COMMON THEMES, COMMON PROBLEMS

Posted on 12.12.2022 by Steve Forward

Category: General Aviation

EditionGAFB 94

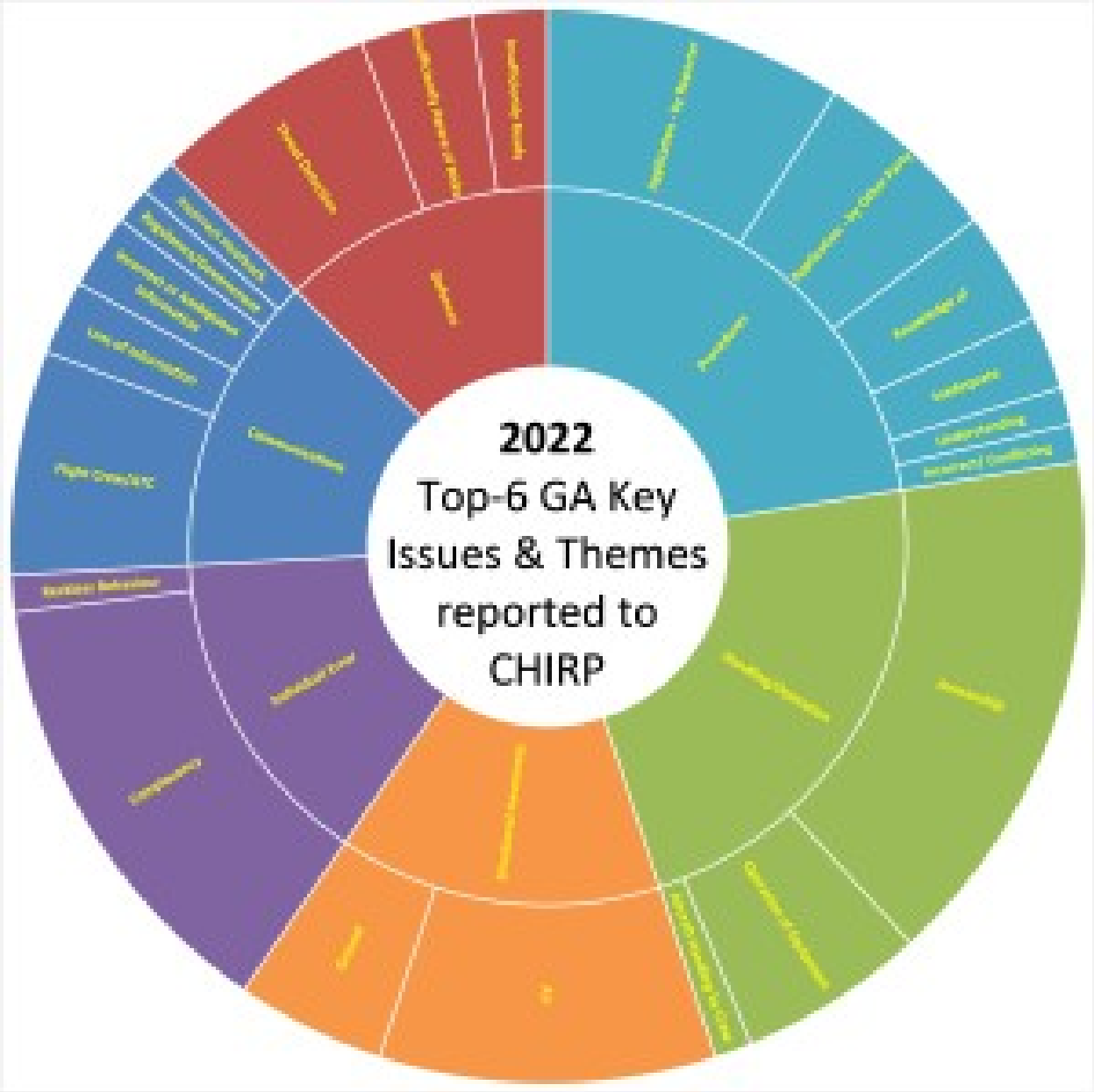
Editorial

Six key issues that provide food for thought

By the time this edition of FEEDBACK is published the year will be coming to an end and it'll be a good time to look back at what has happened in 2022. Of the 550 reports that CHIRP has received in total to date (mid-November as I write this), which includes commercial aviation etc, there were 24 GA and 10 ATC reports. This probably reflects a slow start to the year's GA flying post-pandemic and represents about half the level of GA reporting that we would expect in a 'normal' non-COVID year. In particular, GA reporting has markedly tailed off since the summer for some reason despite it being one of the best flying seasons for many years in weather terms. CHIRP doesn't have access to any statistics for flying rates with which to normalise these figures and so we can't determine whether there was simply less flying so fewer incidents, fewer Human Factors events from similar

flying rates (unlikely given the impact of previous COVID-related lack of recency), or just a reticence to report for whatever reason.

Although we need to take care in extrapolating data from the relatively small number of reports we did receive, we can still draw some valuable themes to help us think about future safety. The sunburst diagram shows the top-6 key issues reported to CHIRP; Procedures, Handling/Operation, Situational Awareness, Individual Error, Communications, and Defences. Within these 6 key issues, the most common themes provide food for thought.



Application of **Procedures** is one area where, on the face of it, we could do better. Procedures are

there to prevent errors and are one of the strengths of the aviation safety culture in making sure we all do the right thing the right way. Although there will always be situations that don't quite fit, procedures provide the hand-rail for us all to use as the basis for our operations so perhaps now is a good time to dust off those operating manuals during the winter months and refresh ourselves on the way things should go.

Airmanship and **Situational Awareness** generally go hand-in-hand, it's very hard to exercise good Airmanship without good Situational Awareness and vice-versa. But what is 'good Airmanship'? The CAA Safety Sense Leaflet 01 (about to be re-issued I understand) has plenty of good tips and advice but, for me, Airmanship is much more than just experience; it's akin to wisdom: an attribute built from careful thought, listening to others and the application of the 3Cs of Caution, Courtesy and Consideration for others.

Complacency featured quite regularly in the reports sent to us, and mostly self-identified with humility by those who reported. Ranging from a lack of thoroughness in planning or the use of checklists to an assumption that 'it'll be alright on the night', complacency is another area where we can examine our own actions and, if we ever find ourselves glossing over important details or not paying attention to threats that we might identify because it's inconvenient to change our plans, then that's the time to stop, review what's going on and make sure we really have covered the essentials of Threat and Error Management (TEM). Complacency (equivalent to making the error of not doing something in TEM terms) also has parallels with how we deal with '**Defences**' (aka mitigating risks) where we can see that 'Insufficiently Ready', 'Insufficiently Aware of Risks' and 'Threat Detection' were all areas that could have been improved in 2022.

Finally, the perennial '**Communication**' theme was ever-present. Ambiguous passage or misunderstanding of information is why we have a lexicon of pro-words and phrases intended to ensure that misunderstandings are minimised, so we must make every effort to use the right words at the right time rather than being 'cool' on the radio with slang, lingo and banter. But the most important thing is to use the radio to pass/receive information for the benefit of ourselves and others on the frequency or simply ask questions when we're not sure. I'm not advocating hugely verbose R/T calls, but making the right calls at the right time is vital, and if you don't understand what is being asked of you or what is going on then don't be incurious or proud, ask the question in plain language to gain that situational awareness and give a boost to that airmanship.

If nothing else, a few quiet moments thinking of those 6 themes before each flight would be a useful way of spending a few minutes, and even better, another few minutes after each flight as well to honestly review your performance and log away some personal lessons for the next flight.

Safe flying in 2023,

Steve Forward, Director Aviation

Comments on FEEDBACK

Comment No.1: Regarding FEEDBACK Edition 93, another informative edition – thank you (all), it's the one aviation production I read immediately and cover to cover. Report No 4 [GA1317 – Mag Switch found selected to 'BOTH' with key removed] is so important. Hereon I will cease my practice of checking the prop until I have uncovered our plane and checked the keyhole! More generally, in the last few years I have been astonished at the proliferation of photos of pilots by props. Even one showing one of the presenters of the CAA's safety seminars: not only was the photo shoot unsafe – doubtless longer than a quick snap – but such photos disseminate the belief – subliminal which is worse – that props are benign. CHIRP does an essential job well.

CHIRP Response: Thank you for your kind words about our work, it's always a pleasure to know that our newsletters are being read and important lessons taken onboard. 'Always treat the propellor as live' was drummed into me from day one of my pilot training and even now I'm always hugely cautious when going near one so your comments certainly resonated with me. There are plenty of photo opportunities elsewhere around an aircraft so avoid the propellor arc at all times when it's not necessary to be near to it – without wishing to overstate the hazard, propellors can be dangerous things so why increase your personal risk for no reason? Aircraft magnetos work such that the system is 'live' unless they are selected 'off' (i.e. grounded) and so the engine will fire if the propellor is turned and the magnetos haven't been selected to 'off'.

Comment No.2: Congratulations on producing another excellent GA FEEDBACK – some really good 'added value' stuff from the CHIRP team in Edition 93. This prompted a couple of thoughts on two of the items in particular:

> **Report 4** (GA1313) – Reduced power on take-off due to selection of only one magneto. I have come across this myself and is a potential problem for instructors where the magneto key barrel can sometimes be 'hidden' behind the yoke when viewed from the right-hand seat. For some years now I have been teaching my students (and anyone else who will listen) to adopt the following when conducting the pre-flight 'mag checks'. Simple " TWO clicks LEFT – back to BOTH…then ONE click LEFT – back to BOTH". This makes it much less likely that the key will be returned accidentally to leave only 1 mag selected, with all the consequences for reduced power during the take-off run.
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> **Report 5** (GA1318) – IMSAFE mnemonic. You probably already know that there are a number of different versions of this mnemonic. The version I have been using (not sure where it came from – USA I think) replaces 'Eating' with 'External Pressures' for the final letter E. I like it because it brings the risks of 'get-home-itis/get-there-itis to mind as a consideration during the pre-flight planning stage in particular.

CHIRP Response: This edition of FEEDBACK has another report where only one magneto was selected for takeoff (Report No.7 – GA1332). Whilst 2 incidents doesn't make a trend, perhaps it's

time for all of us to think about how we conduct that vital check before takeoff so that we don't inadvertently put ourselves in a situation where we're getting airborne with only half the ignition system working. As for the IMSAFE mnemonic, we agree and would also like to see it expanded to cover the state of mind of the pilot about to go flying too; our suggestion is 'IAMSAFE' because that allows for 'Eating' (i.e. nutrition) to remain, whilst the additional 'A' for 'Attitude' and 'S' for 'Stress' should prompt people to consider external pressures and how they are approaching their flight that day.

I – Illness (do I have any symptoms that might affect my ability to fly?)

A – Attitude (am I emotionally ready and fully focussed on the flight?)

M – Medication (am I taking any prescription or over-the-counter drugs that might affect my performance?)

S – Stress (am I under pressure or have any worries and anxieties?)

A – Alcohol (have I been drinking within the last 24 hours?)

F – Fatigue (am I tired or not adequately rested?)

E – Eating (am I adequately nourished?

Comment No.3: As a private and commercial airline pilot, I want to say that I thought your article 'The problem with Threats and Errors' in GA FEEDBACK Edition 93 was very well written and interesting to read. As a 'commercial pilot', I am of course very familiar with TEM but it is so good to see this becoming increasing prevalent within GA. And the new CHIRP digital format is also great. So essentially this email is saying, keep up the good work, it is vital to keeping us all safe.

CHIRP Response: We're grateful for all forms of feedback on our work, be it plaudits or brickbats, so thank you for taking the time to contact us. TEM is an important tool in the safety toolbox but it has to be used honestly and it's outcomes acted upon – there's no point identifying threats and then doing nothing about them because 'it'll probably be alright'…

There are no comments yet.