



Simpler, lighter, better rules for General Aviation

GA Roadmap lunchtime update

Trevor Woods

EASA Certification Director

Aero 2018 - Friedrichshafen



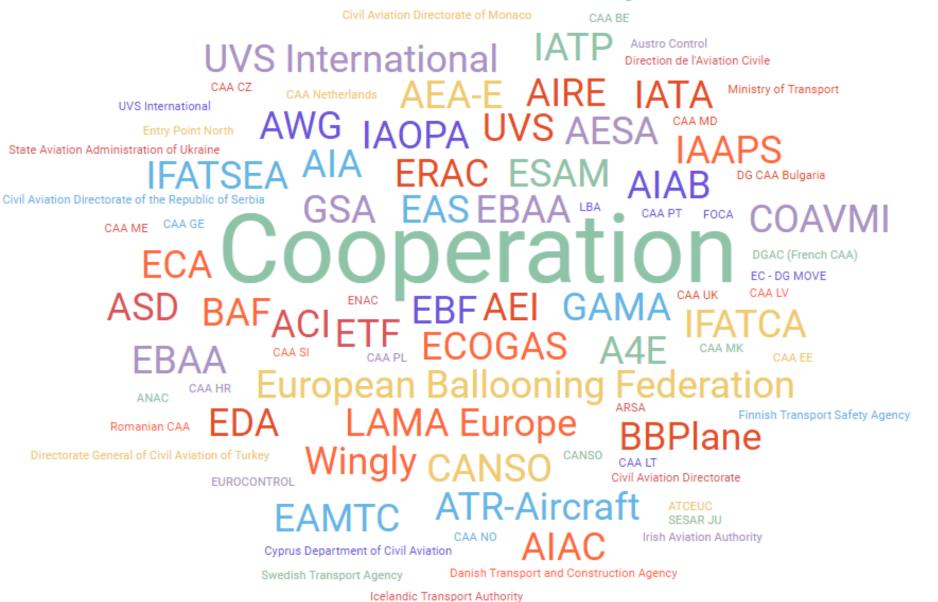


Cooperation of stakeholders



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EFTA Surveillance Authority



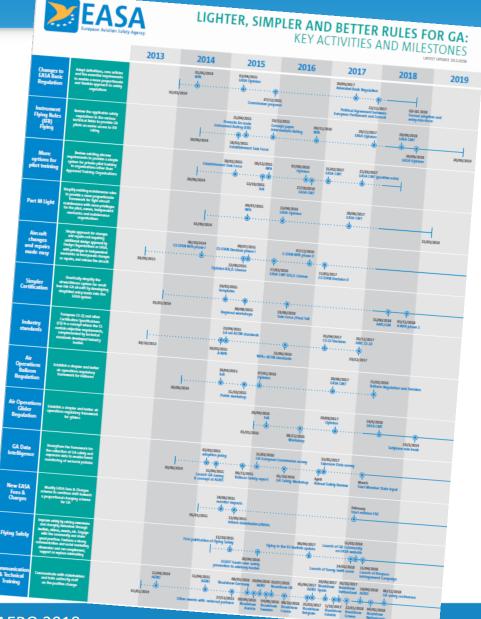
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One new year of significant achievements

 GA Roadmap is delivering in accordance with commitments

 Progress towards lighter, simpler and better regulation continues





- Overview of GA Roadmap achievements
- Communication and safety promotion
- A vision for the future of GA
- Questions

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Simpler, lighter, better rules for General Aviation

GA ROADMAP Update

Introduction

Dominique ROLAND – GA Champion Boudewijn Deuss – GA Roadmap Project Manager

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GA Roadmap achievements

- Changes to the Basic Regulation: 2018: On-going*
- Part M Light: Opinion published in May 2016*
- Facilitate access to IFR (holistic approach across domains): NPA published in November 2016*
- Aircraft changes and repairs made easy (CS-STAN): Amendment 2 published in April 2017
- More options for pilot training outside ATO (DTO): Opinion published in September 2016
- Spare parts without EASA Form 1 (NPA 2017-19)

- Balloons Air Operations Reg. 2018/395 Published 13 March 2018
- Air Operations and licence Sailplane Rule Book: Rulemaking task on-going
- LAPL Medical Certificate: Done (Needs Safety Promotion)
- Modular LAPL: Opinion 08/2017
- Simpler Certification (Part 21 proportionality manufacturer approval): AMC planned for Q2/2018
- Reorganisation of CS-23 using Industry standards: AMC in Dec 2017

*Commission's process in progress

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New EASA Basic Regulation

A small intro



Things to look for (New BR Chapter III)

- Much of the detail moved to lower level rules (complex acft etc.)
- The new BR just gives a set of tools and options. Rest can be decided in lower level rules.
- Look for standard formulations for the risk-based approach:
 - √ 'Unless otherwise established in the delegated/implementing acts...';
 - √ 'Where the delegated/implementing acts so provide...';
 - ✓ 'By way of derogation from...';
 - ✓ '...situations in which, ...taking account of the nature and risk of the particular activity concerned, such certificates shall be required or shall not be required'.
- Annexes with Essential Requirements can be amended by Delegated Acts (except Annex I on excluded aircraft);

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Continued Airworthiness (Maintenance)

update

Alberto FERNANDEZ-LOPEZ

Part-66 & B2L licenses
Part ML & CAO
Parts without EASA Form 1

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New Part-66 licenses: B2L and L licences

➤ The B2L aircraft maintenance licence:

- For avionics and electrical systems.
- For aircraft other than those in the group of complex aircraft (Group 1).
- Based on "system ratings".
- Progressive (eventually leading to a full B2, if so wished).

➤ The L aircraft maintenance licence:

- ➤ For airframe, power-plant, mechanical and electrical systems, radio, ELT, transponders and limited avionics.
- ➤ For sailplanes, powered-sailplanes, balloons, airships and ELA1 aeroplanes.
- ➤ No training required. Examination by NAA, Part-147 or anywhere agreed with NAA.
- ➤ It will replace at a certain point the current national qualifications. Current certifying staff under national rules will obtain the L-licence with the same privileges by conversion.



New Part-66 licenses: B2L and L licences

- ➤ Expected favourably vote by EU Commission in April2018 and adoption as EU-regulation approx. 9 months.
- ➤ NAAs will start issuing the new licenses in 2019 and converting existing national licenses in 2020.



Future CAW regulation structure: Parts ML and CAO

PROPOSED RULE STRUCTURE		Non-CAT		CAT	
		Non-CMPA	СМРА	Non-CMPA	СМРА
Part-M		Applicable only to non-	Applicable		
		Light aircraft (Light			
		aircraft must follow			
		Part-ML)			
	Subpart F	May still be used for 2	N/A	N/A	N/A
		years after new			
		Regulation. It			
		disappears later.			
	Subpart G (CAMO)	Disappe	ars (transferred to Part-CAMO)		
Part-145		Applicable			
Part-66		Applicable			
Part-147		Applicable			
Part-T (Third country aircraft dry-		N/A	N/A	Applicable	Applicable
leased by EU AOC holders)					
Part-ML		Applicable to Light	N/A	N/A	N/A
		aircraft			
Part-CAMO (with SMS)		Applicable			
Part-CAO (without SMS)		Applicable	N/A	N/A	N/A

To be adopted by Commission EU (Expected in 2019 + transition)



Near future: Part-ML and Part-CAO

▶ Part-ML

- ➤ Applicable to private and commercial (except CAT) operations of:
 - aeroplanes up to 2730 Kg,
 - other ELA2 aircraft and
 - helicopters up to 4 occupants and 1200 Kg.
 - if they are not complex motor-powered aircraft.
- ➤ It allows more attributions to the pilot (deferment of certain defects) and certifying staff/maintenance organisations (airworthiness reviews).
- Maintenance programme not requiring authority approval



Near future: Part-ML and Part-CAO

➤ Part-CAO

- ➤ Applicable to organisation for maintenance/management of non-complex non-CAT aircraft (some aircraft will follow Part-M and others Part-ML)
- ➤ Combines the privileges of a Subpart-F maintenance organisation and a CAMO.
- ➤ No SMS: They will continue with the current Quality System (or organisational reviews if the organisation is small).
- ➤ Introduces simplified requirements.

Medium future: alleviation from Form 1 for certain parts

- ➤ Regulatory activity aiming that certain spare parts, as, can be installed during maintenance without a Form1.
- ➤ Concept proposal in NPA 2017-019:
 - Applicable only for not safety critical parts, as identified by the aircraft manufacturer (or by EASA in special cases).
 - ➤ Specially interesting for light aircraft.
- ➤ Positive comments to NPA from the GA community.
- ➤ Opinion scheduled for end2018





Simpler, lighter, better rules for General Aviation

What's new in certification?

Michael Gerhard, EASA CS-STAN

Pasquale Violeti, EASA CS-23

Boudewijn Deuss, EASA Part 21 proportionality

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CS-STAN

standard changes and repairs

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The CS-STAN concept

All changes and repairs are subject to approval (Part 21, Subparts D + M); but 21.A.90B and 21.A.431B allow to derogate for **standard changes and repairs**

Specifications laid down in CS-STAN

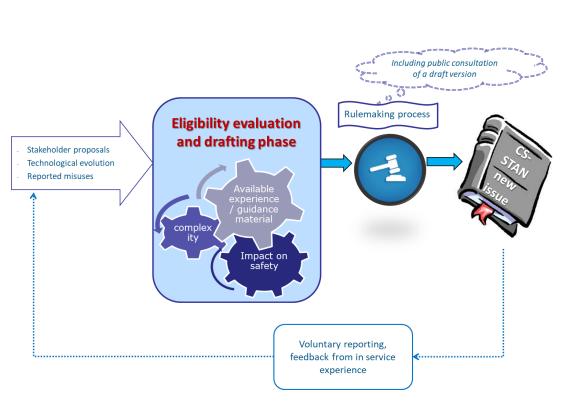
✓ A set of provisions allowing the embodiment of simple changes or repairs to "GA aircraft" without a dedicated approval process, provided that specific conditions are met

Purpose for allowing standard changes/repairs:

- ✓ Reduce the regulatory burden for embodiment of simple changes and repairs.
- ✓ Facilitate introduction of more modern and safer equipment
- ✓ Limit certain illegal practices to modify or repair aircraft



CS-STAN evolution process



Topics for CS-STAN next issue:

- new standard changes for balloons
- installation of flight time counters
- replacement of starter batteries
- installation of attachments / brackets for various purposes
- headset exchange
- clock replacement
- repainting of composite aircraft acrylic
- installation of weather warning functionality for VFR a/c
- improvement/ extension of existing provisions

> ..



Your contribution matters

How can I contribute?



- a) Proposals and feedbacks can be submitted to the Agency https://www.easa.europa.eu/easa-and-you/general-aviation
- b) The <u>GA community site</u> will contain:
 - a generic topic to share experience on CS-STAN among GA community site
 - II. a dedicated topic to discuss potential topics for CS-STAN evolution

What if I have further questions?

FAQ for CS-STAN will be introduced in the EASA website

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First experiences with new CS 23

Pasquale Violetti
Project Certification Manager for General Aviation, EASA

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Some dates and numbers

- ➤ CS 23 amdt 5 effective from 15 Aug. 2017
- ➤ EASA AMC published Dec. 2017
 - >> Including first set of accepted consensus standards
- ➤ At least 5 new TC applications
 - ➤ Including eVTOL aircraft
 - ➤ One major change (elect to comply)

Confirmations

- ➤ Greater agitily in accomodating innovation
- ➤ Stronger focus on desired safety performance

Challenges

- **▶** Integration of VTOL
- More decisions to be taken on project level
- ➤ Full Harmonization with FAA
 - At requirements and MoC levels
- ➤ Crosslinks with ASTM standards sections





Simpler, lighter, better rules for General Aviation

Part-21 Proportionality

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- ➤ Innovation is the future for GA
- ➤ New ideas and players on the market should be encouraged and supported
- ➤ Today's rules for design and production are challenging for start-up organisations
- ➤ Part 21 proportionality is intended to change that



Step 1 – Developing (draft) AMC-ELA to Part-21

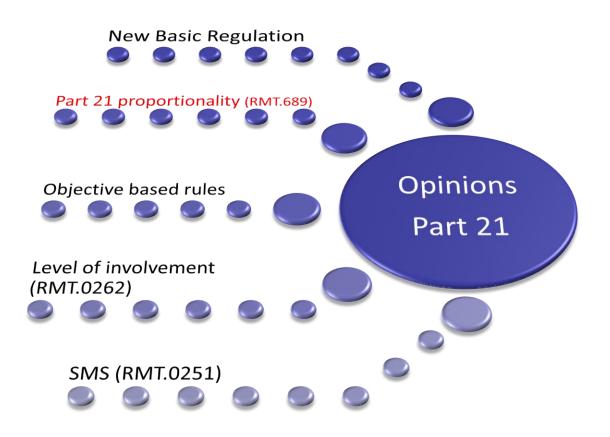
Today there are three +1 main problem areas:

- Existing AMC/GM to Part-21 is written for large aircraft and companies; especially POA is lacking alternatives
- Non-natural split between approvals for DOA & POA (and Maintenance) of small, consolidated teams
- Part-21 Section B (Procedures for competent authorities) mandate a process-oriented approach
- We want flexibility and scale-ability in a regulatory rigid system



Step 2 – Fundamental changes to Part-21

Develop a new approach for Part-21we are not alone!



!! Complete the "restricted" AMC-ELA (2018/Q2)

➤ Develop the new concept for Part-21 (A-NPA 2018)



THIS AERO

Friday 20 April- EASA session at AERO

- **➤ EASA Part 21-Proportionality Session**
- **➤ CS-STAN**
- **▶** T4S,

14:00-15:30, Room Berlin



Balloon & Sailplane Regulations (air operations and licensing)

AERO 2018 – Press & stakeholder event 19 April 2018

Jan Boettcher – EASA Flight Standards

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Balloon & Sailplane Regulations

The past for air operations

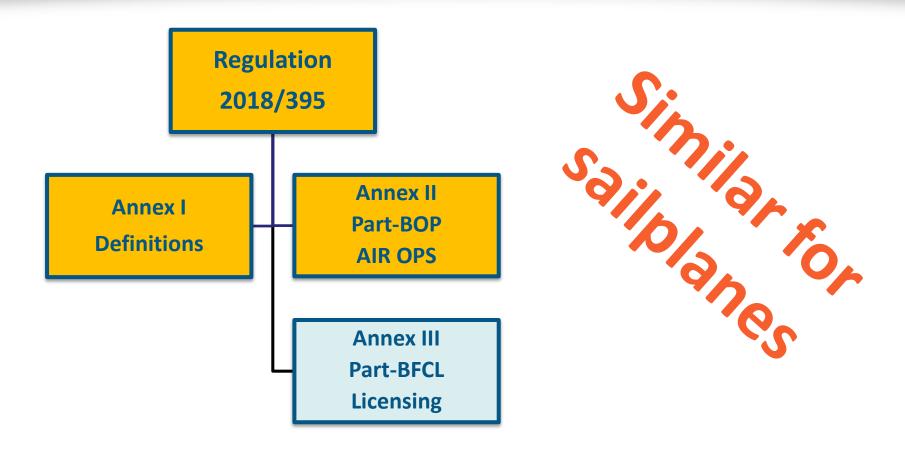
- ➤ Reg. 965/2012 and 'associated material' (AMC/GM)
 - ➤ About 1900 pages
- ➤ For each, balloons and sailplanes
 - About 100 pages apply
 - ▶ But spread over the 1900 pages

The way forward

- ➤ Rules extracted from Reg. 965/2012
- ➤ Simpler and proportionate rules
- Separate Balloon and Sailplane Regulation

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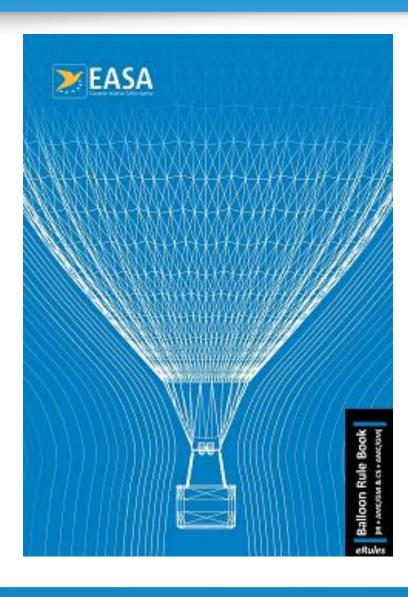


BOP = **B**alloon Air **Op**erations

BFCL = **B**alloon **F**light **C**rew **L**icensing (work in progress)



Balloon Rule Book – similar planned for sailplanes



- Easy access and easy-to-read
- Consolidated versions
- All a pilot/operator needs to know

Content

- ➤ Chapter 1 Air operations
 - Reg. 2018/395 + Decision 2018/004/R
- ➤ Chapter 2 Licensing
 - ➤ Reserved 1st quarter 2020
- Chapter 3 Continuing airworthiness
 - Reserved Part-M Light; with the Commission
- Chapter 4 Initial airworthiness
 - ➤ CS-31GB, CS-31HB and CS-31TGB

https://www.easa.europa.eu/sites/default/files/dfu/Balloon %20Rule%20Book.pdf



What's new in Aircrew?

Christian KUCHER
Flight Crew Licensing Expert, EASA

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TE.GEN.00409-001

- ➤ New rules for balloon & sailplane pilot licences under development
 - ➤ Part of the new balloon & sailplane regulations

Part-BFCL

Part-SFCL

- ➤ Revised requirements, more proportionate to GA
- ➤ Opinion planned to be published by 31 October 2018



▶ Declared Training Organisation (DTO)

- ➤ New training organisation for non-professional pilot licences
- Declaration instead of prior approval
- ➤ Publication expected for <u>July 2018</u>
- ➤ Easy transition for existing training organisations

▶ Basic Instrument Rating (BIR)

- ➤ New rating for flying IFR tailored to GA pilots (PPL)
- ➤ Full competency based training (modules)
- ➤ Revised theory syllabus
- ➤ Limitations for approach minima
- ➤ Opinion planned to be published by 31 October 2018



➤ Modular LAPL(A) – Proposal

- ➤ Option for LAPL training delivered in modules
- ➤ Modules to be determined by each Member State

➤ Modular LAPL(A) – Proposal

Syllabus for LAPL

Example for aeroplanes:

AMC1 FCL.210; FCL.215

AMC1 FCL.110.A



Module 1

- Full theory course
- Flight training relevant for local flights (within a MS)



LAPL

restricted to local flights

Module 2

 Additional flight training relevant for cross-country flights



LAPL

(Part-FCL)



➤ Modular LAPL(A) - Proposal

- ➤ EASA committee February 2018: Many critical comments from Member States
- Concept currently under review, revised proposal under development
- ➤ Opt-out for LAPL until <u>08.04.2020</u>



GA Roadmap Communication & Safety Promotion

Safety Together!

Your safety is our mission.



GA Roadmap Communication & Safety Promotion Safety Together!

- Safety Promotion
- European Airspace Infringement Campaign
- Sunny Swift
- GA Community Site

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Safety Promotion, a growing priority!

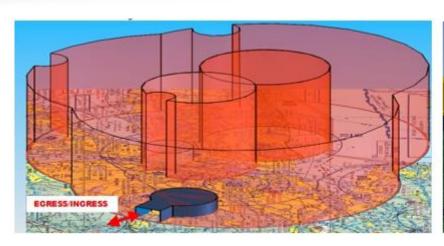
AERO 2018 4-

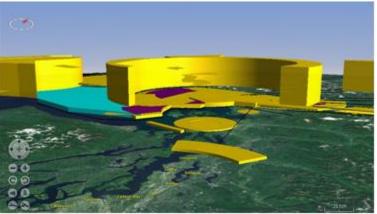
- EASA is taking a leading and more proactive role in Safety Promotion
- Working together with NAAs and other partners
- > We need your support to spread the messages

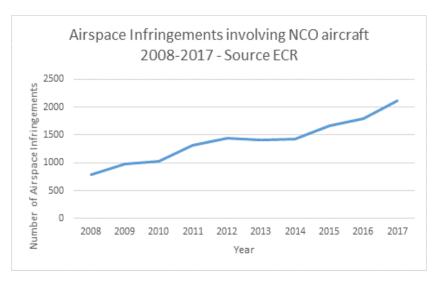




European Airspace Infringement Campaign Rationale









European Airspace Infringement Campaign *Main Messages*





European Airspace Infringement Campaign EASA and National Video Clips











European Airspace Infringement Campaign EASA Webpage





the agency



newsroom & events





regulations



document I

home > easa & you > general aviation > flying safely > airspace infringement

Please share and distribute webpage, videos and PDFs in your professional and social networks on flying!



GA Talking points

The number of airspace infringements has **increased significantly** over recent years and it is important that we all work to reverse this trend.



EASA Video



Finnish CAA Video



UK CAA Video



Belgian CAA Video

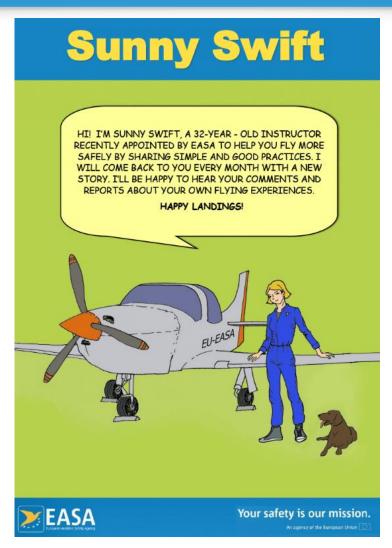


Pilvi Pouta

Saulė Greituolė

Съни Суифт

Σάνυ Σουίφτ



Freyja flugkennari

Sanija Svifta

Sanne Sommer





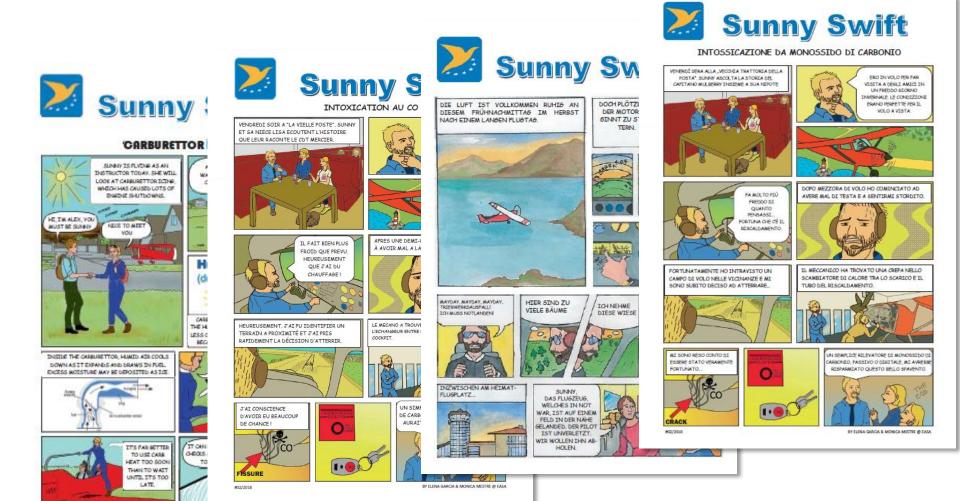




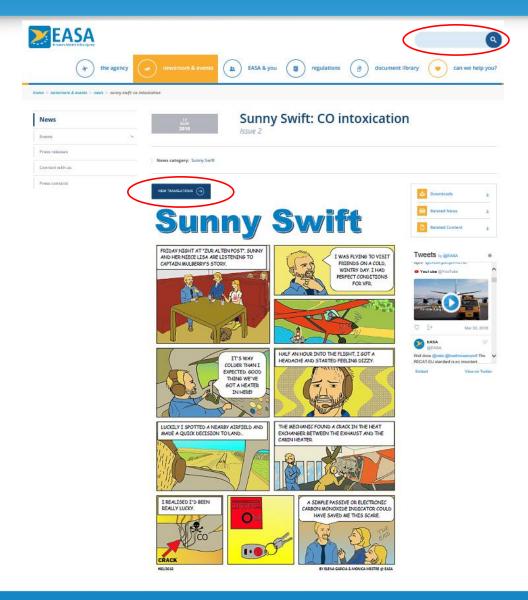


- Stories, conceptualisation, art design and drawing, as well as translations – all produced inhouse!
- Short cartoons on mitigating risks while flying
- Available in 24 European languages
- ➤ Three cartoons have been published (on Fuel light, CO intoxication, Carburettor icing)
- Upcoming: Loss-of-Control, Airspace infringement

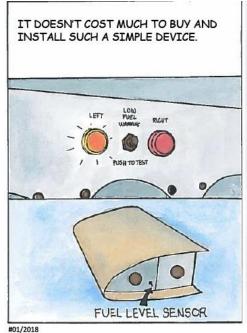














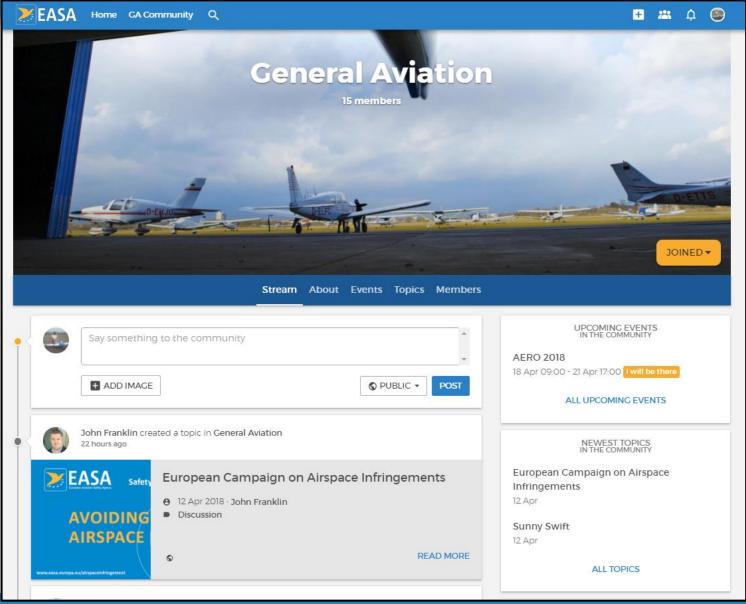


BY ELENA GARCIA & MONICA MESTRE @ EASA



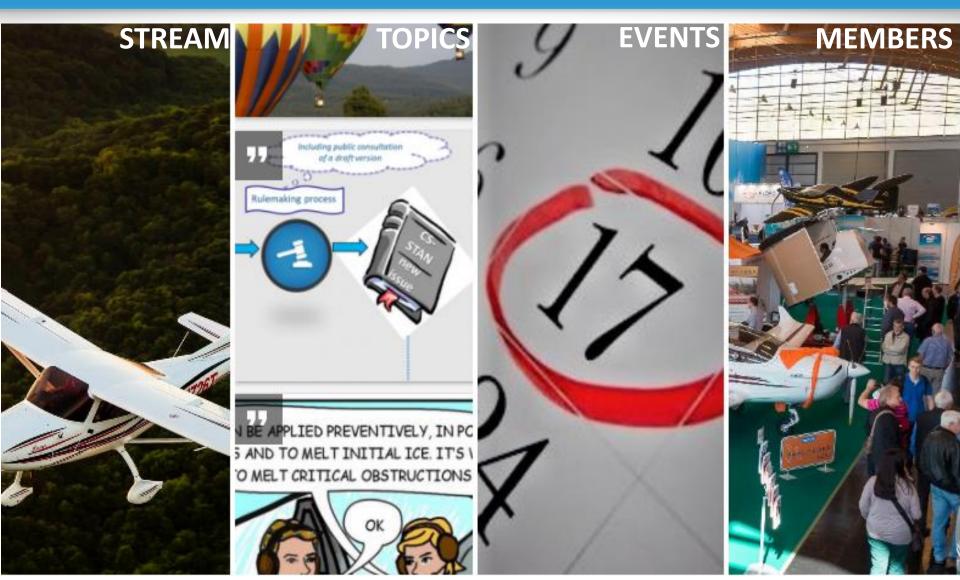


GA Gommunity Site





GA Gommunity Site: Key Features





The End?



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The way forward

- GA Roadmap close to completing the original list of actions
- New BR introduces an obligation to review the GA rules
- This require direction,
 vision and strategy.





GA is the cradle for...

New aviators & future pilots



New business models









Where are we coming from?

Launch a study on the economical & SOCIAL weight of GA in Europe and analyse the trends from 2007 -2017

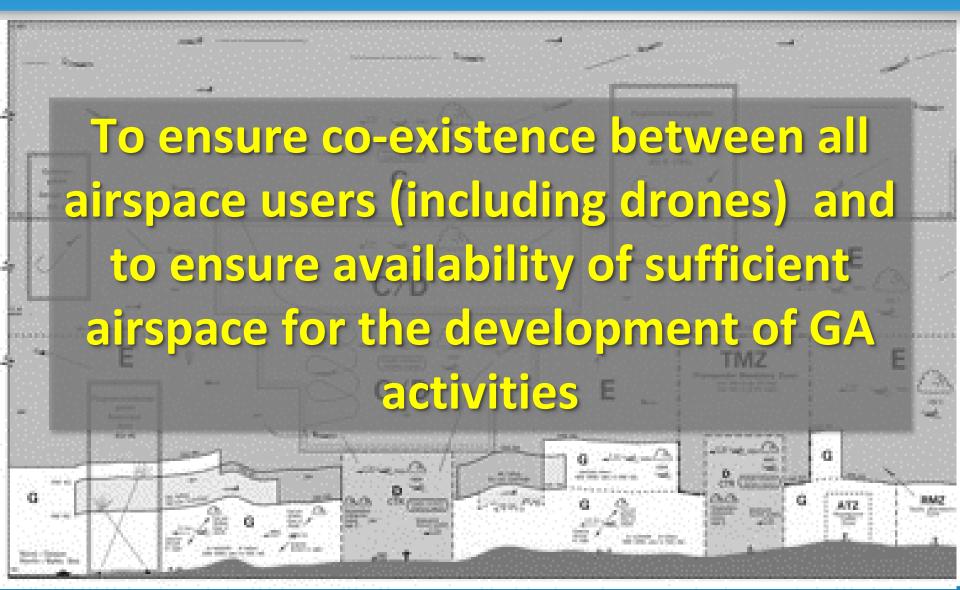






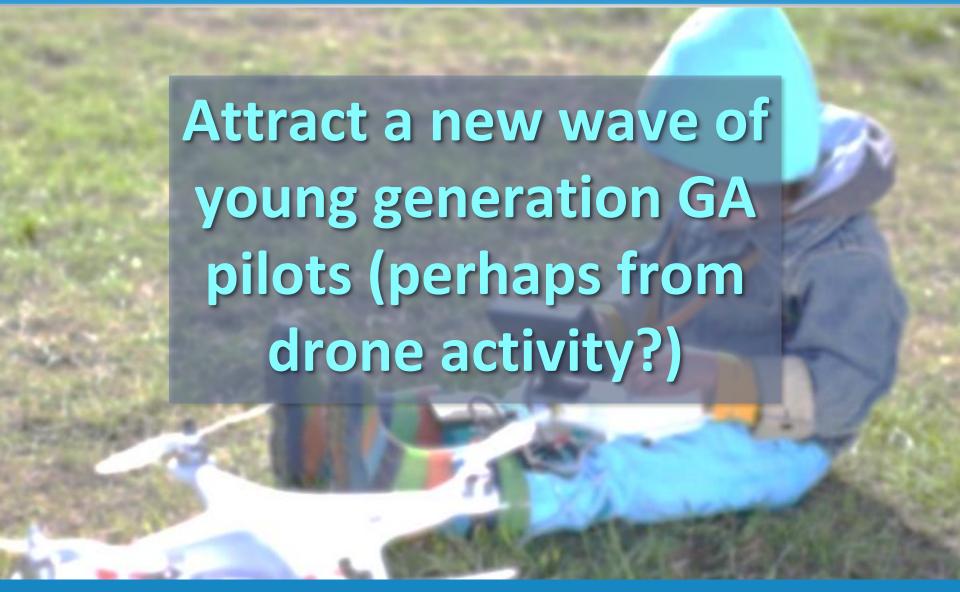


Where do we go from here?



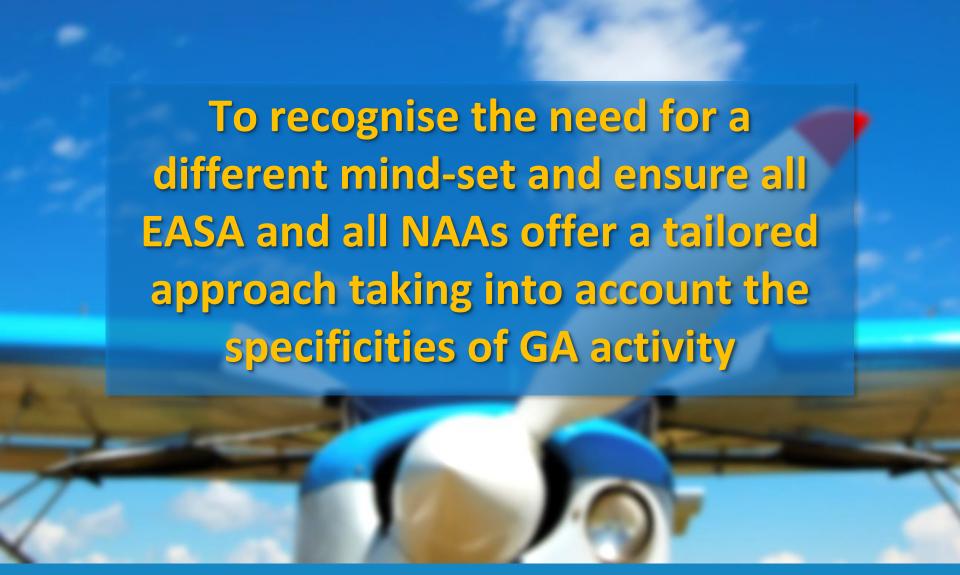
Recognising that Electric & Hybrid aviation is a key driver to improve the social acceptance of the GA activity by the general public; and to reduce the operating costs. To implement within 5 years a framework (regulations, safety promotion, research) enabling the rapid development of this new technology







What culture do we want?



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We can work on a vision, Together

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EASA Annual Safety Conference

Promoting Safety together: a vision for the future of General Aviation

Marriott Hotel Vienna, 6-7 Nov 2018

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