



EASA
European Aviation Safety Agency

Coping with Weather

John Franklin Safety Analysis & Research Section Manager – Moderator

Tony Rapson UK CAA Head of General Aviation - Reporter

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Key Safety Issues

- 2011 – 2015 Total Numbers
- Operations in Adverse Weather Conditions
- 120 Incidents
- 7 Serious Incidents
- 190 Accidents
- 24 Fatal Accidents



Key Safety issues

- Coping with Weather
 - Entering IMC
 - Icing conditions
 - Carburettor icing
 - Weather information



The Issues - General

- Flights need to be better planned. This preparation is key. How do we encourage better planning
- Two issues:
 - Getting pilots not to fly in poor / marginal weather
 - Helping pilots to get of trouble if then encounter poor / marginal weather
- Press on – desire to get to planned destination – Plan Continuation Bias – how do you encourage pilots not to continue with the Plan
- Not sure we understand the real root cause of weather accidents so risk providing the solutions to the wrong problems!



The Issues - Rules

- Rules make it more difficult / less safe it allows flight in minimums that Student pilots have not be trained to fly in
- What is your minimum? Know and understand it.
- If it rests on training then the instructor community needs be properly trained and competent to provide the training
- Not about providing IR pilots its about getting yourself out of trouble. Rule set needs to permit simple in cloud, get yourself out of trouble / poor weather. Currently the rule set focuses on VFR or IFR are is very binary
- Difference in levels of IRs held in USA and EASA Area still not fully understood and or resolved



The Issues - Training

- Very expensive to fly to any training needs to be affordable and cost effective
- Current PPL training very light on getting out of trouble / Instructors are not trained to provide the training
- Knowledge and Experience take time to build
- Simpler, easier access to IR training both full and get you out of trouble. Basic IR needed
- If it rests on training then the instructor community needs be properly trained and competent to provide the training
- How do we provide the pilot with JUST the information needed relative to the flight rather than ALL information.



The Issues – Safety Promotion

- Using Basic instruments to keep you in control – Videos produced by various experts/ organisations
- Immediate actions if you enter bad weather - what to do
- Experience pilot interviews to explain the visual clues and loss of visual references
- Decision making reference material and guidance
- Encourage individual VFR pilots to take a better Risk Based approach to their flights



The Issues – Culture

- Teach pilots to be more open and ask for help as soon as they realise they may be getting into trouble – concern that airspace infringement fines was driving a culture of pilots not asking for help when things have gone wrong. (Member States)
- How do we get more information from GA Pilots and then use that to improve safety.
- Encouragement of a Just Culture. What promotes and what detract from Just Culture
- If in doubt fly the aircraft and call ATC they will be able to help



The Issues – Technology

- Airport Camera so a pilot can log on and see the weather.
- One FLIGHT FOLLOWING frequency to cover all of the European Area. Better and coherent way of providing information needed.



Ideas and Solutions - 1

- Safety promotion material should be readily available (ideally not in too many places) and easy to understand/use
- Given that there is a lot of good material already available produced by very knowledgeable and technically competent experts do we now need to use Communication and Engagement experts to support us in getting this material to land. Is this something EASA could do?
- Rather than try and cover the full range of safety issues choose one or two each year or every other year and put all communication resource into those topics so pilots can not fail to hear about those issues.



Ideas and Solutions - 2

- CS 23 and other initiatives there could be technological solutions – simple auto pilots with a panic button to get you out of trouble and fly the aircraft
- Training instructors to recognise and pass on their skills to students
- Better tools in the cockpit to show the weather
- Enable GPS set to provide weather picture / information
- Use of emerging technology – mobile / 4G network use – Apps
- Financial incentive to engage in promotional material – or associations to provide membership incentives to engage?
What can Stakeholders do.



Ideas and Solutions - 3

- On Board Weather Radar Picture – Technology will provide better information and is the first step to in providing better information to enable better decision making
- How do you then provide the decision making skills to use the technology
- Communications – kept coming back to the fact there is already a lot of good information available at the State Level, the EASA Level and the International Level. The messages are already out there – how do we get these message to land better and be taken on by those we want to change their behaviour
- Courses and training material works better than just putting information on a web site



Ideas and Solutions - 3

- Use of social media? Extensive use of internet forums can we use these better?
- Greater focus on transitional training between different types and even different equipment levels on types
- Technical solutions for Carburetting Icing warnings
- Reliable useful information available before and often during the flight to enable better decision making
- Who does the pilot talk to or learn informally can we target these opinion formers?



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Thank you

Comments and questions are welcomed

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