Safety Bulletin 14

Even as I type this I'm looking out at a perfect sky and listening to the whatsapps pinging as pilots head for Clough … which doesn't help my karma. But lots to do before I'm allowed to get on the plane for Australia. I'll be thinking of you!

For obvious reasons it's been a quiet time on the safety front and it would be nice if it stayed that way. For this first Bulletin of the new season I though it might be useful to revisit the safety system we established back in 2015, both for the benefit of new pilots (new to flying or the club) and as a reminder to the rest of us. I'll start with by quoting the introduction to my safety manifesto in 2015.

"I have been involved in a considerable amount of discussion over the last few weeks within the club and with our sister northern clubs. It is clear that a consensus exists within the paragliding community that an intrinsically unsafe culture has developed. Just to re-visit my election leaflet for a moment; whilst safety may be high in most pilots' minds it is low to non-existent when it comes to communication after the event. Safety only raises its head when an injury occurs and scrutiny can't be avoided. Near misses and lucky escapes are not reported and only discussed in the pub or on the fell side, if at all. Hence a mass of vital lessons is lost to the flying community. My first task is to address this failure of communication."

I admit to a degree of trepidation when implementing a system that called for such a high degree of openness in an area where in the past pilots have been distinctly reluctant. It transpired that I was being overly pessimistic and the level of engagement exceeded my most optimistic expectation. I found it particularly interesting that the system we introduced to provide the option of anonymity has rarely been used. However, those that have chosen to remain under the radar have appreciated the option and it has facilitated reporting and discussion on many important safety issues. (Examples where pilots have chosen anonymity are, Suitable Footwear for flying http://www.cumbriasoaringclub.co.uk/forum/viewtopic.php?f=20&t=4010 and the inherent dangers of coastal flying
http://www.cumbriasoaringclub.co.uk/forum/viewtopic.php?f=20&t=4399)

Another trend that has proved extremely beneficial has been the reporting of the seemingly trivial. Small things, like a failure to fasten a helmet before launching or failure to check lines or speed-bar links before relaunching, highlighted an endemic failure to carry out pre-flight checks. None of these reported incidents resulted in accident or injury, but the potential is there and members have benefitted from continuous reinforcement of lessons originally taught on the training hill.

One aspect of the system that has been astonishingly impressive (and I choose these words carefully) has been the quality and inclusivity of the forum discussion. With only a couple of exceptions, forum chat has been positive, informative and focused without descending to the

personal. I find it quite humbling that some of the best and most experienced pilots in the country, let alone the club, have been so willing to share their experience and opinions. It is gratifying to observe pilots at all levels of experience being willing to debate and disagree, sometimes fervently. The cloud flying thread provides an example of such a reasoned discussion. (http://www.cumbriasoaringclub.co.uk/forum/viewtopic.php?f=20&t=4204) The 'Power Line' incidents, initially publicized on YouTube, showing a very lucky escape, invoked a timely look at our approach to this particularly ubiquitous hazard. Our 'findings' were gratefully received internationally on the Paragliding Forum.
(http://www.cumbriasoaringclub.co.uk/documents/sfy/sfy373.pdf)

This is not intended as an auto-congratulatory monologue, only to establish what has gone well and how we intend to develop the system for the coming season.

One element of the club safety system which did not take off in the manner I expected was the use of incidents@cumbriasoaringclub.co.uk . The original intention and expectation was that this would provide the normal means of reporting incidents. It has been used twice so far, firstly at the end of 2015 to wish the CSO a happy Christmas, thank you; and more recently to ask if it was still working, it is, thanks for asking. Whilst seemingly redundant it costs nothing so for the moment it can remain alone and unloved but feel free to use it if the mood takes you.

The other element of the safety system that has been less used than I expected is the Safety Panel. The panel was devised to provide a level of expertise in any considerations of incidents or accidents. NB. "consideration" not "investigation"! The willingness of some of our most experienced pilots to get stuck into the forum discussions meant that the members rarely felt the need to get involved as a panel although panel members contributed freely as individuals. Perhaps the greatest value of the panel is in the support it provides for the CSO. We'll keep the system going. There a couple of changes:

- Chair and CSO   Chris Field
- Equipment member   Steve Giles
- XC member   Yet to be appointed
- Training member   Mal Grout
- New pilot member   Alistair Maltby

Many thanks to the outgoing members, Ali Guthrie (XC) and Rhett Harrison (new pilot, who very rapidly gained too many flying hours to qualify)

It's probably worth reminding ourselves how the system operates and what we are trying to achieve. Flying is inherently hazardous. We will not eliminate accidents and injury. We can, however, by working together as a community, reduce the number and severity of accidents. A useful rule of thumb is – if a pilot was injured having had an accident due to a matter you were aware of but failed to raise, would you feel a bit responsible?

The reporting system is simple, flexible and non-bureaucratic. If a pilot wishes to report an incident or accident or raise an issue, he or she has several choices. You can post it directly on the forum for open discussion or inform the CSO (email, text, conversation in the pub or whatever). The CSO responds to the initial report by the most appropriate means, probably email but possibly SMS, phone or in person. We (CSO, reporter and the pilot if not the reporter)

decide on the best way forward. This will give absolute regard to the desired level of discretion/anonymity.

Having let any discussion run its course the CSO will provide a summary of the event including any useful lessons and recommendations. This will be published in the Safety Bulletins which are 'emailed to all members' and archived in the 'Knowledge Base'. The CSO is responsible for ensuring any recommended action is taken. Typically, this involves adjustments to Site Guides.

So, to finish with a plea. Can all pilots please enthusiastically embrace the club safety system. It has proved its worth and has been admired and copied by other clubs.

Radios and Safety

Many, if not most, of us carry radios, for a variety of reasons. The use and abuse of radios by free-flyers was discussed at length on the forum last year.
http://www.cumbriasoaringclub.co.uk/forum/viewtopic.php?f=20&t=4444   This resulted in further discussion, investigation and debate which indicated a high degree of consensus on the problems but less agreement on the solutions.

Everyone agrees that radios have an important safety function and modern radios are cheap and simple to operate; ergo every pilot should carry a radio, you'd think. However, there are many reasons why pilots don't carry radios.

- The legality of radio use is, at best, dubious and cannot be made compulsory.
- Many pilots lack the skills and knowledge and interest to operate a radio whilst flying.
- Many pilots are put off by the amount and nature of radio traffic.

The full range of the general argument about radio use in a variety of situations will be found in the forum debate and in the latest issue of SFC. http://www.cumbriasoaringclub.co.uk/documents/sfc/sfc399.pdf .

Whilst accepting that it is a tall order to completely change pilots' attitude to radio use, in the relatively narrow context of safety there are a few actions that we can easily take to mitigate against the sort of problems encountered on Wether Fell and Barton last year.

- All pilots should carry a radio. Even if they do not wish to transmit they will be able to monitor the local net and be kept informed in the case of an accident.
- Pilots flying recognised club sites should be tuned to that local club's frequency. In the event of an accident it will be possible to quickly update pilots. e.g. approach of a CASEVAC helicopter. (The situation at Wether Fell when pilots were on 4 separate frequencies is, frankly, bonkers).
- The frequencies of our adjacent clubs are:
  - CSC   143.700
  - Dales   143.850
  - Pennines   143.950
  - NHPC   143.950
  - Wingbeat   143.750

- We should (in the words Catherine suggested on the forum) "all pipe down". The most frequently cited reason given for not being on the radio was the amount of rubbish chatter; noisy, irrelevant to 99% of other pilots and distracting. Many have observed that it is about 5% of pilots generating 95% of the traffic.

Please note, this suggestion only deals with the scenario of flying a soaring site. Concentration of gliders, frequency of launches, landings, busy skies and the presence of low airtime pilots make it the most likely scenario for accidents. There will be situations when pilots will not be willing or able to comply with this proposal (e.g. flying XC as a gaggle, pilots in transit). These situations are all discussed in the Way Ahead Paper which I've attached below for those who might be interested or at a loose end.

Please accept this proposal in a spirit of good intentions. No one is being coerced, there is no compulsion, just a suggestion that could improve safety.

So, here's hoping for a brilliant season.

Fly lots, fly safe!

CSO

P.S. Just got a whatsapp from Pete Price: 'There's 30 pilots on Clough'. And I'm writing a Safety Bulletin! Bollocks!

On the use and abuse of VHR radios by free flyers.

(Discussion Document, views and comments are welcome)

I had a dream! It was a sunny day on Clough Head and I saw a sky filled with paragliders, maybe forty or more from clubs all over the north. Each one was carrying a VHF radio tuned to 143.7.   A few XC gaggles were forming prior to setting off down the ridge; already tuned to their chosen chat frequency but each pilot was monitoring 143.7 in case of an emergency. The airwaves were practically silent, just an occasional short transmission message receiving a brief response and no transmissions lasting more than 5 to 10seconds. And then a large Gloucester old spot flew into my vision….

1.   A couple of recent incidents (Barton and Wether Fell) highlighted some of the long running issues affecting radio use by free flyers. It's clear that the problems are fairly universal. I was tasked by the CSC committee with finding possible solutions.

2.   VHF radio use has some clear benefits.

- Safety is the most obvious benefit, both in incident/accident management and for warning of potential threats and hazards. The safety benefits were clearly demonstrated by recent events.
- Radio has an essential role in coaching and training.
- The ability to share information is particularly valuable to XC gaggles. XC performance and enjoyment is improved by good radio communications.
- The above points are 'hard' benefits, radios use also provide some 'soft' benefits. Paragliding is for many a social activity and some pilots report pleasure and an increased feeling of security and enjoyment from an active radio net, even if they are not actively involved.

3.   There is a negative side to radio use. It is frequently cited as the most annoying aspect of flying. The common complaints are:

- Irrelevant chatter which can be at best irritating and worse a distraction from safe flying.
- Long rambling transmissions are at best irritating but can block out more important or urgent transmissions.
- Radios jammed on 'transmit' block the net.
- Objectional language puts potential users off.
- Poor radio procedure leads to confusion, repetitive transmissions frustration.

A significant number of pilots report a reluctance to use VHF radios for some or all of the above reasons. This is a pity as it negates the strong positive benefits, particularly safety.

4.   VHF radio use by the free flying community is of dubious legitimacy. This reality hinders any formal or universally imposed top-down regulation. Moreover, given that the ethos of the free flying community resists perceived over-regulation any recommendations cannot involve mandatory radio use.

5.   All clubs have a preferred operating frequency. This has the benefit of providing an established net for any pilot, local or visitor, intending to fly in that club's area of influence.   However, on occasions when large numbers are flying the club radio net can become busy to the point of being unworkable. Some visiting pilots choose to remain on their own club frequency or move to an alternative vacant frequency. The problem is exacerbated by the potentially long range of radio transitions particularly when broadcast at altitude and high power.

6.   The level of technical knowledge and skill of pilots varies a lot; unsurprising given that radio use is neither mandatory or included in any training syllabus. It is not unusual to meet pilots on launch that are unable to adjust the settings of their own radio. Few pilots are able or willing to change frequency in flight and many pilots are unaware of the dual watch facility whereby a "radio capable" pilot can set his radio to monitor an additional frequency. It is unrealistic to expect pilots, particularly the occasional, non-XC pilot who might be reluctant to let go of the brakes, to achieve a higher level of in-flight operating skill beyond pressing the transmit switch. It is however, in the interest of XC pilots to be able to switch frequency as a flight progresses or circumstances dictate. Hence there can be no single panacea for improved radio use. Any proposals need to be simple and acceptable to occasional use pilots. If we, as a club, are dissatisfied with pilot radio competence we need to take action to rectify the situation.

7.   Pilot radio voice procedure is execrable. Again, this is unsurprising given the absence of any formal accepted protocol or training.   (See 3 above) The problems stem from a lack of understanding and to some extent a lack of empathy with other pilots. Individual pilots and small groups tend to treat their chosen frequency (often the club frequency) as a cell phone conference facility, unaware or unconcerned that their discourse is entirely public and potentially annoying. Whilst the obvious solution might be to encourage such groups to move to a different frequency (and most do) this can have unintended safety implications when it runs counter to the principle of establishing a single 'all-informed' net. (see below)

8.   There can be no simple 'one size fits all' solution to improved radio comms. Compromise will be needed to devise a system that meets the needs and matches the abilities of a wide spectrum of radio users from the trainee/trainer through occasional ridge soarer to XC hound. Any attempt to establish a heavily disciplined radio protocol will have the adverse effect of discouraging pilot involvement. It is useful to consider the different situations and needs separately whilst accepting that there is considerable overlap between categories of user.

10.   **The Safety Imperative.**   As discussed above, radio comms is a key component of pilot safety which only works if pilots are carrying radios and know how to use them. Recent examples of the safety value of radios have been the passing of information on approaching squalls, approaching aircraft and information concerning a downed pilot. (In the latter case the ability of the pilot to communicate that he was okay saved a potentially intense and disruptive rescue effort) The most frequent and important safety value of radios has been in accident management. Some examples are:

- Accident of Wolf Crag.   A seriously injured pilot was being treated on the fell side. A helicopter was called however there was no way of contacting the few remaining pilots still flying after various attempts to signal failed. The pilots were not on radio.

- Accident at Wether Fell.   A seriously injured pilot was being treated on the fell and helevac summoned. Radio communication with the airborne pilots was successful but only achieved by transmitting on the four separate frequencies being used.
- Incident at Barton Fell. A pilot was seen to impact heavily. A pilot landed unnecessarily to assist which could have been avoided if the pilot had communicated he was okay.

The Wether Fell incident is the most instructive in demonstrating the benefits and limitations of radios.

11.   **Training and coaching**.

- Groups training in a BHPA school environment do not present a problem. Schools appreciate the need for continuous reliable communication (usually one way) over short distances with students. Schools will use tried and tested frequencies often using PMRs hence not being part of the problem.
- Coaching, whether in groups or one-to-one, formal or informal, can present particular problems for the coaching group and other pilots. Coaching is likely to be radio intensive. It also needs to be reliable and non-confusing for coach and coached. It will normally be conducted over short range. For the sake of both the coaching group and potential listeners-in, coaching participants should not use a club frequency. It is good practice (accepted practice in some clubs) where possible to use PMRs if available.

12.   **Local flying**.   (This is taken to include all flying activity in the vicinity of a flying site. i.e. not XC.) It may involve large numbers of gliders in the air and on the ground with a wide range of pilot experience and ability. Given the number and frequency of launches and landings and potentially high concentrations around the ridge it provides the most likely scenario for an accident. Hence it is the scenario which will benefit most from a structured safety radio protocol. To be effective such a radio safety protocol needs to be:

- Acceptable to all pilots.
- Accessible to all pilots in terms of equipment, understanding and ease of use.
- All pilots need to be on the designated safety frequency. This must include visiting pilots and non-members. The principles of any proposed protocol must be accepted jointly by adjacent clubs.

The realities of free-flyer radio use impose some limitations:

- As many pilots will not be willing or able to operate or monitor more than one frequency (i.e. dual watch) the local club frequency must incorporate the safety function.
- The club frequency must be available for other legitimate traffic, it cannot function as a stand-alone frequency.   'Legitimate traffic' is a contentious area. Just what is acceptable and who decides is discussed below.
- Any proposed protocol needs to be user friendly. If it is perceived as over-complex, over-policed or autocratically imposed users will avoid the frequency.
- It is unrealistic to expect one hundred per cent take-up. It must be assumed some pilots will be 'off- message' both literally and metaphorically.

14. XC Flying. Radio use for XC flying has some additional challenges and benefits from a higher level of operator skill. A typical flight might involve a period 'local' flying sharing the same radio net as local pilots, discussed above. This may be followed by the XC phase possibly flying in a gaggle. This phase can be radio intensive as pilots exchange information on conditions and flight decisions. Ideally this requires a separate chat frequency. Finally, there will be a landing/retrieve phase.

- During the 'launch phase' the gaggle should ideally be on the local safety net. This can be achieved by commencing the flight tuned into the local club frequency in dual mode or having the facility to switch frequencies in flight.
- On the XC phase it benefits both the XC gaggle and other pilots to be on separate frequencies.
- XC pilots will experience interference from other nets as they progress, a problem that is exacerbated with altitude. Pilots need to be aware that their 'chat frequency' might now be shared with another club's local frequency.

The Goal

15. In spite of the skepticism exhibited in the opening paragraph there is much that can be done to improve on the current situation.

- The main problem affecting safety is the relatively low number of pilots on the local club frequency. This is due in part to …
- … pilots are frustrated and annoyed by the current activity on our radio nets and individually solve the problem by going 'off net' to chat frequencies or simply not carrying a radio. If radio ill-discipline can be eliminated the number of on-net users will increase with a positive effect on safety.
- Pilots need to be educated in good radio procedure. First, we must decide what that is. Then we must devise ways to inculcate the good procedure.
- The default for visiting pilots should be to use the local club net. This can be achieved with cross-club consensus combined with publicity. One simple measure is to publish (across all clubs) a Northern Club Frequency list.
- Some issues are caused by technical ignorance. As with recent efforts to improve pilots' understanding of flight instruments we need to take steps to improve understanding of VHF radios. This can involve the forum, SFC and 'social' events.
- The issues involving XC pilots are probably less urgent. The key issue is for XC pilots to monitor the local club frequencies when appropriate and use separate frequencies for group chat.

Next Steps

16. The first priority is to improve radio procedure.

- A working group should be tasked with devising guidelines for radio use by free flyers.
- An implementation plan should be devised and implemented.

17. Northern clubs should be contacted with a view to achieving consensus on the recommended use of local club frequencies.

18. A programme of technical education/training is required to improve pilots' understanding and competence.

19.   The guiding principal needs to be 'light touch' implementation, no one can be forced!

… and then what happened?

Well as if often the case with good ideas, there was a great deal of discussion. We attempted to involve the other Northern clubs but with the exception of the Dales there was only a muted response. Everyone seems to agree with the analysis of the issues and that the best way forward is deal with it as two separate but related matters. The first is promoting the role of radios as a safety tool; the second is to develop and improve general radio use.

The safety issues are being worked on by the CSO and the conclusions and proposals will be disseminated in the next Safety Bulletin.   In an effort to improve general radio use there is little more that can be done than to publish a guide to best practice and encourage pilots to adhere. We'll see.