European Union Aviation Safety Agency

COMMENT RESPONSE DOCUMENT

EASA CRD of Certification Memorandum CM–21.A-D-003 “CS-31HB Hot Air Balloons: Classification of design changes” Issue 01

[Published on 14 November 2019 and officially closed for comments on 13 December 2019]

Commenter 1: Schroeder fire balloons GmbH

Comment # 1

Dear Mr. Fico,

I´m responsible for changes at Schroeder fire balloons GmbH in Schweich, Germany. We are an AP design organization. The extend of the work load of a minor change is as high as the work load of a major change. In our opinion, the proposed CM-21.A-D-003 Issue 01 has many items that need to be reclassified in order to avoid unnecessary workloads for EASA, Sfb and other APDOAs. I would like to address my concerns about the following minor change items of the scope:

EASA response: noted

Commenter 1: Schroeder fire balloons GmbH

Comment # 2

2. Change of envelope artwork e.g. 2D (sewn on or into panels or printed pictures on balloon fabric).

Each envelope has a different design, there are only few designs that are alike. That would mean at least 50 major change applications a year only from Sfb.

EASA response: Accepted

Change removed.

Commenter 1: Schroeder fire balloons GmbH

Comment # 3

5. Change of panel pattern without changing the basic curvature of an envelope.

In my opinion that is not an issue. If a panel´s shape is changed, the curvature or volume changes automatically. Maybe I got this wrong?

EASA response: Not Accepted

This item addresses changes in panel pattern due to fabric orientation.

Commenter 1: Schroeder fire balloons GmbH

Comment # 4

7. Changing the rotation vent position due to artwork , not invalidating the assumption of the initial certification.

The envelope is a symmetric shape. Changing the position of a turning vent does not influence a balloons structure or controllability. (That certainly also refers to Item 10)

EASA response: Not Accepted

Lateral changes have an impact on structure and need to be considered.

Commenter 1: Schroeder fire balloons GmbH

Comment # 5

9. Changing flying wire lengths

There is a range of load frames that Sfb envelopes can be attached to. Are these existing approvals for changing the length of flying wires in question? Changing the wires always results in changing the scoop (item 12)

EASA response: *Not Accepted*

this does not affect approved configurations or approved type design.

Commenter 1: Schroeder fire balloons GmbH

Comment # 6

10. Change of pulley position, maintaining operating forces and function

If the pulley is not significantly (10 m) moved upwards inside the envelope, the movement has no effect to the activation forces. The maximum activation force is within the first decimeters while the parachute is still in contact with the envelope. After that the forces are dropping significantly. The pulleys also need to be moved on a horizontal plane inside the envelope when the turning vent is to be

EASA response: Not Accepted

Lateral relocation of pulleys requires re-evaluation (analysis) of the pulley forces in accordance with CS 31HB.57

Commenter 1: Schroeder fire balloons GmbH

Comment # 7

11. Exchange of material combinations of fabric and tape previously approved under the type design

That I do not fully understand. Is this related to the combination of Polyester and Nylon or Polyaramid and Polyamid panels?

EASA response: Noted

This change has been Removed as not considered a change per Part-21.A.91.

Commenter 1: Schroeder fire balloons GmbH

Comment # 8

12. Change in scoop or skirt size.

The scoop´s function is to simply keep the wind away from the burner. The change of scoop size has no influence on the performance of the burner or the balloon itself.

EASA response: Not Accepted

Changing the size of the scoop is classified as minor in line with the comment, already approved type design is not affected.

Commenter 1: Schroeder fire balloons GmbH

Comment # 9

13. Change of basket size within approved limits.

The variation of sizes is often necessary due to customer requirements. This does not influence the strength or stability of the baskets.

EASA response: Not Accepted

changing the basket size is classified as minor in line with the comment, already approved type design is not affected.

Commenter 1: Schroeder fire balloons GmbH

Comment # 10

14. Change of basket wicker work, not invalidating the assumptions of the initial certification.

Wicker is a natural fibre without steady material properties. Nevertheless it has proven over the last decades that it is the best material for occupant protection in baskets. The classification of wicker work variation does not need to be an issue of a change.

EASA response: Not Accepted

changing the basket wicker work is classified as minor in line with the comment, already approved type design is not affected.

Commenter 1: Schroeder fire balloons GmbH

Comment # 11

15. Installation of equipment required for the operation and not affecting airworthiness limitations, e.g. radio, transponder, fire extinguisher, etc.

This issue is as far as I know already a standard change issue for CS-STAN. Why make it a minor change?

EASA response: Noted

EASA considers this equipment portable and by definition not installed. Change removed.

Commenter 1: Schroeder fire balloons GmbH

Comment # 12

17. Fitting individual serial numbers with e.g. approved doors, seats, movable partitions or lights and their and their modifications due to customer request, not invalidating the assumptions of the initial certifications.

The serial number is a specific instrument that allows the traceability of production related information. Why would this have to be minor change to fit an individual serial number as long as the requirement of traceability is provided.

EASA response: Not accepted

customizing individual serials with previous approved items, doors, seats, etc. is classified as minor in line with the comment, already approved type design is not affected.

Commenter 1: Schroeder fire balloons GmbH

Comment # 13

27. Change of Maintenance manual other than airworthiness limitations.

There must be free space to address changes that are not involved in airworthiness issues like ADR related information to fuel cylinders or

EASA response: Not accepted

changes to the maintenance manual requires EASA acceptance.

Commenter 1: Schroeder fire balloons GmbH

Comment # 14

This is quite a number of concerns, but the result of classifying simple issues as minor changes is like tying the hands on the back of AP’s. All these Items do not have an impact to the initial airworthiness of the balloon as I think. This is every day work for a POA and APDOA that would be intensely disordered if these items would be classified as minor changes. I cannot see an increase of safety or decrease of risk if these items would be classified as minor changes. I kindly ask you to consider downranking them to keep our hands clear for working on important safety related issues or new products.

EASA response: Not accepted

the CM classifies changes in accordance with 21.A.91. DOA as well as APDOA have to comply with Part-21. It is common practice for APDOA to approve many items addressed by this comment with broad boundaries allowing individual customization under the initial approval. The CM addresses cases where the initial approval does not provide enough freedom and an additional approval is required. EASA believes that the CM will not change the daily way of working of an existing APDOA.

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 15 (1)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change of envelope volume	Major	
Ultramagic Position		
RESERVATIONS: Small changes to envelope volumes (up to 10%) without affecting limitations or structure (e.g. MTOM, number of load tapes, etc) should be considered to fall within the privilege of 21.A.263(c)8.		
Cameron Balloons Position		
Is this driven by a TC change? In which case agree. If not, changes within the TC approved size range should be considered minor.		

EASA response: Accepted

item 1 modified and item 2 added.

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 16 (2)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change of envelope artwork, e.g. 2D	Minor	
Ultramagic Position		
STRONG DISAGREEMENT: Artwork is only a combination of the colours of the fabric, with no change in terms of design. Artwork customisation has never required any compliance demonstration and has never been deemed to have a relation with the airworthiness of the aircraft. Over 2300 balloons built along the 40 years of experience of our company never required a design modification associated to artwork customisation, and there is no notice of any incident associated with it. In our case, such a change as proposed, would introduce the need to fulfil and sign +400 documents a year for no benefit nor improvement at all. In seek for agreement, would it be acceptable to refer to a generic change that defines the basic techniques and considerations for artwork, either printed, integrated, overlayed or in form of banner?		
Cameron Balloons Position		
Initial CM draft has artwork change as Minor without further showing of compliance. Process is controlled by internal work instructions.		

EASA response:

Refer to comment #2

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 17 (3)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Addition of inflated artwork, e.g. 3D	Major	X
Ultramagic Position		
FURTHER DISCUSSION NEEDED: Introduction of appendixes (a.k.a. inflated artwork) with a total variation of volume below the 10% should be considered as Minor, as it has been up to the date. To get this classification, change requires no alteration to limitations, MTOM, number of tapes, etc.		
Cameron Balloons Position		
Understood that this change is driven by the need to remove the ability for Repair Station and Individuals from taking on this work. Concern over ease of DO approval, and reference to historical work. Historical work must be accepted.		

EASA response: Not accepted

any 3D inflated artwork is classified as major due to its potential effects on the airworthiness of the design. DOA has the possibility to apply for a major change privilege in accordance with 21.A.263(c)8.

No change to approved configurations

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 18 (4)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Introduction of a new Special Shape envelope	Major	X
Ultramagic Position		
In Agreement		
Cameron Balloons Position		
In Agreement		

EASA response: Noted

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 19 (5)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change of a panel pattern without changing the basic curvature of an envelope	Minor	
Ultramagic Position		
FURTHER DISCUSSION NEEDED: Observe note on #1		
Cameron Balloons Position		
No comments		

EASA response: Noted

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 20 (6)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Introduction of a new fast deflation system or rotation vent	Major	X
Ultramagic Position		
In Agreement		
Cameron Balloons Position		
In Agreement		

EASA response: Noted

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 21 (7)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Changing the rotation vent position due to artwork, not invalidating the assumptions of the initial certification	Minor	
Ultramagic Position		
No comment		
Cameron Balloons Position		
Initial CM draft has Rotation Vent position change as Minor without further showing of compliance. Process is controlled by internal work instructions.		

EASA response: Noted

the assessment of compliance is under the obligation of the DOA.

ommenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 22 (8)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change to parachute or fast deflation system	Major	X
Ultramagic Position		
FURTHER DISCUSSION NEEDED: Definition is too broad. Changes such as small dimensional adjustments, changes in pulley or rope types etc. should be considered Minor, as it has been so far (generally, changes having no effect in the operation).		
Cameron Balloons Position		
Agree with UM comment.		

EASA response: Accepted

see new item 8 and changed item 9

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 23(9)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Changing flying wire length	Minor	
Ultramagic Position		
FURTHER DISCUSSION NEEDED: Flying wire length is customised for a neat accommodation of the frame and the scoop, with no appreciable effect in the structural design (assuming that the specifications of the materials conforming the wire assembly are maintained). There should be no need for change, as it has been up to the present date. The need to record adjustments on their length will develop in the introduction of very broad useless designs allowing big tolerances to overcome this burden requirement.		
Cameron Balloons Position		
Agree with UM comment.		

EASA response: Not accepted

same rationale as comment #2

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 24 (10)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change of envelope artwork, e.g. 2D	Minor	
Change of a pulley position, maintaining operating forces and function		
Ultramagic Position		
Agree with Cameron Balloons comment.		
Cameron Balloons Position		

EASA response: Noted

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 25 (11)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Exchange of material combinations of fabric and tape previously approved under the type design	Minor	
Ultramagic Position		
No comment		
Cameron Balloons Position		
Is this referring to actual material change to something not defined under the type design?		

EASA response: noted

Removed as not considered a change per Part-21.A.91.

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 26 (12)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change in scoop or skirt size	Minor	
Ultramagic Position		
FURTHER DISCUSSION NEEDED: As long as scoop/skirt are mere accessories with no effect in the airworthiness of the balloon, the need to record adjustments on their size will develop in the introduction of very broad useless designs allowing big tolerances to overcome this burden requirement. Agree with Cameron Balloons Comment.		
Cameron Balloons Position		
Agree with UM Comment. Scoop/skirt should be minor without further showing of compliance.		

EASA response: Not accepted

same rationale as comment #2.

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 27 (13)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change of a basket size within approved limits	Minor	
Ultramagic Position		
RESERVATIONS: Clarification needed: Changes within the +/-10% in dimensions with no effect in limitations are considered Minor up to the date. This criteria should be kept.		
Cameron Balloons Position		
No Comment		

EASA response: Partially accepted,

further explanation added.

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 28 (14)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change of the basket wicker work, not invalidating the assumptions of the initial certification	Minor	
Ultramagic Position		
FURTHER DISCUSION NEEDED: Case is not clear. Can you provide an example? Up to now, changes in the position of internal walls without affecting the structure nor changing the construction technique are considered to be within the tolerances of the original approval.		
Cameron Balloons Position		
No comment		

EASA response: Noted

item 14 is intended for changes in the wicker work itself, for example patterns, weight savings or footsteps.

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 29 (15)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Installation of equipment required for the operation and not affecting airworthiness limitations, e.g. radio, transponder, fire extinguisher, etc.	Minor	
Ultramagic Position		
DISAGREEMENT: The equipments provided as example are considered portable, not requiring installation other than securing to the basket, similarly to the pilot bag. Note that some of them are generally removed after flight. So it should not be considered a design change. Agree with Cameron Balloons comment.		
Cameron Balloons Position		
In Disagreement. If BOP allows use of non approved equipment, how are DO's meant to approve their installation?		

EASA response: Accepted
item has been removed.

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 30 (16)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Installation of components significantly affecting construction of a basket or operational procedures (e.g. door, seat, movable partition, lights)	Major	
Ultramagic Position		
FURTHER DISCUSSION NEEDED: Observe the possibility to include the installation of components without significantly affecting the construction of the basket but amending the operational procedures under privilege of 21.A.263(c)(8). Agreeing also with Cameron comments.		
Cameron Balloons Position		
Approving a generic design could be considered Major as long as it's individual application to other basket models is considered Minor.		

EASA response: Noted,
Item #15 is intended for the first implementation and #16 for subsequent serials and customized applications

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 31(17)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Fitting individual serial numbers with e.g. approved doors, seats, movable partitions or lights and their modification due to customer requests, not invalidating the assumptions of the initial certification	Minor	
Ultramagic Position		
RESERVATIONS: Assemblies such as doors, seats, etc., if approved generically and eligible, must not require further modifications nor approvals for installation to a particular equipment. Conformity certificates would already make reference to the Generic modification implemented.		
Cameron Balloons Position		
See above		

EASA response: not accepted
customization for individual serials might require changes to the already approved configuration. If no change is required for an individual serial, this does not apply.

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 32 (18)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change in the number of compartments and occupancy of the baskets	Major	X
Ultramagic Position		
No comment		
Cameron Balloons Position		
No comment		

EASA response: Noted

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 33 (19)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Reducing MTOM (RMTOM)	Minor	
Ultramagic Position		
Agree with Cameron Balloons Comment.		
Cameron Balloons Position		
Initial CM draft has RMTOM change as Minor without further showing of compliance. Process controlled by internal work instructions.		

EASA response: Noted
refer to comment #20

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 34 (20)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change of the configuration of burner jet nozzles, not adversely affecting burner performance	Minor	
Ultramagic Position		
No comment		
Cameron Balloons Position		
No comment		

EASA response: Noted

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 35 (21)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change of burner installation, not using other manufacturers' equipment	Major	X
Ultramagic Position		
RESERVATIONS: Could an example be provided? Does this cover compatibility issues?		
Cameron Balloons Position		
Not clear what this applies to. Is this relevant to new burner design?		

EASA response: Partially accepted,

item 22 is intended for changes to the burner and new burner developments, text modified accordingly

"`Changes to the burner and introduction of new burners, not using other manufacturers' equipment"`

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 36 (22)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change to the burner frame	Major	X
Ultramagic Position		
IN DISAGREEMENT: Changes to burner frames not adversely affecting its original strength should be considered minor (e.g. limited dimensional changes, change in heatshields, aesthetic changes, burner mountings, additional attachments, local reinforcements, etc).		
Cameron Balloons Position		
Agree with UM comment.		

EASA response: Accepted

item 23 added as minor change

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 37 (23)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change of fuel cylinder equipment, e.g. valves, pressure gauge, fuel hose connector etc.	Major	X
Ultramagic Position		
SUPPORT WITH RESERVATIONS: Changes under this classification should be limited to non-aesthetical change of parts subjected to fuel pressure (thus excluding e.g. padding, isolated readouts or handles, etc).		
Cameron Balloons Position		
Agree with UM comment.		

EASA response: Noted
EASA has the same understanding and believes the wording is sufficient

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 38 (24)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change to the fuel hose	Major	X
Ultramagic Position		
SUPPORT WITH RESERVATIONS: Changes under this classification should be limited to non-aesthetical changes (e.g. alterations on labelling/marking should be minor). Agree with Cameron Balloons Comment.		
Cameron Balloons Position		
Support but more discussion is needed. Would this apply to a change of manufacturer for similar hose specification? Functional attributes may need to be defined, for example would a Major change be required for a change in hose length?		

EASA response: Noted,

EASA would regard a change in manufacturer as a change subject to the design specification of the hose, whether a change is required for changing the length of the hose depends on the type design definition. Text updated in coordination with commenter.

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 39 (27)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change of Maintenance Manual other than Airworthiness Limitation	Minor	
Ultramagic Position		
SUPPORT WITH RESERVATIONS: Note that Maintenance Manual may be amended without introducing changes to the type design, but beyond the editorial changes.		
Cameron Balloons Position		
No comment		

EASA response: Not accepted

EASA considers any change in the manual as a change to the type design

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 40 (28)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change to Normal and Emergency Procedure	Major	
Ultramagic Position		
IN DISAGREEMENT: This privilege was generally granted to DOAs up to the date, for changes not affecting limitations. Which reasons substantiate this step-back?		
Cameron Balloons Position		
In Disagreement. Limitation and Emergency procedures should be subject to EASA approval while Normal Procedures should be covered under DO privilege.		

EASA response: Not accepted

in accordance with CS 31HB.81(b)(2) the section for operating limitations, normal procedures (including rigging, inflation and deflation), emergency procedures, and other relevant information specific to the balloon’s operating characteristics and necessary for safe operation require an approval, changes other than editorial are not covered by the DOA privilege for minor changes.

Additional change introduced to cover changes to operating limitations.

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 41 (29)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change to approved combination of envelope, basket and heater system, e.g. using other manufacturer’s equipment	Major	X
Ultramagic Position		
FURTHER DISCUSSION NEEDED: Up to the present date, changes in the combination of equipments from other manufacturer's were considered minor in certain cases (meeting a set of conditions agreed with the DOATL/PCM). With this proposal, this is not possible anymore and the process gets more complex for no apparently funded reason, as no incidents have been reported because of issues in the combination of equipments. Similarly, we ask to address in an easy manner the case of changes to approved combinations of equipments from the same TC Holder - Simple changes of equipment already certified should be included in the privilege of 21.A.263(c)(8) - although this is also linked with the need to modify and harmonise the EASA TCDS formats (See point #21).		
Cameron Balloons Position		
Agree with UM comment.		

EASA response: Not accepted

the reason for this classification has been subject to EASA dialogue with Industry for two years. Creating a new configuration is a major change and not minor. EASA is open to discuss future TCDS harmonization. As other manufacturers equipment is an example the same classification would apply for combinations from the same TC holder, for most cases this is however already reflected in the TCDS.

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 42 (30)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change in basic materials	Major	X
Ultramagic Position		
SUPPORT WITH RESERVATIONS: Clarification requested. What do "change" and "basic" mean in this case? Does basic mean a material belonging to the main structure (used in the load path)? Eligibility of a known material not adversely changing the strength requirements would fall within the scope of this point (e.g. using a thicker wire)? See point #32.		
Cameron Balloons Position		
Agree with UM comment.		

EASA response: Noted

the intention of this item is to define change of basic materials, for example wicker to composite basket or nylon to polyester fabric as a major change.

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 43 (31)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change of a construction principle of primary construction components	Major	
Ultramagic Position		
No comment		
Cameron Balloons Position		
No comment		

EASA response:

Noted

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 44 (32)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Change to the primary load path	Major	X
Ultramagic Position		
FURTHER DISCUSSION NEEDED: See point #30. Changes such as type of karabiners or tapes (same base material and meeting the minimum approved strength requirements) should be considered minor.		
Cameron Balloons Position		
Requires clarification.		

EASA response: Not accepted

changes to the primary load path are per 21.A.91 major

Commenters 2/3: Ultramagic / Cameron (comments have been provided together so they will be answered together where possible or differences will be highlighted)

Comment # 45 (33)

Scope of the design change	Classification	Possibility to obtain privilege as per 21.A.263(c)8
Influence on the technical data in TCDS (note editorial changes are not a change)	Major	
Ultramagic Position		
FURTHER DISCUSSION NEEDED: Discussion on TCDS format harmonisation ongoing, in order to avoid inequalities between TC Holders.		
Cameron Balloons Position		
No comment		

EASA response: Noted

Commenters 4: Kubicek

Comment # 46

Line 1 – regular shape models. Can we get the privilege also? I do not see any logic why this should work for special shapes only. What will be the difference from regular shape? Is new shape to racing balloon special or regular? I think the line 1 and 4 shall be the same saying “Introduction of new envelope within previously EASA approved limits ”. This will exclude new big envelopes in sizes not previously approved by EASA which is important to me.

EASA response:

Refer to comment # 15

Commenters 4: Kubicek

Comment # 47

Line 21 – I do not understand the wording.

EASA response:

Refer to comment #35

commenters 4: Kubicek

Comment # 48

We are missing anything about mixing other manufacturers component. Should be major with privilege. Unless it is the meaning of the line 21.

EASA response:

Noted please refer to item #31

Commenters 4: Kubicek

Comment # 49

Line 22 – I think the reading is too restrictive. I think it should be “change to primary load parts of burner frame”. Adding a small eye for attaching of control line shall not be major.

EASA response:

Refer to comment #36

Commenters 4: Kubicek

Comment # 50

Line 28 – I do not know if this is general EASA policy but as written is not a good way forward. Can we get any softer way how to change/update emergency and normal procedure? We had a case previously, when due to occurrence in operation we had to quickly change some procedure. We could use our “change to FM” privilege for that. Other case could be when a minor change to e.g. equipment (see line 15) will require change to normal procedure. With this restriction this will be very hard to achiviee. Could we at least have the privilege for that? Or at least wording “Significant change to normal and emergency procedures?”

EASA response:

Refer to comment #40

Commenters 4: Kubicek

Comment # 51

What about new basket models when all the design principles remain unchanged? Can we get the privilege for that?

EASA response: Accepted

item 18 added