

Inconsistency under the law

By Captain Ed Pooley

This issue of Hindsight contains, as the Editor intended, a lot of discussion about both the criminalisation of error and the 'just culture' which is nowadays recognised as an essential element of the broader organisational culture we need if high levels of operational safety are to be delivered. When these two are put together, some of the debate is about one subject or the other and some about the interface between the two. The result is frequently confusion about both process and effect in both aspects.



Captain Ed Pooley is an experienced airline pilot who for many years also held the post of Head of Safety for a large short haul airline operation. He now works with a wide range of clients as a Consultant and also acts as Chief Validation Adviser for SKYbrary.

Since the nature of the interface is extremely complex, and since in my view the effects in either direction are not always as direct as some people perceive, I'm going to focus here on the evident inconsistencies which characterise the criminalisation end of the spectrum of 'justice' in its widest sense.

First we should be clear on two things:

- We are never going to see **formal** harmonisation of the administration of criminal justice between jurisdictions. Whilst there is no great difference in the civilised world, at least in theory, in respect of the guiding principle of fairness and equality under the law, both the statute law of a State and the use of any flexibility afforded under it ultimately reflects the nature of society of that State.
- Aviation cannot and should not expect to be treated as some sort of special case. There are too many other activities out there which also depend on the performance of the professional – but ultimately fallible – human for risk control.

But back to basics! Crime is essentially about intent and consequence. This model fits deterrence and punishment very well. But as we know, unintended human performance failures are rarely about intent and much more often involve either a single and significant 'instant' lapse or a sequence of poor situational management. They are, though, still about consequence. Either people died or sustained serious injury and/or there was substantial loss or damage – aka an 'accident' (although not necessarily in the legal sense). Or these things were narrowly avoided – aka a serious incident. Although there are always exceptions, it is at least encouraging to note that, even in States where criminal prosecution for serious incidents which have no actual consequence except that an unrealised heightened risk to life or property are possible, few occur.

If intent is lacking, it is sometimes argued that whilst making an example of a 'perpetrator' may not affect their individual propensity to re-offend, it will indirectly encourage others in similar roles to 'be more careful'. I be-

lieve that such a view is at the very least questionable in the context of qualified and trained professionals even though it may have merit in other behavioural contexts. If you accept my view on this, then all that remains is consequence. The criminal law is generally administered on the basis of consequence and on that basis, the worse the consequence, the more that people expect to see responsibility identified and therefore at least one successful prosecution and sentences to match.

We know that in a majority of accidents and serious incidents in aviation, some or all of the cause is down to a transitory failure in the performance of those in front line roles. But where, as in almost all cases, these failures were without intent, their context becomes rather important – we need, without diminishing the principle that every mentally competent individual is responsible for their own actions – to be asking who shares responsibility. The first place to look for context (but not necessarily to add to the accused) is those who formed part of the responsible front liner's team. It's easy in the case of a pilot in command, it's the co-pilot (or possibly

members of an augmented crew) who may have attempted to influence matters, may have chosen not to, or may simply not have had superior situational awareness. If such people were ignored without good reason, then that would count negatively¹.

But it goes much deeper than this. The search for potential criminal behaviour is often insufficiently wide. Any person making errors on the front line (and those around them) was there because those who were responsible for using their services to deliver the 'product' they were selling had (in theory at least) validated the level of competency which it was reasonable to expect them to consistently deliver and structured the mitigation of risk accordingly. My experience in accident and incident investigation tells me that there are still relatively few competency-assessment systems in aviation which are capable of providing that assurance. And the responsibility for the existence of such systems is that of both the employing entity

and the managers it appoints to act on that responsibility.

So, if more prosecutors spent more time looking at the context of inadvertent error, there would be a shift away from the front line victims to their managers and, where the criminal law makes it possible, also to the employing entities. The latter is of course where deterrence really becomes effective, since running a business carelessly can attract such large financial penalties that the very survival of the business is threatened. Of course, since criminal guilt for any offence can be shared, such a shift of focus would not entirely remove the possibility of prosecution from front liners but it would certainly reduce it so that the balance of responsibility could be fairly reflected in the sentencing after any successful prosecution.

So what about this proposition of context transferred to reality? Let's look at a few examples where it was ignored so that only the pilot(s) or controller(s)

involved were prosecuted:

- Instead of making an en route diversion whilst there was still enough fuel on board to safely do so, the experienced pilot, having misunderstood the way the FMS worked, continued to a more distant airport confident that it was attainable despite contrary suggestions for earlier diversion from his (very) junior colleague. Fuel was exhausted but a skilfully managed glide just enabled the aircraft to crash land short of the runway but inside the airport perimeter with no fatalities or serious injuries to the occupants [[http://www.skybrary.aero/index.php/A310,_Vienna_Austria,_2000_\(LOC_HF_AW\)](http://www.skybrary.aero/index.php/A310,_Vienna_Austria,_2000_(LOC_HF_AW))]

Aftermath: the pilot in command, a German national employed at the time by a German airline, was prosecuted in Germany for "negligent interference with air traffic", convicted and given a sentence of ten months probation increased on appeal to six months imprisonment.



1- Of course, I appreciate that the potential position of a controller (or an aircraft engineer) who is 'on task' without the benefit of dedicated (human) monitoring is more problematic.

- A trainee controller operating under the supervision of an OJTI who was also acting as TWR supervisor but who was not actively supervising – in LVP predicated on lack of manoeuvring area visibility from the TWR visual control room (but not low surface visibility) was fed inaccurate information about runway occupancy by an Assistant Controller and, having failed to validate it became distracted from the imperative of situational certainty by self-imposed pressure to take advantage of an about-to-expire departure window and cleared an aircraft to take off on the about-to-be-occupied runway. A high speed RTO was made and a collision narrowly avoided. The subsequent investigation found that both the normal method of working and the supporting technical infrastructure was deficient and made extensive recommendations accordingly.
[http://www.skybrary.aero/index.php/B763/_B744,_Amsterdam_Netherlands,_1998_\(RI_HF\)](http://www.skybrary.aero/index.php/B763/_B744,_Amsterdam_Netherlands,_1998_(RI_HF))

Aftermath: The Trainee Controller, their OJTI and the Assistant Controller were prosecuted for “the provision of air traffic control in a dangerous manner, or in a manner that could be dangerous, to persons or properties”. The Assistant Controller was acquitted but the other two controllers were convicted and sentenced to a small fine or 20 days imprisonment in default. On appeal, all three controllers were found guilty but their action was reclassified as an “infringement” rather than as an “offence” which simultaneously had the effect of removing any possibility of a penalty but also any possibility of an appeal.

- Approach Control acceded to a request from the pilot of a twin jet on an IFR Flight Plan who claimed that he had the field in sight to make a visual approach. The pilot subsequently flew the aircraft into unseen terrain killing all on board. The subsequent investigation showed that the pilot could not have had the field in sight when this had been claimed and that radar cover on the more direct routing taken would have rapidly become intermittent.
[http://www.skybrary.aero/index.php/C550,_vicinity_Cagliari_Sardinia_Italy,_2004_\(CFIT_HF\)](http://www.skybrary.aero/index.php/C550,_vicinity_Cagliari_Sardinia_Italy,_2004_(CFIT_HF))

Aftermath: Both controllers were convicted of “multiple manslaughter and causing air disaster” on the basis that, under the general provisions of Italian law, they had a duty of care towards pilots in respect of terrain clearance which they had not met even though the direct responsibility for terrain clearance was internationally recognised as being assigned to the pilots and only a relatively minor technicality in specific ANSP procedures had been breached. The conviction and a suspended sentence of two years imprisonment was twice upheld at hearings before superior Courts.

Now let’s look at a few examples where nobody, front line or other person or entity, was prosecuted in broadly comparable circumstances:

- After a failure to carry out engine shut down procedures with the care reasonably expected for such a critical action after evidence of en route engine malfunction, the ‘good’ engine was shut down instead of the malfunctioning one and a diversionary descent commenced. The subsequent attempt to get thrust from the malfunctioning engine on final approach as flaps and landing gear were deployed failed and the aircraft crashed killing or seriously injuring most occupants. Both pilots survived with major injuries.
[http://www.skybrary.aero/index.php/B734,_vicinity_East_Midlands_UK,_1989_\(HF_LOC_FIRE_AW\)](http://www.skybrary.aero/index.php/B734,_vicinity_East_Midlands_UK,_1989_(HF_LOC_FIRE_AW))
- The runway controller cleared a vehicle operating on a different radio frequency to enter the runway for bird patrol purposes via a third party but then forgot about it and cleared an aircraft for take off. The aircraft achieved good clearance over the vehicle and there was no actual risk of collision. Subsequently, the independent investigation found a context for the error which indicated ANSP runway occupancy procedures which varied markedly from ICAO and EAPPRI guidance and from equivalent processes at other busy European airports.
[[http://www.skybrary.aero/index.php/B733/_vehicle,_Amsterdam_Netherlands,_2010_\(RI_HF\)](http://www.skybrary.aero/index.php/B733/_vehicle,_Amsterdam_Netherlands,_2010_(RI_HF))]



■ ATC radar acceded to requests for descent below MSA and manoeuvring of a demonstration flight on an IFR Flight Plan. The aircraft crew ignored TAWS 'PULL UP' Warnings in IMC and terrain impact followed killing all on board. It was subsequently found that the controller, who was busy and without an assistant or a supervisory presence had mistakenly read from his displays that the aircraft involved was a military fast jet rather than a transport aircraft manufactured by the same company. Since the fast jets were known to regularly operate in a designated military exercise area in the vicinity, he assumed that despite a declared level of FL100, a descent in the area filed on the flight plan might be expected in order to make use of a designated military exercise area in the vicinity. It was also found that no MRVAs had been defined and that the MSAW aural alert had been de-activated. However, since terrain in the area where the accident occurred had not been input, no visual MSAW alert would have occurred either.

[http://www.skybrary.aero/index.php/SU95,_manoeuvring_near_Jakarta_Indonesia,_2012_\(CFIT_HF_FIRE\)](http://www.skybrary.aero/index.php/SU95,_manoeuvring_near_Jakarta_Indonesia,_2012_(CFIT_HF_FIRE))

I can assure the reader that a more in-depth look at examples that did and did not end up as prosecutions would merely substantiate the charge of inconsistency both within and between States. So what can be done about this if my earlier assertion that there is no possibility of **formal** harmonisation is correct?

Well, the answer is that there is clearly a lot of scope for encouraging **voluntary convergence** in the way that criminal justice is applied to human error in any occupation where risk management depends on human performance and there is no conscious intent for action or inaction to materially increase the chances of an unsafe outcome. At the heart of this is the concept of "the public interest". This is the principle by which a prosecutor who has accumulated enough evidence to have a high probability of securing a conviction then applies a final test of "is this prosecution in the public interest?" which must be satisfied before a prosecution is begun. This is a complex intervention (currently excluded by statute in many civil law jurisdictions) which seems to be most successful when it is facilitated not by a set of rules but by formalised comprehensive guidance to prosecutors². Interestingly, States that build in a consideration of public interest before bringing a prosecution also allow the police

There is clearly a lot of scope for encouraging **voluntary convergence** in the way that criminal justice is applied to human error in any occupation where risk management depends on human performance and there is no conscious intent for action or inaction to materially increase the chances of an unsafe outcome.

or judicial investigation which must precede the determination of whether a prosecution may be warranted to be abandoned at an early stage on a similar basis by not requiring the completion of a thorough investigation into every possible 'crime' where it seems that the cost of a prosecution would significantly outweigh its benefits.

So how can we encourage this enlightened convergence as far as aviation is concerned? I think that one of the most useful – and relatively simple – actions would raise awareness of inconsistency in the treatment of professional pilots, controllers and aircraft engineers. Leaving this (at best) to the superficial and transitory interest of the specialist media is not enough. I propose that it is time to, as a minimum, make widely available the evidence on which each prosecution is based alongside a transcript of the final Court Judgement³, both presented in English. An open access online repository is needed and I suggest that SKYbrary would appear to be the obvious choice. But this project will need help from both lawyers and aviation people in all the countries where cases have been heard as well as the services of translators. **S**

2- For example, the 'Code for Crown Prosecutors' applicable to all criminal prosecutions in England, Wales and Northern Ireland: http://www.cps.gov.uk/publications/docs/code2013english_v2.pdf

3- It is critical that the basis for the verdict reached and any sentencing that follows is available exactly as given. A summary is not sufficient to understand the thinking of the Court.