents with fatalities on 10 mio flights, i.e. 2.8 x 10E-7: this is global top level. Though for 1998-2007, page seven shows the causes of these accidents. In an even generous approach, about 15% of these accidents are from a nature, where cabin crew potentially could have contributed to less serious consequences (e.g. F-POST fire/fumes after impact, RE runway excursion, EVAC evacuation, F-NI fire/fumes no impact, USOS under/overshoot etc.). An incapacitated cabin crew member will however change nothing during a controlled flight into terrain (CFIT) or loss of control inflight.

In result, [15% x 2,8 x 10E-7] ~ [4 x 10E-8] is the potential contribution of cabin crew to safety. Now, how many of these accidents would have ended up with more serious consequences, if a cabin crew member was incapacitated? We assume every 10th, so the probability of such an accident is 4 x 10E-9. **10E-9 is already a level, which according to ICAO standards is classified as being "extremely improbable", thus denying the need for further regulation.**

But let us furthermore assume, cabin crew members are only as healthy as an average German (at this point we only have German statistics on hand, which we consider however to be also a good first approach to the European average). So it is assumed that cabin crews do only follow average society values about health awareness and care, which is considered to be a conservative approach. In 2002, according to the Statistical Yearbook of Health of the German ministry of health, 59,036 people out of a population of 55.862 mio in the age segment of 15-65 have died by causes from the 3 major disease classes cardiovascular, respiratory and digestive systems. These are typical diseases, which may be potentially identified during a medical, but do not necessarily lead to permanent unfitness to fly under current legislation for cabin crews.

So, 1 in 1000 dies from that. Let us assume that 10 in 1000 are suffering so chronically from such a disease that they are anyway considered to be not employable as cabin crew. Let us further assume that 100 in 1000 are suffering more or less, occassionally, from such a disease, but are generally employable. Within these 100 we suppose 10 reporting for duty already not feeling ultimatively well or sensing upcoming uncomfort.

How probable is now that a cabin crew member who a) belongs to the 100 in 1000 suffering from such a disease, and b) does not notice an acut or upcoming unfitness before duty to report sick, and c) actually becomes unfit during flight duty, and d) performs flight duty exactly on that working position on that flight where he/she can contribute to a less serious consequence of an accident?

Lufthansa assigns more than 9000 daily „shifts" for cabin crew members, on

about 1000 flights. Let us assume accoring to 5. above that 900 in 9000 suffer from one of the mentioned diseases. Considering an average sickness quota of 4% (German population, according to Statistical Yearbook of Health of the German ministry of health), 36 per day will report sick due to such a disease. These are however only 90%, because 1 in 10 of the sick, i.e. 4, report for duty despite not feeling ultimatively fit. Let us further assume that another 4 cabin crew members report for duty without having any reasonable indication of an upcoming unfitness, but who may become unfit under stress, e.g. emergency. In total, it can be assumed that 8 out of 9000 daily shifts are performed by a cabin crew member possibly becoming unfit due to constitutional impairment. 8 in 1000 flights means a probability of 8 x 10E-3.

The probability results in 4 x 10E-9 x 8 x 10E-3 = 3,2 x 10E-11 for the combined case of an accident with a cabin crew member being unavailable due to unfitness. Even under conservative assumptions, this case is definitively less probable than 10E-9.

In real life, the level of safety will most probably be even higher:

a. It can be assumed that cabin crew members have a higher level of health than the average population due to their self-image and due to the fact that they need to pass their annual safety training excercise.

b. Even without the requirement of a class 2 medical, there are regular medical assessments in place throughout Europe. Even without being harmonized, these regular assessments also cater for a higher than average level of health, as the rest of the population not subject to any such a professional requirement can be considered to care less for their health (in average).

c. The a.m. statistics aggregate the age segment from 15-65. The same source offers a split into 15-45 and 45-65. The diseases mentioned only cumulate in the latter. The majority of cabin crew members however belongs to the younger age segment.

The real life risk of an occurrence combining an accident with a cabin crew member being incapacitated by an impairment of physical constitution that was potentially predictable during a medical, and where this missing cabin crew member leads to more severe consequences of that occurrence, can be assumed between 10E-12 and 10E-13. This is based on current legislation and is therefore far beyond the need for additional regulation.

Additionally, it should be noted that the EASA presentation quoted under 2. shows on page 10 that 87% of all accidents with fatalities occur in **general aviation**, 67% of all fatalities are in this segment. Commercial air transport only caters for 6% of all accidents with fatalities, though with 28% of all fatalities due to the higher average number of passengers on board.

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comment *191* comment by: *TAP Portugal*

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Additionally, the proposals would result in an economic impact on operators due to the higher costs of the medical and the costs associated with the consequences of permanent unfitness to fly of a cabin crew member.

The **level of safety would not be increased, incurring on additional cost**. This is unacceptable.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.10 Assessment of cabin crew medical fitness - 2.10.1 Options p. 89

comment *42* comment by: *British Airways*

Comment:

Option 5A is the only option which does not create an additional regulatory burden. In the absence of any evidence of a safety risk which would be mitigated by additional medical fitness requirements, this is the only justifiable option.

Justification:

Compliance with basic EASA 216/2008 Regulation

The intent of the EU legislator has not been to change the cabin crew medical fitness requirements of EU-OPS when migrating to EASA-OPS.

International requirements

There are no ICAO SARPS relating to cabin crew medical requirements. Most major regulatory authorities do not require cabin crew periodic medical screening and/or devolve responsibility for cabin crew medical fitness to operators. The FAA has no regulatory requirements for cabin crew medical fitness.

Despite this absence of regulation, we can find no report of an incident where cabin crew incapacitation has endangered the safety of an aircraft or it's occupants. Imposition of the proposed requirements would therefore expose EASA regulated airlines to an expensive and complex additional burden, creating a competitive disadvantage, for no safety benefit

comment *144* comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

- 5A: requirement for regular medical assessments of medical fitness but no detailed common criteria (same rules for all cabin crew, in CAT and in non-commercial operations): i.e. no common rules on the medical examiners; no fixed peroiodicity;no description of medical conditions, analysis or examinations to be checked;

Comment:

The procedure according to procedure [EU OPS 1.995] has not been proven as unsafe. The RIA has provided no evidence to show that the proposals will improve safety

comment *172* comment by: *British Airways Flight Operations*

British Airways completely concurs with the AEA comment (#131), and the

data analysys undetaken by Lufthansa. The inevitable conclusion is that there is no safety justification for routine medical assessment of cabin crew, by AMEs, to Class II medical standards. Therefore, any such requirement must be withdrawn.

General Comment:

NPA 2009-2 in its entirety is unfit for the purpose for which it is intended and must be withdrawn and reconsidered.

comment *291* comment by: *IACA International Air Carrier Association*

p.89 5A: requirement for regular medical assessments of medical fitness but no detailed common criteria (same rules for all cabin crew, in CAT and in non-commercial operations): i.e. no common rules on the medical examiners; no fixed periodicity; no description of medical conditions, analysis or examinations to be checked;

Has this procedure – EU-OPS 1.995 – proved unsafe ? The RIA provides no evidence to demonstrate that the NPA will improve safety.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.10 Assessment of cabin crew medical fitness - 2.10.2 Target group and number of entities concerned p. 90-94

comment *43* comment by: *British Airways*

Comment:

The fact that a number of countries choose to have more stringent national regulations on cabin crew medical standards (and this therefore impacts on operators, cabin crew, AMEs etc) cannot be used to justify imposing an additional regulatory burden unless there is evidence of a risk to safety that would be mitigated by such additional regulation.

comment *117* comment by: *UK CAA*

Paragraph No: 2.10.2.1

Comment: Text at option 5B states this option would only affect one authority, which is clearly the UK CAA.

Justification: Whilst this may be true, the cabin crew in the UK (just over 31,000) represent 25% of all cabin crew in Europe so the impact is much larger than suggested.

Proposed Text (if applicable): Consideration should be given to the financial impact on the operators who employ 25% of all Community cabin crew.

comment *119* comment by: *UK CAA*

Paragraph No: 2.10.2.5

Comment: Text states that the preferred option 5C would affect 18 competent authorities.

Justification: This implies an equivalent effect on those 18 authorities. This is not the case. The UK CAA would bear 50% of the effect.

Proposed Text (if applicable): Consideration should be given to the impact on one competent authority, which is disproportionate to the remaining 17 competent authorities.

comment *145* comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

Page 91 Option 5A would maintain the requirements presently established by EU-OPS. However, EUOPS related requirements for cabin crew are considered "minimum" requirements while the EASA OPS rules will become common requirements with no possibility for additional rules adopted at national level since this would distort competition. Therefore, for the operators established in the 18 States where today there are no detailed requirements, option 5A would be very flexible and open to different implementations including "self assessment": in the end the impact on them would be negligible. On the contrary for the CAT operators established in the 12 Member States where detailed rules are in force today, the "light" common requirements would represent a smaller burden although a reduced medical follow-up could have secondary effects but hard to quantify such as increased sick leaves. Since these States represent around 48 % of the population, the "lighter" requirements would apply to 48 % of the 570 CAT operators = 274.

Comment:

Uses the number of population to decide the number of affected CAT operators. The argument should be more weighted to the number of CC per member state/requirements. Currently the UK complies with EU OPS 1.995 and has 25% of the CC population of the EU States. There is no record of a reduction of Cabin Safety in this country [which complies with Option 5a] as there is no record of an improvement in Cabin Safety with those countries with more stringent requirements.

comment *292* comment by: *IACA International Air Carrier Association*

p.91

Option 5A… 18 States where today there are no detailed requirements… 12 Member States where detailed rules are in force today…Since these States represent around 48 % of the population, the "lighter" requirements would apply to 48 % of the 570 CAT operators = 274.

In option 5B…Since that Member State represents around 12 % of the EU 27 + 4 population, but is one of the most developed States in respect of aviation

and has roughly 25 % of the cabin crew, it is assumed that 20 % of the 570 EU CAT operators (scheduled and non-scheduled) by large aeroplanes would be affected by said option 5B in that State = 114 CAT operators.

In case of option 5C, for the 12 Member States where medical certification of cabin crew is required today… these 12 States represent around 48% of the EU population…for the remaining 52 % operators (i.e. 296) established in States with no detailed requirements…

The RIA uses the number of population to decide the number of affected CAT operators. The argument should be more weighed to the number of Cabin Crew per Member State. Currently, the UK complies with EU-OPS 1.995 and has 25% of the EU Cabin Crew population. Like there is no decrease in Cabin Crew safety in the UK (complying with Option 5A), there is no record of an improvement in cabin safety in those countries with more stringent requirements.

comment *320* comment by: *ETF*

Option 5C is what most of the MS that certify or license their crew have in place. The new standard should not be significantly lower.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.10 Assessment of cabin crew medical fitness - 2.10.3 Safety impact p. 94-96

comment *44* comment by: *British Airways*

Comment:

In this section it is stated that: "In conclusion, option 5A not only does not comply with the Essential requirements set in the Basic Regulation, but has also to be considered negative in qualitative safety terms, although it is very hard to make any quantitative estimation in relation to it."

There is no evidence to support this statement.

Justification:

The intent of the EU legislator has not been to change the cabin crew medical fitness requirements of EU-OPS when migrating to EASA-OPS.

There are no ICAO SARPS relating to cabin crew medical requirements. Most major regulatory authorities do not require cabin crew periodic medical screening and/or devolve responsibility for cabin crew medical fitness to operators. The FAA has no regulatory requirements for cabin crew medical fitness.

Despite this absence of regulation, we can find no report of an incident where cabin crew incapacitation has endangered the safety of an aircraft or it's occupants.

comment *45* comment by: *British Airways*

Comment:

It is claimed that introducing higher medical standards for medical assessment of cabin crew (options 5C and 5D) would enhance the level of safety. There is no evidence to substantiate this claim.

Justification:

International requirements

There are no ICAO SARPS relating to cabin crew medical requirements. Most major regulatory authorities do not require cabin crew periodic medical screening and/or devolve responsibility for cabin crew medical fitness to operators. The FAA has no regulatory requirements for cabin crew medical fitness.

Despite this absence of regulation, we can find no report of an incident where cabin crew incapacitation has endangered the safety of an aircraft or it's occupants. Imposition of the proposed requirements would therefore expose EASA regulated airlines to an expensive and complex additional burden, creating a competitive disadvantage, for no safety benefit.

No safety justification for a detailed medical for cabin crew

Cabin Crew Medical Fitness Requirements have no safety justification. Incidents of cabin crew incapacitation do occur, typically as a result of minor illness such as gastroenteritis, or accidental injury due to burns/scalds or other trauma e.g. as a result of turbulence (none of which are amenable to prevention by periodic medical screening) but they have no direct impact on flight safety. One AEA member reported 676 events over a 3-year period to 31 Dec 07, a rate of 1.27/10,000 sectors. One of these events, the result of an acute traumatic incident, resulted in a diversion. There were no other operational / safety implications

A survey of 4 international airlines (one from Europe) identified 3 diversions following incidents of cabin crew incapacitation in 2007, none of which could have been prevented by periodic medical screening. The total rpk for the 4 airlines was 305.1 billion, giving a rate of 0.01 diversion per billion rpks.

This data is further evidence that there is no safety issue associated with cabin crew medical fitness which would justify the imposition of additional medical requirements, such as for example the Class 2 medical used for the private pilot licence.

comment *46* comment by: *British Airways*

Comment:

Table 62 presents an apparently objective assessment to demonstrate a negative safety impact for options 5A and 5B and a positive safety impact which would result from options 5C and 5D. There is no evidence to support either the scoring system or the scores which are claimed.

Justification:

International requirements

There are no ICAO SARPS relating to cabin crew medical requirements. Most major regulatory authorities do not require cabin crew periodic medical screening and/or devolve responsibility for cabin crew medical fitness to

operators. The FAA has no regulatory requirements for cabin crew medical fitness.

Despite this absence of regulation, we can find no report of an incident where cabin crew incapacitation has endangered the safety of an aircraft or it's occupants. Imposition of the proposed requirements would therefore expose EASA regulated airlines to an expensive and complex additional burden, creating a competitive disadvantage, for no safety benefit.

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comment

146 comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

Page 95 para 3 In other words, option 5A could lead to spreading the practice of "self assessment" by cabin crew of their medical fitness since this is the cheapest solution for the entrepreneurs. In turn, cabin crew, besides not necessarily being totally aware of their health status, may be tempted to declare themselves fit in order not to risk consequences on their job. Furthermore, option 5A would maintain the present situation of non-uniformity of safety levels across the EU 27 + 4 States in relation to the topic under consideration. In conclusion, option 5A not only does not comply with the Essential requirements set in the Basic Regulation, but has also to be considered negative in qualitative safety terms, although it is very hard to make any quantitative estimation in relation to it.

Comment:

This implies that a Cabin Crew medical certificate would improve Cabin Safety and that the current system under EU-OPS 1.995 is unsafe. This neither statements are proven by the RIA.

comment

147 comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

Page96 Therefore in qualitative terms, option 5C would enhance the level of

safety in the EU 27 + 4 by introducing clearer and higher requirements for medical assessment of cabin crew in CAT, thus minimising the potential risk of degraded performance particularly in case of adverse conditions and of possibly more cabin crew becoming inoperational/incapacitated in case of emergency evacuation.

Comment:

This statement implies that EU OPS 1.995 is unsafe – this is not proven. There have been no reported cases of CC incapacitation affecting Cabin Safety [reference the IATA CC Safety Conference Geneva 2008]

There are no UK MORs [Mandatory Occurrence Reports] that CC health affected flight safety.

comment *293* comment by: *IACA International Air Carrier Association*

p.95

In other words, option 5A could lead to spreading the practice of "self assessment" by cabin crew of their medical fitness… not necessarily being totally aware of their health status, may be tempted to declare themselves fit in order not to risk consequences on their job...option 5A not only does not comply with the Essential requirements set in the Basic Regulation, but has also to be considered negative in qualitative safety terms…

…option 5B, in terms of uniformity, would be negative as 5A.

This implies that a Cabin Crew medical certificate would improve Cabin Safety. This statement is not proven by the RIA.

comment *294* comment by: *IACA International Air Carrier Association*

p.96 "…it has been estimated that today cabin crew save in average 90 human lives/year…"

Table 6 Primary Causal Factors

This table produces an argument that there are 9.2 accidents/year. 10% are assumed to be fatal, which produces 27 victims per year. The narrative beneath Table 7 now makes the leap mixing total accidents (around 20/year) x 15% (the average of the 3 elements of Table 7) to arrive at 3 accidents per year, thus arriving at 30 (27) x 3 = 90 saved non-victims. This cross pollination creates confusion indicating that cabin crew can save more people than are actually killed ?

What is the point of this argument ? It is accepted and recognised that Cabin Crew are needed for safety purposes, especially for evacuation. With the 90 human lives saved per year, EASA incorrectly attempts to justify the "raison d'être" of cabin crew, which is not questioned by industry.

The issue of the RIA is however the impact assessment of the additional EASA requirements. The 90 lives include to a far extent the lives are saved per the current requirements, i.e. without the EASA proposed additional requirements.

comment *296* comment by: *IACA International Air Carrier Association*

p.96

Therefore in qualitative terms, option 5C would enhance the level of safety in the EU 27 + 4 by introducing clearer and higher requirements for medical assessment of cabin crew in CAT…

This statement implies that EU-OPS 1.995 is unsafe, this is not proven. There is absolutely no justification offered in the RIA that substantiates this statement.

There have been no reported cases of Cabin Crew incapacitation affecting Cabin Safety that could have been prevented by a medical certificate, refer to the IATA Cabin Crew Safety Conference, Geneva 2008. There are no UK Mandatory Occurrence Reports regarding Cabin Crew health affecting flight safety.

There is no recorded evidence whatsoever of degraded performance of cabin crew due to pre-existing medical conditions. Obviously, such degraded performance may well be the result of the same reason that the cabin crew must perform their duties. i.e. an accident. In the Turkish accident in Amsterdam on 25 FEB 2009 all cabin crew became inoperational/incapacitated.

comment *297* comment by: *IACA International Air Carrier Association*

p.96 In quantitative terms it is estimated that this could contribute to 0.5% improvement in terms of reduction of the severity of possible aviation accidents. Since in paragraph 2.3.2.9 above it has been estimated that today cabin crew save in average 90 human lives/year.

If the figure of 90 would be true (which it is not, see other comment), then 0.5% of that would amount to the saving of less than half a live/year. This is not a significant safety benefit and warrants the conclusion that in Table 62 all options should be scored equally.

comment *298* comment by: *IACA International Air Carrier Association*

p.96 Table 6.2

Scores in para 2.10 are very subjective and very biased.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.10 Assessment of cabin crew medical fitness - 2.10.5 Economic Impact p. 97-100

comment *47* comment by: *British Airways*

Comment:

Paragraphs 2.10.1, 2.10.5.2 and 2.10.5.1 evaluate the costs for each aspect of

the economic impact, i.e. rulemaking and standardisation, oversight and operator costs. The costs are summarised in Table 64 and clearly demonstrate that Option 5A offers substantial cost saving relative to all other options.

Table 65 introduces an arbitrary scoring system which allows "level playing field" to offset this impact. There is no evidence that those authorities which currently require higher medical standards achieve higher levels of safety. It is therefore reasonable to anticipate these authorities could adopt the requirements of Option 5A, thereby achieving a level playing field with no increase in safety risk.

Justification:

International requirements

There are no ICAO SARPS relating to cabin crew medical requirements. Most major regulatory authorities do not require cabin crew periodic medical screening and/or devolve responsibility for cabin crew medical fitness to operators. The FAA has no regulatory requirements for cabin crew medical fitness.

Despite this absence of regulation, we can find no report of an incident where cabin crew incapacitation has endangered the safety of an aircraft or it's occupants. Imposition of the proposed requirements would therefore expose EASA regulated airlines to an expensive and complex additional burden, creating a competitive disadvantage, for no safety benefit.

comment *120* comment by: *UK CAA*

Paragraph No: 2.10.5.2

Comment: Text shows cost analysis for the 18 competent authorities that do not have medical examinations for cabin crew.

Justification: The cost shown is divided by 18, which gives a distorted figure. The UK CAA would bear 50% of that cost.

Proposed Text (if applicable): The financial impact is not clearly justified.

comment *121* comment by: *UK CAA*

Paragraph No: 2.10.5.3

Comment: The regulatory cost to operators in terms of visits and loss of labour is divided between the numbers of cabin crew in the 18 Member States affected by the proposals.

Justification: This minimises the overall impact as it does not show the impact on the Member State operators who will bear 50% of this cost and loss of labour.

Proposed Text (if applicable): The financial impact is disproportionate.

comment *122* comment by: *UK CAA*

Paragraph No: 2.10.5.4

Comment: Table 64 shows costs to operators and taxpayers and these are 1,4 M Euros per year to taxpayers and 4 M Euros per year to operators.

Justification: The UK CAA and UK operators would bear 25% of this cost for no justified improvement in safety standards. There is no evidence that cabin crew fitness has had a detrimental effect in an emergency situation. Financial impact of this magnitude should not be considered until the result of the research commissioned by EASA into the Scientific and Medical Evaluation of EU OPS Provisions for Cabin Crew have been made available.

comment *299* comment by: *IACA International Air Carrier Association*

p.100 Table 6.5

Scores in para 2.10 are very subjective and very biased.

comment *300* comment by: *IACA International Air Carrier Association*

p.100 Table 6.5

EASA concludes that options 5A and 5B would not result in a level playing field. This is not correct. All options will by definition result in the same level playing field for all 27 EU members as they are all bound by the same Implementing Rules.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.10 Assessment of cabin crew medical fitness - 2.10.6 Social Impact p. 100-101

comment *48* comment by: *British Airways*

Comment:

This paragraph claims that Options 5C and 5D would facilitate free movement of cabin crew by providing clear common requirements and that regular aero-medical checks would improve the level of cabin crew fitness. It also describes the negative employment effects, i.e. loss of job due to unfitness assessment as "extremely limited".

Option 5A (and 5B) would also facilitate free movement of cabin crew by providing clear common requirements - authorities would be required to accept crew from another EASA state. There is no evidence to support the claim that regular medical checks improve fitness. Any negative employment effects -

both in current cabin crew and future applicants - is unjustifiable unless there is clear evidence of safety enhancement as a consequence of the medical requirement.

Justification:

Social Impact

Although not part of the remit of EASA, one could consider assessment of cabin crew medical fitness from the perspective of occupational health (as many airlines do, in some instances as part of a national requirement).

A fundamental principle of 'best occupational health practice', and also such social legislation as EU disability discrimination legislation, is that individuals should only be excluded from the workplace where there is objective evidence of risk and no suitable accommodation can be made. Cabin crew with a range of medical conditions which would lead to an 'unfit' classification under the proposed medical standards are currently operating in many airlines without problems. Examples include insulin dependent diabetes, treatment with systemic anticoagulants and treatment with a wide range of antidepressants.

There is no justification for the grounding of existing crew, or preventing the recruitment of individuals with such conditions. An extensive medical requirement for cabin crew would therefore have significant social implications since it would be likely to mean that a number of existing cabin crew would be deemed not to meet the medical standard and therefore unable to continue in the role.

comment

148

comment by: *The TUI Airlines group represented by Thomson Airways,TUIfly,TUIfly Nordic,CorsairFly,Arkefly,Jet4U,JetairFly*

Page 101 Para 2

Options 5C and 5D by providing clear common requirements for all should facilitate the free movement of cabin crew, and the regular aero-medical checks improve their level of fitness. Positive impact may also be expected in terms of legal certainty for these personnel required to be fit for their job, clear medical criteria possibly allowing access to provisions compensating the imposed professional limitations.

Comment:

1. It is not the responsibility of EASA to facilitate free movement of CC; this however is currently provided by EASA OPS 1.995. Not withstanding, all cabin crew changing jobs have to complete an 'OCC' [Operators conversion course] which obviates the need of a certificate and formal Regulated attestation
2. It is not the remit of the Agency to improve levels of fitness – it is the Agencies remit to set the minimum level that meets the Safety requirements.
3. The level of fitness for CC set out in this NPA is the equivalent to a Class 2 Pilot medical, but there is no evidence that such a high level of medical fitness would improve flight safety.

(a) The Group 2 medical fitness for HGV drivers required by the UK DfT is less stringent

(b) The LPL is less stringent and here a single pilot can carry up to 4 passengers.

(c) Group 1 drivers [normal car drivers] do not require a medical examination but only a self declaration. A similar standard applied to CC should be adequate.

(d) The frequency of the proposed medical examination has been set arbitrarily.

(e) In the UK with the existing 3 yearly declarations, there have been no cases identified by these that were not already referred to the company doctor by other established rotes of referral

(f) Best Occupational Health Practice is responsible for looking after CC's general health not the regulator

(g) This NPA would expose EASA to the Disability Discrimination Act.

(h) Currently the UKCAA and The FAA are deciding to allow Pilots with a degree of colour blindness to fly Public Transport aircraft.

(i) Many existing competent and highly experienced CC with proscribed conditions would have to be medically retired.

• In the UK there are a significant number of Type 1 diabetics treated with insulin and there are no known reports of sudden incapacitation

• It is currently being considered to approve Type 1 diabetics to exercise the privileges of a PPL.

• The UK Airline Medical Advisor's Committee [UKAMAC] have recently issued guidance on the employment of CC withy stable Epilepsy – "Fit free for 12 months on or off medication is acceptable".

comment *301* comment by: *IACA International Air Carrier Association*

p.101

Options 5C and 5D by providing clear common requirements for all should facilitate the free movement of cabin crew, and the regular aero-medical checks improve their level of fitness.

It is not the responsibility of EASA to facilitate free movement of Cabin Crew, currently provided by EU-OPS 1.995. Notwithstanding, all Cabin Crew changing jobs have to complete an OCC Operators Conversion Course, which obviates the need of a certificate and/or formal regulated attestation

comment *302* comment by: *IACA International Air Carrier Association*

p.101

Options 5C and 5D by providing clear common requirements for all should facilitate the free movement of cabin crew, and the regular aero-medical checks improve their level of fitness.

It is not the remit of EASA to improve levels of fitness. It is the remit of EASA to set the minimum level that meets the safety requirements.

comment *303* comment by: *IACA International Air Carrier Association*

p.101

Options 5C and 5D by providing clear common requirements for all should facilitate the free movement of cabin crew, and the regular aero-medical checks improve their level of fitness.

The level of Cabin Crew fitness set out in this NPA is the equivalent of a Class 2 Pilot medical, but there is no evidence that such a high level of medical fitness would improve flight safety.

(a) The Group 2 medical fitness for HGV Heavy Goods Vehicle drivers required by the UK DoT is less stringent.

(b) The LPL is less stringent and her a single pilot can carry up to 4 passengers.

(c) Group 1 drivers (normal car drivers) do not require a medical examination, but only a self-declaration. A similar standard applied to Cabin Crew should be adequate.

(d) The frequency of the medical examination has been set arbitrarily.

(e) With the existing three-yearly declarations, there have been no cases identified but the ones already referred to the company doctor by other established routes of referral.

(f) Bes Occupational Health Practice is responsible for looking after Cabin Crew, who are less than A1, not the regulator.

(g) This NPA would expose EASA to the Disability Discrimination Act.

(h) Currently UK-CAA and US-FAA are deciding to allow Pilots a degree of colour blindness to fly public transport aircraft.

(i) Many existing competent and highly experience cabin crew would have to be medically retired.

- There a significant number of Type 1 diabetics in the UK being treated with insulin and there are no known reports of sudden incapacitation.
- It is currently being considered to approve Type 1 diabetics to exercise the privileges of a PPL.

The UK Airline Medical Advisor's Committee (UKAMAC) have recently issued guidance upon the employment of Cabin Crew with stable epilepsy – "Fit free for 12 months on or off medication is acceptable."

G. 2. REGULATORY IMPACT ASSESSMENT - 2.10 Assessment of cabin crew medical fitness - 2.10.7 Regulatory harmonisation p. 101-102

comment *49* comment by: *British Airways*

Comment:

This section is headed 'regulatory harmonisation'.

It is claimed that only Options 5C and 5D contribute to the construction of the internal market. A common regulatory standard would contribute to the construction of the internal market regardless of whether 5A, B, C or D were adopted, as authorities would be obliged to recognise assessments conducted

by other authorities in compliance with the standard.

It also claims that:

- the proposals would be neutral with regard to ICAO standards - whereas this would represent a clear move away from harmonised standards
- that the options would not compromise the possibility for operators from the EU 27 + 4 to fly to/from the USA - whereas this would represent a clear move away from harmonised standards and represent an additional regulatory burden and cost on the EU 27 + 4 airlines.

Table 67 is another arbitrary scoring system which cannot be justified, for example with regard to consistency with EU Rules (BR) or compliance with ICAO standards.

Justification:

Compliance with basic EASA 216/2008 Regulation

The intent of the EU legislator has not been to change the cabin crew medical fitness requirements of EU-OPS when migrating to EASA-OPS.

International requirements

There are no ICAO SARPS relating to cabin crew medical requirements. Most major regulatory authorities do not require cabin crew periodic medical screening and/or devolve responsibility for cabin crew medical fitness to operators. The FAA has no regulatory requirements for cabin crew medical fitness.

Despite this absence of regulation, we can find no report of an incident where cabin crew incapacitation has endangered the safety of an aircraft or it's occupants. Imposition of the proposed requirements would therefore expose EASA regulated airlines to an expensive and complex additional burden, creating a competitive disadvantage, for no safety benefit.

comment *123* comment by: *UK CAA*

Paragraph No: 2.10.7.2

Comment: It is stated that ICAO does not require medical examinations therefore regulatory harmonisation is considered neutral. In fact, the requirement applies an additional burden on operators which goes beyond ICAO. The application of a "gold standard" of additional requirements is something which EASA seeks to address as part of its Standardisation procedure. Member States are criticised for applying national requirements which go beyond EASA rules. Therefore it is inconsistent for EASA to describe Community rules which go beyond ICAO as being "neutral".

Justification: There is a lack of consistency and it would be preferable to aim for ICAO harmonisation rather than differences.

comment *124* comment by: *UK CAA*

Paragraph No: 2.10.7.3

Comment: Text states that any option will not comprise EU operators from flying to or from the USA. However, text does not explain that FAA does not require medical examinations and therefore harmonisation will not be achieved.

Justification: Harmonisation with the FAA is being proposed in many other areas therefore it is preferable for this area to also be considered.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.10 Assessment of cabin crew medical fitness - 2.10.8 Multi Criteria Analysis (MCA) and recommended option p. 102-103

comment *50* comment by: *British Airways*

Comment:

The multi criteria analysis for cabin crew medical assessment is used to justify assertions that Options 5A and 5B are negative "largely due to safety considerations" and that Options 5C and 5D are positive with "in particular identical high scores for safety aspects".

No evidence has been provided to justify the assertion that the proposals for cabin crew medical assessment contained in Options 5C, 5D or even 5B would have any impact in enhancing safety.

This scores in this table for economic and social impact have also been compiled in a manner which is biased towards Options 5C and 5D.

Justification:

International requirements

There are no ICAO SARPS relating to cabin crew medical requirements. Most major regulatory authorities do not require cabin crew periodic medical screening and/or devolve responsibility for cabin crew medical fitness to operators. The FAA has no regulatory requirements for cabin crew medical fitness.

Despite this absence of regulation, we can find no report of an incident where cabin crew incapacitation has endangered the safety of an aircraft or it's occupants. Imposition of the proposed requirements would therefore expose EASA regulated airlines to an expensive and complex additional burden, creating a competitive disadvantage, for no safety benefit.

No safety justification for a detailed medical for cabin crew

Cabin Crew Medical Fitness Requirements have no safety justification. Incidents of cabin crew incapacitation do occur, typically as a result of minor illness such as gastroenteritis, or accidental injury due to burns/scalds or other

trauma e.g. as a result of turbulence (none of which are amenable to prevention by periodic medical screening) but they have no direct impact on flight safety. One AEA member reported 676 events over a 3-year period to 31 Dec 07, a rate of 1.27/10,000 sectors. One of these events, the result of an acute traumatic incident, resulted in a diversion. There were no other operational / safety implications

A survey of 4 international airlines (one from Europe) identified 3 diversions following incidents of cabin crew incapacitation in 2007, none of which could have been prevented by periodic medical screening. The total rpk for the 4 airlines was 305.1 billion, giving a rate of 0.01 diversion per billion rpks.

This data is further evidence that there is no safety issue associated with cabin crew medical fitness which would justify the imposition of additional medical requirements, such as for example the Class 2 medical used for the private pilot licence.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.11 Attestation process for cabin crew competence - 2.11.2 Target group and number of entities concerned p. 105-107

comment *321* comment by: *ETF*

Option 6C or preferably 6D is preferable as this would uphold the current level in half of the MS.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.11 Attestation process for cabin crew competence - 2.11.3 Safety Impact p. 107-108

comment *125* comment by: *UK CAA*

Paragraph No: 2.11.3

Comment: Text takes a simplistic view that the attestation process will improve compliance with requirements together with the standardisation of levels of training. It is not explained how this is to be achieved.

Justification: Clear requirements, properly implemented within States and checked through a standardisation process improves standards, not a system to issue cabin crew with an attestation. The draft Implementing Rules do not contain any more detail of content of training so the attestation cannot be justified on the grounds of standardisation of levels of training.

Proposed Text (if applicable): Clarification required as to how the attestation process can be seen to improve levels of safety.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.11 Attestation process for cabin crew competence - 2.11.4 Economic Impact p. 108-111

comment *126* comment by: *UK CAA*

Paragraph No: 2.11.4.3

Comment: Text states that mutual recognition of attestations will reduce training and associated costs for operators.

Justification: This is likely to be correct but a reduction in training cannot be quantified as an automatic improvement.

Proposed Text (if applicable): Clarity required on how reduced training improves standards.

comment *304* comment by: *IACA International Air Carrier Association*

Table 72

EASA concludes that options 6A and 6B would not result in a level playing field. This is not correct. All options will by definition result in the same level playing field for all 27 EU members as they are all bound by the same Implementing Rules.

G. 2. REGULATORY IMPACT ASSESSMENT - 2.11 Attestation process for cabin crew competence - 2.11.7 Regulatory harmonisation p. 112-113

comment *305* comment by: *IACA International Air Carrier Association*

2.11.7.2.

It is unfair to say that all options are neutral. In fact they would score negative. The more stringent the option is, the more negative the score would be.

comment *306* comment by: *IACA International Air Carrier Association*

2.11.7.3

Statement is incorrect. The FAA Certificate of competence (actually: Certificate of demonstrated proficiency) is similar to option 6A and is without any medical assessment.

G. 2. REGULATORY IMPACT ASSESSMENT - 3. Conclusions p. 115

comment *38* comment by: *Richard Paul Bateman*

There is no evidence base that this - which despite the impact assessment -

will be a massive expense to the operator will save lives. The regulation is not supported.

comment *112* comment by: *James Leavesley*

If the unwritten desire of this porpose dlegislation is to reduce the number of aircraft benig operated by PPL owners occupiers then it will succeed.

I have asked my maintance engineer for estimated to comply and he considered the total cost for me to confirm would be in the region of £ 85,000 or 100,000 euro.

That is nearly one third of the value of my machine and more than half of older machines.

This legislation would cause me to sell the machine and stop flying. It will all be too expensive to continue. This comment does not take into the current economic climate which I don't believe will continue for much longer.

If these costs ere to be imposed accross the whole of Europe then, this legislation is either being sponsered by the maintance companies who will be the ony beneficieries or the enviromental extreemests who want to reduce the amount of PPL private flying.

If the person who believe that the options will only have "minor cost impact on operators" ask them to purchase my machine, then spend the required amount on compliance and see if they can sell it or find someone willing to pay the rates required to cover the increased costs!! ps let them know it has been in a hanager all its life so is in excellent condition !!

These proposals do not have an acceptable cost to benefit outcome for the PPL owners.

comment *199* comment by: *DGAC*

Proposal: Choose option 5D instead of 5C.

Justification :

There is no reason for distinguishing two categories of cabin crew members. More over on non commercial aircrafts, cabin crew are often alone on board the aircraft and can have a big impact on safety. For example, in case of sudden incapacity of one pilot, to help the other pilot to keep out the cockpit the ***[???]*** incapacited pilot. = “extracting the incapacitated pilot from the cockpit” ?

It is also difficult to introduce different periodicity of examination.

comment *219* comment by: *Aero-Club of Switzerland*

Looking non-commercial operations with other than complex motor-powered aircraft 4A is only the best option, when the private use of helicopters is

brought in line with the private use of fixed wing aircraft.

Justification: This is not the case today, measures should be taken as soon as possible to change this.

The positive social impact will, we think, not be situated where it should be.

Justification: A flow of money to the equipment manufacturers will be the result, not a flow in the direction of the flying schools or clubs, but in any case the flow of money will have one clearly defined source: The pockets of the private pilots.

We also question the statement, that there will be positive impacts in safety: Money spent on equipment will normally not be spent in flying, hence safety will not increase.

Justification: Individuals normally cannot increase their income because there is no tax to be levied or price to be increased, tax and price paid by someone else.

comment *247* comment by: *European Private Helicopter Alliance*

Conclusions

Regarding non commercial air operations with other than complex motor-powered aircraft

Option 4B or 4C should be selected, as they both score 1, as against option 4A which scores -2, according to our argument above.

Certainly for helicopters the result is unquestionably 4B or 4C

comment *256* comment by: *Helicopter Club of Great Britain*

Conclusions

Regarding non commercial air operations with other than complex motor-powered aircraft

Option 4B or 4C should be selected, as they both score 1, as against option 4A which scored -2, according to our argument above.

Helicopters

Certainly for helicopters the result is unquestionably 4B or 4C

comment *259* comment by: *William Harford*

The stated preferred option 4A for non commercial operation of other than complex motor powered aircraft is the most presciptive and draconian of all the options listed and yet for the operation of complex motor powered aircraft the

least presciptive option, 3C, is your preference. The assessment of the preferred options as shown in tables 49 do not share the same parameters as those shown in table 56 thus no valid direct comparison is possible.

What option 4A is saying in effect is that my very simple non complex R44 helicopter will have to operate under a stricter and more prescriptive regime than my friend's Dauphin helicopter, a large complex IFR helicopter.

Appendix A – Attachments to comments received on NPA 2009-02g

Accidents where cabin crew made the difference.pdf
Attachment #1 to comment #275