


Just Culture in

Should the competence of an individual be put in doubt after an incident?

There are plenty of articles in this issue of HindSight exploring the relationship between the aviation safety system and the national judicial system. And rightly so, as we do not live in isolation but in a society which has matured over the centuries and has developed norms and corrective mechanisms. Fixing things in the society is a noble goal but I would like to ask you with my Editorial to look also 'in our own garden', to see how safety and justice is balanced in our own organisations.

Enough of the introduction. Let me look at what sometimes goes on in an organisation – a Controller's competence is placed in doubt after his involvement in an incident. This is surprisingly common not as part of a 'history' but as the result of just one 'performance error'.



Internal incident investigation takes place with the intention of enabling improvement – improvement of our technical equipment, operational procedures and training. Recently, there has been a lot of talk about evidence-based training. The essence of this in most cases is to train on the basis of what the evidence shows as the (general) training need and not what it is simply assumed to be important to train. The evidence here is coming from, amongst other sources, safety investigation and monitoring. If it is recognised that safety incidents are a means to inform the design of our training programme then isn't it also natural to think that these incidents can tell us something about the competence of the individuals involved?

Actually this is not quite true. Let us look carefully at what we call competence. ICAO defines competency as the combination of knowledge skills and attitudes required

to perform a task to a prescribed standard. Which of those elements of competence can be judged for an individual after their involvement in an incident?

Are single cases indicative of the possession of skills?

Consider a case where a Controller cleared an aircraft for take-off after he had previously cleared another aircraft for take-off on the intersecting runway. One can conclude that, obviously, the Controller's situational awareness competence 'failed'. Is it necessary to check the 'situational awareness skills' of the controller after this incident? Now what would be your reaction if I tell you that, in this real story, the same controller was involved in almost the same incident scenario approximately 5 years before the incident and no 'competence assessment' of any kind was taken?

An outrage? Perhaps not! Let's look at the numbers. Here are some rough calculations. Assume, for an airport like the one in this case, that the Controller, over 5 years, had 200 shifts a year, each with 5 hours of actual work in the position and an average of 20 departing aircraft. This gives us 100,000 'good' departure clearances and 1 'situational awareness skill' issue. Ten times in a million instructions! What is your problem? There may well be skills problems with an individual controller but incidents in which they are involved are unlikely to inform what these problems are. It is the job of the competence system to identify and rectify issues of underdeveloped individual skills.

Do we question the competence system or individual competence?

In two real events, two trainees, both well-advanced with their on-the-job training, had similar incidents a couple of weeks apart. Both trainees had been through college instruction, Unit training and almost 100 hours of in-position training. In both cases an aircraft was cleared to depart when a vehicle was present on the RESA at the far end of the runway. In both cases, the trainees involved reported not being aware that, for the purpose of a take off clearance, the RESA is considered to be part of the runway – part of the safe distance available. The conclusion from investigation highlighted a gap in the training program – both classroom and on-the-job-training.

Tzvetomir Blajev

Editor in Chief of HindSight
Fellow of the Flight Safety Foundation

doubt

In another case, a series of incidents were recorded at the same airport during the first few days of late-autumn low visibility procedures. Those involved commented that 'their' incident had taken place after almost 9 months of rather different conditions in which an entirely different set of procedures had been in use. Such a situation clearly 'stretches' one's cognitive capabilities and challenges the established routines. The analysis of these events disclosed some systemic issues and suggested that they should be addressed by synchronising the Unit training program with the seasonal variation of visibility conditions.

Here is another example. At a busy international airport, the ATC supervisor agreed that a VFR helicopter flight could take place in order to film the approach lights. The AIR controller was unaware of this plan and so there was no advance preparation or anticipation. The helicopter checked in on the TWR frequency and was cleared for a low approach to the runway at the same time as a departing aircraft was instructed to line up. Consequently, the helicopter reported "deviating to the right during go-around" and in doing so passed 50 feet above and 100 metres to the right of the aircraft which had lined up.

During the investigation, it was found that the Controller involved was unaware of national procedures which prohibit aircraft cleared for a low approach and go-around descending below 400ft when the runway is occupied. The investigation also found that none of the controllers at this airport had received refresher training on low approach or training touch-and-go traffic, because these procedures were not expected at an airport with a high intensity of commercial operations.

Degraded performance is not always degraded competence

What all these examples demonstrate is gap in the controller training programme, systemic problems in respect of knowledge retention and deficiency in the Unit training program. These represent a deficiency in the competence training and assessment system which would affect more than one individual.



So, one should not take a degradation in the momentary performance of an individual as indicative of their level of competence. Competence is about the ability to perform trained behaviours over time. There might be cases where performance drops, but overall the competence is intact. It is certainly possible for a single incident to raise competence issues for a particular individual but, in my opinion, this will be quite rare unless an event is part of a much bigger performance history. Great care should be exercised when considering the introduction of procedures to deal with rare events – there is a danger that the procedure will be gradually applied to all cases since it may become easier to avoid taking difficult decisions and instead put the 'blame' on the procedure.

If it is still concluded that there is a need for a procedure to resolve a potential problem, then it may be helpful to extend the involvement in its design to all those involved in the incident which has triggered the action and to set a clear deadline (maybe 24 or 48 hours) for the local competence committee to come up with a decision. Otherwise the 'competence in doubt' mechanism will start slowly undermining your safety system and eventually turn into 'just culture in doubt'.

Enjoy reading HindSight! ☞