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'RULE OF TWO'?

WHAT ABOUT THE 'RULE OF THREE'?

by Philip Baum

I'm perplexed. Within 24 hours of the premature announcement that Andreas Lubitz had intentionally flown Germanwings flight 4U9525 into the Alps, airlines, regulators and governments were announcing the introduction of new rules by which no pilot would ever be left alone on the flight deck. The so-called 'rule of two' requires the pilot who wishes to exit the cockpit summoning another crewmember - usually a flight attendant - to the flight deck who must then enter the cockpit and remain inside whilst the pilot is outside. Sounds simple and straightforward...but it isn't!

Before we even consider the practicalities of the new requirement, the knee-jerk response demonstrates exceptionally poor risk management by the industry. To start with, we were all well aware of the risks of a suicidal pilot locking him or herself into the cockpit; for airlines which had not adopted the 'rule of two' before the Germanwings incident, they could not - or at least should not - have been ignorant of the loss of a LAM Mozambique Airlines aircraft due to the actions of a suicidal pilot in November 2013. And if, somehow, that event had passed them by, surely they must have considered the implications of the actions of an Ethiopian Airlines pilot in February 2014?

The sudden introduction of the 'rule of two' as a standard, rather than a recommendation, is illustrative of our reactive approach to aviation security and our tendency to ignore events which occur beyond European or North American shores. There are times when a speedy revision of procedures is necessary, especially when a terrorist plot is unearthed and countermeasures pertinent to the attack modus operandi detected are required. Yet aircrew mental health has long been an unspoken concern and there was no greater likelihood of another act of aircraft-assisted suicide the day after the Germanwings loss than the day before it. In 2011, Robert Brown, a British Airways pilot who had murdered his wife, admitted at his own trial that, "I thought if I go to work, I could crash an aircraft, or fly to Lagos and crash it there, or hang myself in the hotel room", when explaining how he intended to avoid arrest. He was a B-747 pilot and fortunately phoned in sick the next day instead of operating the flight.

Many airlines have long operated with the 'rule of two'. Much has been written about the fact that American carriers follow this procedure, although it is important to note that their reasoning is based on safety and practicality rather than as a method of overpowering a suicidal pilot. On aircraft where there are no cameras by which the pilots can see what is happening outside the flight deck door, should one pilot leave the flight deck, the other pilot would have to leave their seat - and therefore the controls - in order to look through the peephole to allow their colleague back in; for that reason a flight attendant would enter the cockpit to manage the door.

Actually I fully support, and even teach, the 'rule of two', for both safety and security reasons. Whilst a suicidal pilot, especially if armed (as would be permissible in the United States and, indeed, this is an extra argument to add to the list presented by those who oppose the US Federal Flight Deck Officer programme), could certainly neutralise their colleague, if we followed that reasoning one would never allow there to be two pilots left alone in the flight deck let alone one! More to the point, the introduction of another

"...avoid deploying systems which are designed to make us impotent to respond..."

crewmember to the flight deck might give a suicidally-inclined pilot cause to think twice before carrying out their act and it certainly increases the chances of help being summoned from outside the flight deck should the need arise.

But...and it's a big but...the 'rule of two' cannot be introduced overnight. Why? Because there is also a 'rule of three'. The enhanced flight deck door deployed in the aftermath of the events of 11th September 2001 was designed and deployed - at huge expense - in order to prevent suicidal terrorists gaining access to the cockpit. For that investment to be truly worthwhile, we must also limit the amount of time the flight deck door is open. Many airlines adopt, and I teach, the 'rule of three' (a.k.a. the Three Second Rule) whereby the door is never open for any more than three seconds. This is in order to prevent a sudden attack on the cockpit perpetrated by hijackers. Where crew changeovers are required - a pilot leaving and another crewmember taking their place - this cannot be achieved in three seconds. Accordingly, the recommended procedure is a two-stage process whereby the replacement crewmember enters, the door is then closed and then, once the clear zone has been checked again, the pilot opens the door and leaves. This takes training. Simply telling airlines and crews that they must adopt the 'rule of two' without providing training how to effect this exposes airlines to the very kind of threat the doors were installed to prevent.

There is already widespread complacency over flight deck door procedures so I think we should place greater focus on the reducing the frequency of door openings, banning openings on short flights (where the flight attendants are already struggling with their workload), and giving serious consideration to the deployment of double doors or secondary barriers which facilitate the pilots use of the forward toilets.

This, however, does not address the threat of a suicidal pilot left at the controls. Given that there have been more acts of aircraft-assisted suicide than 9/11-style hijacks, the enhanced flight deck door needs an override system...beyond pilot control. The primary aim of the door should be to delay, rather than permanently prevent, entry. Were there to be suicidal hijackers on board, our objective should be to keep them out of the flight deck long enough to give the pilots a chance to raise the alarm (both via transponder to the ground and by a PA announcement to the cabin) and position themselves appropriately; en masse such hijackers can be overpowered.

We cannot guarantee security in the skies, but we can avoid deploying systems which are designed to make us impotent to respond. The 'rule of two' is a soundbite which might intimate a way of preventing a Germanwings-style incident occurring again; the real solution lies in re-thinking the flight deck door. ■

