



When safety regulation works against safety

- Lessons from Europe

IAOPA World Assembly

Beijing, 2014





A bit of history

- Prior 1987: National aviation regulation based on ICAO
- 1987-2003: (Voluntary) Regulatory cooperation through JAA: Joint Aviation Authority on maintenance, licensing and certification/design standards
- 2003: EASA created and legislative powers for most aviation related areas gradually transferred from individual states to EU/EASA
 - Huge task of merging aviation regulation for 28 EU countries
 - GA has suffered significantly during the transition
 - Recently a new approach to GA regulation gives hope for GA
- What are the lessons to be learned?





Checklist - The classic mistakes

- Lack of proportionality: One size fits all
 - The regulation for commercial operations is applied to GA (maybe in a slightly lighter version)
 - EU/EASA Target: High and **uniform** level of safety in civil aviation
- Lack of time and resources to produce tailor-made regulation for GA
 - Copying commercial regulation is the quick and easy way out – but usually not working
- Lack of safety data and statistics
- Single-minded focus on one single risk factor
 - Prescriptive regulation preventing the pilot from taking into consideration all relevant risks and choosing the safest course of action
- Lack of understanding of the diversity and nature of GA
- Extremely complicated regulatory structure
 - EU/EASA: Up to 7 different documents needs to be consulted to answer simple operational questions
- Bloated & prescriptive regulation: Regulation that could affect the average private pilot has grown to tens-of thousands of pages of prescriptive regulation
- Other intentions than promoting safety
 - Protecting the national/regional market from competition from abroad
 - Keep civil servants 'safe': "We did something", "we have a rule against that"





Bad regulation
Example:

EASA Dangerous goods
regulation





Little John



Hazardous goods with UN number UN3373 in dangerous group 606

Requires permission, trained staff, shippers declaration, hazardous material document etc.





Engine oil



Environmental hazard

Requires permission, trained staff, shippers declaration, hazardous material document etc.





To find out about this

- The private pilot must buy the Technical Instructions on Dangerous Goods from ICAO and read through a >1000 pages document written for professionals and made for commercial air transport





Checklist for bad regulation applied to EASA regulation for Dangerous Goods

- ❌ Commercial regulation applied to GA without further consideration
- ❌ Lack of safety data and statistics
- ❌ No time and resources to develop tailor made regulation for GA
- ❌ Lack of understanding of the diversity and nature of GA
- ❌ Single-minded focus on one single risk factor preventing the pilot from choosing the safest course of action
- ❌ Complicated and inaccessible regulation
- ❌ Bloated and prescriptive regulation
- ❌ Promotes indifference to regulation – from both pilots and authorities!





AOPA proposal for better regulation on Dangerous Goods

Preferably:

- A dedicated guide for private pilots on what should be considered dangerous goods in the context of GA and how to operate with such items safely

Or:

- To allow in general items which are carried for operational purposes





So how do we get better aviation regulation in general?





European General Aviation Safety Strategy

August 30th, 2012

European General Aviation Safety Strategy

- Guidelines for better aviation regulation adopted in 2012 by the EU Commission and EASA in the new European General Aviation Safety Strategy after enourmous pressure and complaints from AOPA, industry, and NAAs





EASA MB 04/ 2012
WP9a - General aviation
Roadmap
11 December 2012



EASA MB 04/ 2012

Cologne, 11 December 2012

Agenda item 9a: Roadmap for Regulation of GA

(Presented by: the Commission and the Agency)

Consequently the approach advocates a move away from the traditional manner of regulating first Commercial Air Transport (CAT) and then basing the General Aviation (GA) rules on a slightly reduced set of CAT rules. Instead the new GA rules should be more "tailor made" and more "proportionate" to the type of GA-activity, with additional "risk modules" based on safety analysis added to a basic rule set for more risky GA activities.





Acceptable Risk Hierarchy

Safety regulation must be proportionate to the risk being regulated and using the risk hierarchy:

1. Uninvolved third parties
2. Fare - paying passengers in commercial air transport (CAT)
3. Involved third parties (e.g. air show spectators, airport ground workers)
4. Aerial work participants / Air crew involved in aviation as workers
5. Passengers (“participants”) on non - commercial flights
6. Private pilots on non - commercial flights





European General Aviation Safety Strategy

August 30th, 2012

European General Aviation Safety Strategy

P1. Proportionate approach, quite separate from CAT

G1.1: Recognize GA does not achieve nor necessarily aim at reaching an equivalent level of safety as CAT, and ensure this is understood by all GA participants.

G1.2: Do not start work from existing regulation which has essentially been designed for CAT, but take a fresh approach by establishing whether and what regulations are most appropriate to GA in all fields: initial and continuing airworthiness, licensing, operations, airports, and ATM.





European General Aviation Safety Strategy

August 30th, 2012

European General Aviation Safety Strategy

P2. A philosophy of minimum necessary rules

G 2.1: **Draft regulations on a "minimum necessary" and "focused on the main risks"** basis for the relevant activity, starting from the simplest cases in terms of design and operations, and adding "building blocks" as necessary to cope progressively with more complex issues and environments, and possible interfaces with other aviation users.

G 2.2 : Where GA can interact with CAT, develop appropriate measures, including regulations as necessary, to prevent undesired events.

G 2.3 : Consider favourably new proposed technologies by OEMs and manufacturers, and demonstration of enhanced safety through an innovative approach.





European General Aviation Safety Strategy

August 30th, 2012

European General Aviation Safety Strategy

P3. Adopt a risk-based approach

G 3: Always consider alternative means to regulation, including the "do nothing" option, based on robust risk assessment and cost benefit analysis methodologies specific to the sector.





European General Aviation Safety Strategy

August 30th, 2012

European General Aviation Safety Strategy

P4. Protect "Grandfather rights"

G 4.1: Give specific attention to transitional arrangements, so that no activity is stopped, including unexpected specific cases, if it had not raised a statistically significant safety issue prior to the implementation of the new rules. Rely on proven competencies, and on NAAs' oversight and reporting to the Agency for transparency and sharing of good practice.

G 4.2: Accept flexibility for continuation of specific local activities under NAA responsibility when they have not proven harmful to safety, to fair competition or to free circulation.



European General Aviation Safety Strategy

P5. Minimise bureaucracy and apply the EU "Smart Regulation Principles"

- G 5.1: Improve the dialogue with users, starting at the very first step of the rule making process, when the “do nothing” option is considered, and give appropriate explanations throughout the process in response to comments in particular when those comments are rejected.
- G 5.2: **Have more confidence in participants to ‘do the right thing’**, thereby reducing the multiple layering of a priori safety nets, and focusing more on declarative processes and individual commitment for managing safety, subject to appropriate downstream oversight by the NAA.
- G 5.3: **Give special attention to clarity and lack of ambiguity** in proposed regulations in order to facilitate the GA community’s understanding.
- G 5.4: **Put more emphasis on soft law than hard law: limit implementing rules to required objectives**, and develop technical means in industry standards, in certification specifications or in acceptable means of compliance supported by detailed guidance material, to be defined with users; use standardisation to check relevance and assure dissemination of best practices.
- G 5.5: Take into account the best global practices for GA, through consideration of various practices inside and outside EU.
- G 5.6: **Adopt a more comprehensive ‘competency based’ approach for personal licensing.**
- G 5.7: Do not impose inappropriate pressure to build new regulations and **give all necessary time for a sound rule-making process** in order to get it right at the first iteration.





European General Aviation Safety Strategy

August 30th, 2012

European General Aviation Safety Strategy

P6. Make best use of available resources of expertise and delegate responsibilities to the appropriate level

G 6.1: Give appropriate privileges to approved organisations to achieve proportionality.

G 6.2: Through an appropriate partnership, enable devolution and delegation of tasks from National Authorities to competent users' organisations.





Based on ICAO principles

International Standards
and Recommended Practices



Annex 6
to the Convention on
International Civil Aviation

Operation of Aircraft

Part II
International General
Aviation — Aeroplanes

In 2005 and 2006, the Air Navigation Commission completed a thorough review of Annex 6, Part II, with the intent of modernizing the provisions to reflect the significant changes in general aviation since the Annex was initially developed. The Commission considered new general aviation dynamics reflected by the increasing use of large, technically advanced turbine-engined aeroplanes in international general aviation operations. The Commission endorsed the philosophy established during initial development of the Annex that the owner and pilot-in-command must assume responsibility for the safety of operations in non-commercial operations where travel is not open to the general public. In such operations the Standards and Recommended Practices need not be as prescriptive as those in Annex 6, Part I, due to the inherent self-responsibility of the owner and pilot-in-command. The State does not have an equivalent “duty of care” to protect the occupants as it does for fare-paying customers in commercial operations. The Commission endorsed the level-of-safety philosophy that the Standards and Recommended Practices of Annex 6, Part II, must protect the interests of third parties. It was therefore agreed that the basic provisions of Annex 6, Part II, should remain applicable to all general aviation operations, but updated to reflect current technologies and operational procedures and the use of safety management systems where appropriate.





Often heard question in rulemaking working groups

How can we allow a private pilot to operate in conditions where (better trained) commercial pilot is not allowed to fly? For instance take-off minima.?

- Answer:
- the operation should first of all be such that it can safely be performed by any proficient pilot,
- Commercial regulation has a greater "duty to protect".
- *Note: protection is not just for passengers but also protection for the commercial pilots who will be under pressure from their employer to always go to the limit of what the regulation allows.*
- Most private pilots are not subject to the same competitive pressure and will have their own personal limits which are quite often far more conservative than what the regulation allows for.





EASA MB 04/2012

Cologne, 11 December 2012

Agenda item 9a: Roadmap for Regulation of GA

(Presented by: the Commission and the Agency)



In summary...

2. A new approach based on risk...

A reoccurring feature in recent discussions has been the need to focus regulation on actual risk and to prioritise rules that target the biggest and most relevant risks. Traditionally much regulation has been blanket regulation, which aimed to cover all possible risks by saying something about everything, although the vast majority of fatalities are caused by a small set of recurring causes. This has led to a situation, where persons participating in aviation only occasionally on their free time cannot actually remember all the rules, nor do they consider the majority of rules relevant to them. The resulting culture of indifference and non-compliance is a major safety risk as those people who choose to ignore rules they consider irrelevant, tend to apply the same attitude to all rules.





Thank you!

