

How to build a good safety culture

by Stefanie Becker

In a recent interview (Skysailor Autumn 2026), Carol Liang asked me: “How do you build a good safety culture?”

Immediately, a myriad of ideas shot into my mind – a wild mix of contents from my dual roles as a Senior Safety Officer Paragliding, and a researcher in attention, perception and decision-making. So I was quickly buried under an avalanche of ideas that all seemed very important but could not be easily distilled into a simple answer (at least not by me). 😊

I believe that we have built a good safety culture in my club (Wicked Wings, Toowoomba QLD), and I am going to share some of the things I believe were instrumental in getting there:

- (1) Better communication instead of penalties;**
- (2) Ensure the legitimacy of rules and consequences;**
- (3) Encourage individual, conservative decision-making;**
- (4) Create psychologically safe environments of mutual respect;**
- (5) Ensure high-quality supervision;**
- (6) Modelling expected behaviour and curb risk-taking behaviour;**
- (7) How club management can support a good safety culture;**
- (8) Identifying and resolving threats to a good safety culture.**

(1) Creating Change: Good Communication instead of Penalties

Flying clubs or flying communities are all very different and so what I’m going to outline won’t fit all, and what works for one club may not work for another club. Many clubs here and overseas follow a system where they advise new members and visiting pilots to read the club rules and site rules, and expect everyone to follow them. Violation of any of the rules is harshly penalised – often with flying bans.

While it’s very widespread, this approach is unlikely to be particularly effective. This system places too much responsibility for preserving club sites on people who haven't even been there (new pilots and visiting pilots). It also assumes that pilots will read the rules, understand them, remember them, and apply them correctly on-site. However, research on memory and learning suggests that these assumptions are often unrealistic as memory is limited^[1,2,3] and leaky^[4,5] (see Green Box 1). Importantly, the system also does not foster building a good safety culture, as it does not effectively prevent rule violations but mainly relies on communications *after a breach has occurred*. These communications or interactions will also often be negative and confrontational, which does not help building a positive safety culture.

Green Box 1: Why it's often unrealistic to expect pilots to know and follow site rules

The approach of expecting pilots to be able to follow all club and site rules after reading them can be doomed to failure, for the following reasons:

First, the number of rules a pilot has to remember has increased, due to changes at the SAFA/CASA level, an increase in housing and people near flying sites, and heightened concerns of landowners and clubs. Rules for accessing a site often span more than a full page. Our flying site at Ma Ma Creek is a good example of this, as we started out with one rule from the landowners, and currently have to observe ten landowner rules.

Now, research shows that we can remember only a limited amount of information, with estimates ranging from maximally 7 chunks of information such as written words^[1] to even fewer visual objects such as landing zones^[2,3]. So given that we often ask pilots to remember more than 10 things, even the most conscientious pilot will not be able to remember some of these items.

Second, memory is not permanent but we are all prone to forgetting things. According to the *Ebbinghaus Forgetting Curve*, we forget up to 50% of information within 24 hours, and up to 90% information within a month if we do not review or use it.^[4,5]

This means that pilots will fail to remember important information even when they studied it, especially in situations when they are distracted by meeting new people or absorbing other new information.

Communicate Early to Protect Pilots and Sites

At our club (Wicked Wings), we protect our pilots and sites by providing pilots directly with information, when it becomes relevant. One important club rule is that pilots have to announce their intention to fly a site on the club chat before flying – ideally, a day before. The club secretary (which happens to be me) then immediately provides information about the most important access rules on the group chat – especially when there are new pilots joining us or when it's been a long time since the rules have been posted.

Importantly, we respect memory limitations in our communications. Even though we have 10 access rules for one of our sites (Ma Ma Creek), I only post the 3 most important ones, to ensure that they are being followed, and explain the others later as they become relevant. The same principle applies to site briefings: Before each briefing, I identify the most relevant items (which usually depend on the conditions of the day) and focus on those to ensure that important information is retained and avoid overwhelming new pilots with information (see Blue Box 1 for an example of a streamlined briefing).

As memory is to some extent context-dependent^[6], it is important where we present specific information. Landing briefings are best conducted at the Landing Zone, while launch and flying briefings are best conducted at launch. This improves memory retrieval, while also reducing the information pilots have to absorb in a given time and context. In addition, it

allows pilots to directly observe important site features such as Landing Zones, No Landing Zones, and hazards directly, circumventing memory limitations and helping their orientation.

Blue Box 1. An example of streamlined briefings: *For the Landing Zone, I usually begin by identifying the main obstacles (e.g., fences and powerlines) and then tailor the briefing to the conditions. In light winds, the focus is on avoiding overshooting; in thermic conditions, on turbulence, collapses, and active flying near the ground; and in strong winds, on rotor avoidance and safe approach paths.*

Similarly, launch briefings always cover rotor areas and site-specific hazards, but the emphasis changes with the conditions. In strong winds, the focus is on launching and flying in wind (including avoiding being blown back); in light conditions, on launch techniques (including recognising when to abort), encountering strong sink; and in cross-wind conditions, on detecting and managing cross-wind during launch and flight.

The obvious limitation of streamlined briefings is that conditions can change. To manage this risk, we ensure that pilots carry radios so that additional information and guidance can be provided in flight if required.

From Initiative to Building a Culture

As the club secretary, I always encourage our club members to post the access rules when I'm not available, and encourage everyone to help remind each other of the most important rules. Getting other pilots to help with this task is the critical step from modelling behaviour to start building a culture.

As an SSO, I also teach these principles in SO workshops – regularly reminding our SOs how easy it is to overwhelm new pilots with too much information and stress the importance of limiting information, providing information in the context where it's relevant and building it up from there (see sibecker.com/aviation for the SO workshop slides).

A possible roadmap to foster a good safety culture that prevents breaches is thus to:

- (1) regularly provide important information instead of relying on pilots to get it themselves;**
- (2) try to provide information that is easily digestible, by**
 - (a) limiting information,**
 - (b) providing it at the right time and**
 - (c) in the relevant context; and**
- (3) regularly checking with pilots that they understand the information (or ask them to provide it, as active retrieval is more effective in consolidating memory).^[7]**

Enforcing Rules: Restoration instead of Penalties

As you may have suspected, punishing pilots for transgressions of rules becomes (almost) obsolete with the system above. Still – clubs serve as the go-between between landowners or other stakeholders and pilots, craft the rules and have the not-so-enviable task of having to enforce those rules. As the saying goes: A rule not enforced is not a rule. The challenge of rule enforcement is that penalties can strain relationships and undermine an otherwise healthy safety culture.

The art of rule enforcement is to protect the rules while also protecting the culture.

So – how can clubs best enforce landowner rules (or club rules)? Many clubs publish their rules along with the consequences of breaching said rules, which often include flying bans, occasionally paired with reporting incidents to SAFA. - Now, posting rules and the consequences for breaking them is an important first step to show that the club has norms that need to be taken seriously.

However, there are multiple potential problems with this system. First, using SAFA's incident reporting system together with a penalty can create resentment and misunderstandings about the purpose of the incident reporting system (which is a no-fault system to reduce accidents). Second, penalties teach you what not to do, but rarely teach you what you *should* do – or teach better behaviour, such as how to take responsibility. Most importantly, many rule breaches are not deliberate acts of misconduct but the result of forgetfulness, inexperience, misunderstanding, poor judgement, or a failure to appreciate the consequences of an action.

For this reason, restoration is often a better system for rule enforcement than punishment: Restoration provides pilots with an opportunity to understand the impact of their actions, take responsibility, and repair any damage caused.

At Wicked Wings, pilots are often given the choice between accepting a penalty or taking practical steps to repair the damage. For example, if a pilot has upset a landowner, we may offer the pilot an opportunity to apologise personally to the landowner and make amends (such as bringing gifts or offer other forms of restoration).

Restoration has positive flow-on effects for the affected landowners, the club and the pilot: The landowners will usually accept the apologies and forgive the pilot(s), as they feel respected (again), and the restoration made their grievance go away – which is something the harshest punishment of the pilot cannot do. Moreover, the affected pilots are usually very receptive to the restoration approach and often volunteer to apologise without prompting, pre-empting the need to hand out a penalty, leading to good relations between pilots and club committee members.

Research in criminology, compliance theory, and aviation safety suggests that restorative approaches often achieve outcomes that are at least as good as, and frequently better than, punitive approaches, also with respect to reducing recidivism.^[8,9,10] However, neither punishment nor restoration is, by itself, the strongest driver of compliance.

Rather, research has revealed that rule-following increases:

- when people perceive rules and authority figures as legitimate^[11],
- authority figures are visibly present and engaged on-site^[12], and
- when people strongly identify with that group.^[13]

(2) Ensure the Legitimacy of Rules and Authority

A club with a strong safety culture has a clear and shared purpose, values that are widely supported by its members, and governance processes that consistently advance the club's primary objective: maximising opportunities for safe flying. Rules transparently serve this purpose, are applied fairly, and promote safety, participation, and trust rather than personal interests, politics or unhealthy power dynamics. Authority within the club derives its legitimacy from serving these shared goals and values, and can only be sustained when these principles are applied consistently.

One aspect that often leads to problems is that clubs often need to limit or restrict flying to preserve access to a site, because of the demands of one of the stakeholders, which can include landowners, Airservices, CASA, SAFA, National Parks and local councils. Other limitations on flying are in place to keep pilots safe.

Rules that prevent or limit flying need to be clearly linked to safety, site preservation, or legal obligations to be perceived as legitimate, and should not be more restrictive than necessary. Most pilots are unaware of the effort required to keep sites open and safe. In a healthy safety culture, experienced pilots and club officials explain the reasons behind rules, helping others understand, accept, and support them.

As rules should always be clearly linked to risk, a good option is to be solution-oriented and focusing on managing the underlying risk in a way that still allows pilots to fly safely. For example, equipment requirements such as helmet, reserve and radio should generally be non-negotiable, especially when a club is expected to supervise the respective pilot. However, at our club, if a pilot is missing a required item, we will often lend them the equipment. This allows the club to foster flying while managing the underlying risk and maintaining safety standards.

Similarly, our club does not use *curfews* – blanket restrictions that prohibit novice pilots from flying during particular seasons or times of day. The problem with such rules is that conditions are not consistently hazardous or suitable for novices at particular dates or times. Instead, we rely on informed judgement. Instead of curfews, our Safety Officers make an effort to get to know the pilots and understand their capabilities, which enables them to identify which conditions are suitable for them and determine the best pathways for their progression. This allows them to make decisions that are tailored to the actual risks rather than relying on broad restrictions.

While the approaches exemplified above may not be suitable for every club, they illustrate that the same risk can often be managed in different ways – without compromising safety or undermining the credibility of the club and its rules.

If Rules Conflict, Safety Must Come First

Building a good safety culture requires putting the safety of the pilots first. That means that if a particular landowner rule or club rule endangers a pilot in a specific situation, the pilot needs to prioritise their safety.

For example, if a pilot is unsure whether they can safely clear an obstacle such as a power line, they may have to land in a designated no-landing zone. While this may create inconvenience for the club, the landowner or their neighbours, the consequences of a serious accident are usually far worse for everyone involved (including the landowner and their neighbours, who are unlikely to appreciate damaged infrastructure or a serious accident on the property).

In a good safety culture, the no. 1 rule for all pilots is to ensure that they do not get hurt. All other rules are secondary to that. Compromising this principle would ultimately undermine the legitimacy of the club's rules, as their primary purpose should be to promote safety.

(3) Encourage individual, conservative decision-making

a) Focus on decision-making rather than skills and the importance of assessments. The SAFA training and supervision standards focus largely on flying skills. However, many accidents are not caused by poor handling, but by poor decision-making, rooted in misjudging the conditions, overestimating one's abilities, or motivational pressures such as peer pressure or the perceived need to fly.

A strong safety culture therefore promotes conservative decision-making and actively counters group bravado, record-chasing, and the pressure to fly. Pilots must be able to say, "I'm not flying today" without losing status or feeling the need to justify their decision.

When a pilot tells me that they have a headache, feel dizzy, or simply feel a bit "off" and have decided not to fly, I will usually applaud that decision. It demonstrates mastery of one of the most important skills in aviation: the ability to recognise personal limitations and to know when not to fly.

Pilots are routinely trained and assessed on their ability to judge weather, conditions, and other external risks. Equally important is the ability to assess oneself. Pilots who are still developing this skill are provided with the Ready-to-Fly Checklist (see www.sibecker.com/aviation), which encourages systematic self-assessment before flight.

Flying safely requires pilots to continuously assess both the external conditions and their own physical, mental, and emotional state, and to have the discipline and courage to stand down whenever either falls outside the envelope of flying safely.

b) Focus on decision-making rather than outcomes. A good safety culture moreover focuses on decision-making rather than outcomes. In our sport, poor decisions are not always punished and may occasionally even be rewarded, simply because we get lucky. Conversely, conservative decision-making can occasionally lead to poor outcomes because of unexpected events such as strong sink, turbulence, or sudden changes in the conditions. Pilots therefore need feedback on the quality of their decisions.

In a good safety culture, good decision-making should always result in positive feedback, and risky decisions should be reviewed and discussed, even when nothing untoward happened. In this respect, it's also important to build a common understanding what conservative decision-making actually is (see Blue Box 2).

Blue Box 2: What conservative decision-making is (and what it's not)

Good decision-making does not always guarantee a good outcome. Unexpected strong sink, turbulence where it was not expected, or sudden changes in the conditions can occasionally create difficulties despite solid decision-making. Not all of these can be controlled or predicted, but in a good safety culture pilots learn that it's important to know the weather predictions for the site and the day and to constantly monitor the conditions for possible changes.

Importantly, conservative decision-making means avoiding objectively dangerous situations, not avoiding all risk or discomfort. A common mistake among newer pilots is to leave a thermal early or to avoid it altogether, because the air feels rough. However, flying next to a thermal often results in strong sink, which can quickly create a more hazardous situation by reducing height and options. Staying in a thermal will often be the safer and more conservative decision, as additional height usually translates into greater safety margins.

In a good safety culture, these decisions are openly discussed among pilots so that everyone can learn from each other's experiences and continually improve their decision-making skills.

(4) Create psychologically safe environments

Creating a psychologically safe environment is vital for a good safety culture. Research shows that performance in complex tasks suffers when cognitive load increases or attention is divided.^[10,14] A psychologically safe environment removes unnecessary fears such as being ridiculed, harshly criticised, or unfairly penalised. By removing these unnecessary concerns, a psychologically safe environment allows pilots to focus fully on flying, which is one of the most effective ways of increasing situational awareness, guarantee optimal decision-making and reducing accidents.^[10, 14]

Hallmarks of a psychologically safe environment are mutual respect, trust, shared responsibility (instead of blaming and shaming), and a culture of care and learning (instead of power/dominance or fear and intimidation).

a) Mutual Respect and Trust: A strong safety culture is built on mutual respect. In some flying communities, respect is unfortunately reserved for senior club members and highly-skilled or successful pilots. However, respect should never be contingent on status or skill. Systematically disrespecting a group of people is also inconsistent with a good safety culture, as disrespect is bound to make pilots frustrated or even angry, and may result in non-confident pilots. Both excess negative emotions and low confidence are hazardous, as they impede clear thinking and good decision-making.[15]

It is the responsibility of club officials and SOs to enforce rules of respect and to stop disrespectful behaviour immediately whenever and wherever it occurs – be it on the club's chat group, on the hill, in a car, or anywhere else. Once a club has built a culture of mutual respect, many behaviours that endanger safety become unthinkable, such as blaming or publicly shaming pilots for their mistakes, ridiculing or name-calling pilots, discouraging pilots from flying or raising safety concerns.

Of course, emotions (and blood pressure) can run high in paragliding, and despite our best intentions it can happen that another pilot, SO or Duty Pilot ends up yelling into the radio or at a person in the heat of the moment. When that happens, it is important to apologise as soon as practical and explain why this was such a dangerous situation.

What distinguishes a healthy safety culture is not the absence of such mistakes, but how they are handled.

b) Shared responsibility and a culture of care and learning

Another important aspect of a strong safety culture is shared responsibility: When a pilot breaks a rule or makes a mistake, clubs should not only ask what the pilot did wrong or could have done differently, but also whether there was anything the club could have done to prevent the incident. In my experience, it is often possible to identify gaps in communication. Shared responsibility and admitting one's own mistakes helps create trust and encourages pilots to openly discuss their own mistakes.

Pilots must feel safe to admit errors, raise concerns, and discuss incidents without fear of public humiliation. Discussions about breaches should therefore be conducted respectfully and confidentially, with the focus on understanding what happened and preventing similar incidents in the future.

Someone with a character that does not allow them to apologise, own their mistakes, take responsibility or someone who cannot take care of others or who sees everyone else as inferior is not suitable for any of the official club positions or as an SO. This means we need to be selective in who we support for these roles.

(5) Ensure High-Quality Supervision

a) Trust the Learning Process and Reporting Culture. A good safety culture allows new pilots to grow. We will usually encourage pilots to try out new things, gain new skills and extend their comfort zone to facilitate their progression. We do not expect newly certified pilots to have many skills but trust the learning process.

We also actively facilitate the learning progress, for example in using a Q&A format for debriefings: If pilots make a mistake, we don't immediately tell them but instead check first that they are ok (including mentally) and able to have a conversation. If that's the case, we will usually ask them what went wrong and see if they can correctly identify the mistake and know what they could have done better to prevent the mishap. If pilots have the wrong idea about their accident, we point to the more salient points and ensure pilots understand them. Many pilots are too hard on themselves, which can hinder their progression. In these instances, we reassure them that the best way to prevent mistakes is to accept them and to learn as much as possible from them.

If the mistake put the pilot in danger of serious injury or worse, we will usually encourage them to fill out an incident report, emphasising that there will be no penalty, but that it's a tool that allows them to reflect on what had gone wrong and how they can prevent it in the future. We will also usually offer support in filling out the SAFA incident report, and will inform the club committee and the other SOs of the incident.

To reflect on past actions, identify potential mistakes, learn from them and share the lesson with other pilots is a non-negotiable part of good airmanship and a core ingredient of a good safety culture.

b) Carefully selecting your SOs

The SOs play a vital role in the safety culture. It is fairly obvious that not every PG4 or PG5 has the (soft) skills or the right motivation to become an SO. As SAFA does not specify any other skills apart from flying skills, clubs are hesitant to set down their own rules, and feel compelled to allow everyone to become an SO who has attended the SO workshop. Here the club officials and the SSOs need to be more decisive and selective, as this is an important decision.

A truly terrible SO or SSO will wreak havoc with the club, by discouraging new pilots to become members and stopping the club from growing. Especially the smartest pilots will quickly turn their backs on the club, which will make it harder for the club to reach excellence in any domain.

Given the huge costs of a bad SO or SSO, clubs should carefully select who they encourage to become an SO or SSO. All aspiring SOs should be vetted, ideally by monitoring them closely when they act as duty pilots. The decision who should become an SO for the club should be made by the club management, the existing SOs and the SSOs together (e.g., via a dedicated chat group or in an online meeting).

Never allow a pilot to become an SO if they lack the skills, knowledge, motivation or attitude to be a good SO (see box Blue Box 3).

Blue Box 3: What skills, knowledge, motivation, and attitudes do we require of a good Safety Officer?

It is not necessary for Safety Officers to be exceptional pilots. Rather, they must be effective communicators who can explain rules, provide constructive feedback, and conduct debriefings in a manner that promotes learning and trust. They require a sound working knowledge of SAFA and CASA regulations, as they are often responsible for interpreting and explaining these requirements to pilots.

Good Safety Officers also possess sound judgement and situational awareness. They must be able to assess risks, recognise when conditions are changing, identify emerging hazards, and make sound decisions in situations where the best course of action is not immediately obvious. They are able to diagnose mistakes accurately, including their own, and suggest practical ways of reducing risk in the future.

Safety Officers are motivated first and foremost by a desire to keep pilots safe and to protect the long-term interests of the flying community. As a result, they do not need to be liked by everyone. They are willing to make difficult decisions and enforce rules when safety, site access, or the future of the club is at risk, even if doing so is unpopular with a small number of highly motivated pilots.

Equally important are the personal qualities of conscientiousness, honesty, integrity, fairness, humility, and respect. Safety Officers must be trusted by the pilots they serve. A good SO places the interests of pilots and the broader flying community above personal interests or ego and works collaboratively with others to build and maintain a strong safety culture. When difficult decisions need to be made, it should be crystal clear that they are motivated by genuine concern for pilot safety, the welfare of others, and the long-term future of the site, rather than by a desire to exercise authority.

c) Regularly training, practicing and refining supervision skills

SAFA makes no recommendations about training duty pilots; but let's not be fooled by this: Most pilots will need some coaching to supervise others effectively. As an SSO, it is my duty to hold workshops that people need to attend to become SOs. For these workshops, I have developed a set of training slides that introduce prospective Safety Officers to their role and responsibilities. The workshops also include a substantial interactive component in which prospective SOs are asked to assess conditions, identify potential errors, and discuss appropriate responses and remedies (for the workshop slides, see www.sibecker.com/aviation).

Second, I have implemented a system for training supervisory skills: At our sites, all PG4 pilots and above are actively involved in supervising PG2 pilots. This increases safety, as the

additional pilots often identify issues that might otherwise go unnoticed. The system also helps build a strong safety culture by encouraging experienced pilots to take responsibility for the safety of others and by creating opportunities to develop and refine their supervision skills. In turn, involving PG4s in supervision allows SSOs and SOs to observe, mentor, and, where necessary, coach pilots in their supervision practices, helping to develop the next generation of competent duty pilots and Safety Officers (see Blue Box 4 for a coaching example).

Blue Box 4: How do we coach pilots to become good duty pilots?

This is a delicate matter that again requires strong interpersonal skills. Good coaching requires spotting the mistakes of duty pilots, amongst them: (1) intervening too late and then distracting a novice pilot in a difficult situation; (2) instructing PG2s (which we are not allowed to do unless we are instructors); (3) warning PG2s of hazards that do not actually exist (e.g., because of mis-judging the wind-direction or wind strength); (4) using jargon or making otherwise unclear radio transmissions (note that novice pilots often do not know what any of these words mean: ‘crab’, ‘blown back’, ‘sleddie’, ‘turn and burn’; ‘front vs. back of the ridge’, ‘pinned’, ‘bombout’, ‘XC’, ‘stall’, ‘spin’); (5) communicating in an overly forceful or emotional manner.

When providing feedback, it is important to first thank PG4s for helping with supervision, acknowledge that supervising others is often difficult, and highlight that mistakes are part of the learning process. Discussions about supervision should generally be conducted privately (unless immediate safety concerns require otherwise), and SSOs should resist the urge to push too hard. Often, simply raising an issue or asking a thoughtful question is enough to promote reflection and improvement later down the track and leads to noticeable improvements.

d) Understanding and respecting limitations of novice pilots

A good Safety Officer understands that learning to fly places a significant cognitive burden on novice pilots. Experienced pilots perform many tasks automatically, but learners must consciously think through each step of launching, flying, and landing. As a result, they are more susceptible to distraction, stress, and information overload.

This has important implications for how Safety Officers interact with novice pilots. Pilots should not be rushed, distracted during critical tasks, or overloaded with information at inappropriate times. Many mistakes are not caused by recklessness or poor attitudes, but simply by the limits of human attention and working memory.

For this reason, we encourage pilots to take their time, complete their checks carefully, and only launch when they feel ready and able to devote their full attention to the task. Safe launching requires an accurate assessment of both the external conditions and the pilot's internal state, including their physical, mental, and emotional readiness to fly.

Good SOs help pilots recognise and respect their current limitations, while simultaneously helping them to slowly overcome them as they hone their skills.

(6) Modelling expected behaviour and curb risk-taking behaviour

In a good safety culture, club officials, SOs and senior pilots need to consistently display the behaviour they want to see from others. Novice pilots often spend a significant amount of time observing others and what they see will shape their learning, attitudes and norms.

a) Observational Learning: Imitating Behaviours

We all have a natural tendency to mimic behaviours we see (not least thanks to the mirror neurons in our brain ^[15]). This automatic tendency will result in a good safety record if everyone flies conservatively, but can have fairly negative consequences when pilots display risky behaviour – such as scratching low over obstacles or unlandable areas; doing acrobatics below 500m, or performing high-speed manoeuvres close to the ground (e.g., wing-tip touches). The fewer skills pilots have, the more likely are they to think that this looks easy and fun, and some will try to mimic it. Needless to say, this often puts lesser-skilled pilots into hospital or worse.

We need more awareness that our natural tendency to imitate others can be a real problem for flight safety – at the SAFA level, in our flying communities and especially for pilots displaying risky behaviour and novices who cannot realistically gauge their own skills. To protect other people in the face of pilots engaging in risky flying, it is important to remind people that this is an example of high-risk flying that may require certain skills, types of wings and conditions to have a happy ending. SOs should also pair this with a reminder to tell pilots to still watch where they are going rather than keeping their eyes glued on the pilot doing tricks or engaging in risky flying, to prevent collisions.

Ultimately, however, actions speak louder than words and seeing someone doing risky manoeuvres will never help with the safety record of a site. If a club decides to support risky flying and they have novice pilots around, they need to accept a higher rate of accidents, because actions always speak louder than words.

b) Understanding Norms

We all consistently infer what is acceptable, expected, and valued in a certain context by observing the behaviour of the members in a group. Written or verbal instructions are often subject to interpretation, and we all know from experience that there can be a disconnect between what is said and how it is done. The behaviour of others provides the most important clues to understanding how the rules should be interpreted, and what behaviours are encouraged, tolerated, or discouraged within a flying community.

Amongst other things, pilots learn what risks are tolerated, how mistakes are handled, and what behaviours are respected by observing the actions of other members of the community. For this reason, it is not possible to build a good safety culture through rules

alone. A good safety culture requires pilots to consistently model the behaviours they wish to see in others and to conduct themselves in a manner that reinforces the values of the community.

Club officials, instructors, Safety Officers, and senior pilots must be willing to address behaviours that undermine those values. Failing to address unsafe or disrespectful behaviour sends a powerful signal that such behaviour is acceptable, regardless of what the written rules may say.

c) Legitimacy of Rules and Authority

It is particularly important for club officials, Safety Officers, instructors, and other respected members of the community to consistently model the behaviours they expect from others. Their actions shape not only how pilots interpret the rules, but also whether those rules and the people enforcing them are perceived as legitimate.

As discussed earlier, pilots are far more likely to internalise rules and follow them voluntarily when they understand their purpose and perceive them as fair and justified. This process is strengthened when those in positions of authority consistently demonstrate the same standards of behaviour that they expect from others. Conversely, when leaders disregard the rules, behave disrespectfully, or are seen to receive special treatment, confidence in both the rules and the organisation quickly erodes.

d) Building a Community

The behaviours displayed within a flying community do more than shape safety outcomes. They also influence whether pilots trust those around them, identify with the group, and develop a genuine sense of belonging.

Pilots are more likely to identify with and feel connected to a community when its members consistently embody its values. Conversely, a single individual who repeatedly behaves contrary to those values can undermine trust, weaken the club's identity, and make it more difficult for members to embrace the culture the club is trying to build.

(7) How club management can support a good safety culture

Many of the elements discussed in the previous sections ultimately depend on support from club management. In particular, committees contribute to a strong safety culture by:

1. Establishing sensible and proportionate rules;
2. Communicating rules and consequences transparently;
3. Enforcing rules consistently and fairly, preferably through restorative rather than punitive approaches;
4. Selecting Safety Officers with due care and diligence;
5. Leading by example;

6. Investing in initiatives that improve safety;
7. Encouraging and supporting member-led initiatives; and
8. Acting decisively when confronted with threats to safety, site access, or the future of the club.

Points (1) to (5) were discussed in previous sections, and the role of the club committee is hopefully sufficiently clear. Points (6) to (8) deserve some elaboration.

8.6 Investing in initiatives that improve safety

Many safety-critical tasks are often performed in working bees by people who volunteer their time to take care of the club's wind stations, mowing the launch and landings areas, removing lantana and saplings, etc. Working bees can strengthen club cohesion and enrich a club's life. However, more than 3-4 working bees per year also carries some risks, especially if the same few people end up volunteering, as this can lead to volunteer burnout and resentment towards other club members who do not volunteer regularly, creation of an in-group that expects special treatment, or too much pressure to volunteer.

Especially when clubs take membership fees, they should consider investing some of that money in the maintenance of safety-critical infrastructure. Especially regular high-frequency tasks like mowing and heavy-duty work at remote sites such as felling trees are often better outsourced and paid for. Where club members undertake substantial ongoing work, paying them for their services is generally preferable to granting informal privileges or exemptions.

A club management that spends money on these safety-critical tasks is an important ingredient of a good safety culture, as it enhances the credibility of club management, avoids conflict between volunteering and non-volunteering members, and allows the club to apply standards consistently, regardless of who is involved.

8.7. Encouraging and supporting member-led initiatives

A strong safety culture depends on active participation and collaboration. While club committees and Safety Officers provide leadership and direction, the best ideas for improving safety, maintaining sites, training pilots, and strengthening the club can originate from members.

For this reason, it is important to create an environment in which members feel empowered to contribute ideas, identify problems, and take initiative. When pilots are encouraged to take ownership of projects, they often bring valuable expertise, energy, and perspectives that would otherwise remain untapped.

This requires a leadership style based on collaboration rather than control. When all decisions are centralised and every activity is micromanaged, members learn that initiative is neither expected nor valued. Over time, this discourages participation and weakens the collective responsibility on which a strong safety culture depends. Moreover, clubs inevitably

waste the knowledge, experience, and initiative of their members, which is not only short-sighted, but can also erode trust and mutual respect.

Especially strong leaders often need to learn when to step back and empower others, as building a strong safety culture is a team effort rather than the responsibility of a small group of leaders.

8.8. Acting decisively when confronted with threats to safety, site access, or the future of the club.

In General Aviation, a principle that is implemented very widely is that of *Just Culture*.^[10] A Just Culture recognises that honest mistakes are inevitable and treats them as learning and development opportunities. However, reckless, deliberate, or repeated violations of safety rules are treated with restrictions or other disciplinary measures. Disciplinary action is intended to protect pilots and the safety culture rather than to punish for its own sake.

While this distinction between honest mistakes and deliberate reckless behaviour resonates strongly with me and probably most other people, we have good reason to be sceptical of the effectiveness of sanctions or punishments. Education, restoration, mentoring, and other measures that encourage learning and personal responsibility reduce recidivism even of repeat offenders and hardened criminals, so the clubs can feel safe in treating these offences in the same way as honest mistakes.^[8,9,10]

An advantage of this approach is that it quickly becomes apparent whether a pilot is willing to learn from mistakes, accept feedback, and take responsibility for their actions. A persistent inability or unwillingness to do so should be regarded as a red flag. In this instance clubs need to act decisively and should consider removing the pilot permanently to protect the other pilots, their flying sites and the club's safety culture.

(8) Identifying and Resolving Threats to a Good Safety Culture

Perhaps the most difficult aspect of maintaining a good safety culture is recognising when things are going wrong. This can be surprisingly challenging because measures that appear effective on the surface may have unintended consequences. In some cases, it is possible to make pilots behave very well outwardly while undermining the very skills, attitudes, and decision-making processes that keep them safe. Because accidents are relatively rare and the effects may emerge only gradually, such problems can be very hard to detect.

For this reason, clubs should regularly reflect on whether their rules, procedures, and practices are achieving their intended purpose. Drawing on human factors principles, remaining open to feedback and criticism, and periodically reviewing existing practices can help identify unintended consequences before they become entrenched. Particular attention should be paid to factors that undermine pilot autonomy, personal responsibility, trust, mutual respect, or the willingness of pilots to make independent safety decisions.

This includes excessive control, peer pressure, unhealthy politics, and other social dynamics that discourage good judgement or open communication. Such issues are not merely unpleasant; they can actively undermine safety culture by eroding trust, discouraging participation, and driving pilots away from clubs. In a 2025 survey conducted by QSA, club politics and interpersonal conflict were among the most frequently cited reasons why pilots chose not to join a club.[16] Given that clubs often provide mentorship, support, and a safer flying environment, this represents a loss not only for the clubs themselves, but also for pilot safety.

Ultimately, a strong safety culture is never finished. It requires continuous reflection, a willingness to learn, and the humility to recognise that even well-intentioned measures can sometimes have unintended effects.

Final Thoughts and Summary

As noted at the outset, many of the recommendations in this article have been shaped by my experiences as a SO and later, SSO and may not apply to every club or flying community. Especially some of the stronger views expressed here stem from lessons learned through my own mistakes. For example, my conviction that pilots will do as we do rather than as we say was something I have observed repeatedly over the years.

I am strongly motivated to spare others the painful lessons I had to learn, but as a researcher, I am also the first to admit that individual experiences may not be representative. Hence, I encourage everyone to evaluate the ideas presented here and decide for themselves which recommendations are most appropriate for their own clubs, sites, and flying communities.

If I had to reduce the discussion above to three overarching principles, they would be the following:

- First, a good safety culture is a caring culture that looks after its members, landowners, and flying sites.
- Second, in a good safety culture, club officials, SSOs, and SOs hold themselves to the highest standards while recognising that pilots are human, make mistakes, and learn at different rates.
- Third, a strong safety culture continuously reflects on their practices, remains open to feedback and improvement, and regularly asks whether it is creating the best possible conditions for safe flying.

I hope this article encourages further discussions of these topics within as well as across clubs. I would definitely welcome feedback, alternative perspectives, and discussions, and would also be keen to learn what has - or has not - worked in other flying communities.

Safe flying, everyone! 😊

[Disclaimer: The views in this article reflect the author's own views and do not reflect the views or opinions of any of the organisations that the author is a member of.]

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