GERMANWINGS FLIGHT 4U9525:

THE LATEST ACT OF AIRCRAFT-ASSISTED SUICIDE?

BY PHILIP BAUM

On 17th February 2014, Hailemedhin Abera Tegegn hijacked an Ethiopian Airlines flight, on which he was serving as First Officer, to Geneva. Tegegn exploited the window of opportunity afforded him when the Captain exited the flight deck for a toilet break, bolting the flight deck door closed from the inside in order that he could take complete command of the aircraft. When the Captain tried to return to the flight deck, he found that he was locked out; he, the rest of the crew and passengers, simply prayed that Tegegn was not suicidal as they banged on the door hoping to gain access. They were lucky that Tegegn was simply seeking asylum. On 20th March this year, in absentia, Tegegn was sentenced to 19 years and 6 months in prison by the Ethiopian courts for the hijacking.

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The incident highlighted three security challenges the industry faces. Firstly, the fact that the enhanced flight deck door, designed to keep potential hijackers outside the cockpit, can also prevent crew and passengers overpowering an intruder, or pilot, should they manage to lock themselves inside. Secondly, the reality of the 'insider threat' whereby a, presumably, 'trusted' and vetted individual can become the assailant. And, thirdly, that we have to start to acknowledge that aviation security is not just a counterterrorist operation and that, as such, we need to be able to identify negative intent of whatever kind and

Hailemedhin Abera Tegegn, the Ethiopian Airlines pilot who hijacked his own aircraft in 2014.

The residential building in Novosibirsk into which Vladimir Serkov flew his An-2 in 1976.

wherever it can impact upon the safety and security of our operations.

Granted that the Ethiopian Airlines incident ended without loss of life, procedures did not change as a result. I believe that the fact that it was an Ethiopian airliner (as opposed to a European or American carrier), en route to Rome from Addis Ababa, resulted in less media interest and industry disregard. The end result could have been so different; the Ethiopian hijacking took place only three months after Captain Hermino dos Santos Fernandes crashed the Mozambique Airlines aircraft he was piloting (from Maputo to Luanda, Angola) in Namibia. The cockpit voice recorder showed that the co-pilot had been locked outside the flight deck and was desperately trying to get into the cockpit when the aircraft impacted with the ground, killing all on board. Sound familiar?

What was the global response to that incident? None. Why? Probably because it was an African carrier flying between Mozambique and Angola.

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Pilot suicide is not commonplace, but it is not unheard of. The frequency is, however, certainly far greater than the number of times suicidal terrorists have commandeered aircraft and flown them into population centres. The higher profile incidents of Royal Air Maroc, SilkAir, and EgyptAir are often cited as the rare examples of such action impacting commercial aviation, whilst unstable pilots operating in the General Aviation or recreational arena, have often chosen to perform acts termed 'aircraft-assisted suicide'. According to a Federal Aviation Administration report on the phenomena in the United States, published in February 2014, "From 2003-2012, there were 2,758 fatal aviation accidents; the NTSB determined that 8 were aircraft-assisted suicides (all involving the intentional crashing of an aircraft)".

Of course, an act of suicide is one thing, an act of mass murder something else. Aircraft, most famously those piloted by Japanese kamikaze pilots, have been used as instruments of war and commercial aircraft were turned into weapons of mass destruction in the terrorist attacks of 2001. However, most acts of aircraft-assisted suicide have been perpetrated by pilots flying solo.

There was one famous incident back in 1976 when a pilot used his An-2 aircraft in an attempt to kill his wife. Vladimir Serkov, under the influence of alcohol at the time, took off from Severny Airport in the Russian city of Novosibirsk and then intentionally crashed into a residential building where his wife and child resided. Aside from Serkov himself, three residents were killed; his wife and child were not at home at the time.

The loss of Germanwings flight 4U9525 whilst en route from Barcelona to Dusseldorf on 24th March this year is likely to be an industry game changer, primarily because it was a German carrier (owned by Lufthansa), operating from Spain and crashing in France. Within hours of the announcement that the First Officer, Andreas Lubitz, had intentionally crashed the airliner, some carriers were changing their procedures so that there would, henceforth, always be two crewmembers on the flight deck – a long-standing recommended practice. Yet we still don't know why Lubitz crashed the aircraft and we are basing decisions on cockpit voice recorder data which should not, at such an early stage, even have been made public; the revelations were in breach of globally accepted international accident investigation processes.

Regardless, calls from within the industry have already ranged from mandating the periodic psychological assessments of pilots to considering enabling people on the ground to be able to override the door locking system.

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In terms of mandatory psychological assessments, one thinks back to Japan Airlines flight 350 in 1982, when Captain Seiji Katagiri tried to crash the DC-8 aircraft he was flying whilst it was on its final approach into Tokyo's Haneda Airport; fellow crewmembers managed to overpower Katagiri. An article which appeared in Time magazine (1st March 1982) following the incident makes eerie reading in the

Airbus A320 (D-AIPX) of Germanwings taking off from Barcelona Airport. This aircraft crashed on 24 March 2015 in the French Alps (Credit: Sebastien Mortier)

Andreas Lubitz (Credit: Facebook)

aftermath of the Germanwings disaster. "There were claims that Seiji Katagiri had been suffering from hallucinations and feelings of depression. He once summoned police to his two-story house near Tokyo because he was convinced it was bugged, but a thorough search turned up no eavesdropping devices. On three occasions, his employers had urged him to see a psychiatrist. Ever since he was granted one month's leave in November 1980 for a 'psychosomatic disorder', Katagiri's wife has worried about his neurotic behaviour."

24 people died in the Japan Airlines incident when the aircraft landed in Tokyo Bay. Katagiri himself survived. Indeed, he was arrested whilst trying to flee the scene of the disaster and was charged with professional negligence resulting in death; he was found not guilty by reason of insanity.

All the incidents highlighted, whilst shocking in their own right, made it absolutely crystal clear to the industry that pilots could become suicidal and might be prepared to crash their aircraft. Unlikely, true…but most of the security measures we put in place at airports are to prevent the 'one in a billion' and most of the technologies we deploy are to identify the 'needle in the haystack'. Against this backdrop, we should never have created the situation whereby a pilot could lock themselves into a cockpit on their own and even the 'rule of two' (whereby no pilot is left alone on the flight deck) does not offer any guarantees… especially in the United States where a pilot may even be a Federal Flight Deck Officer, thereby legally armed with a gun.

In the April 2012 issue of ASI, our lead story was 'Pilots-in-Command: but what if they are not?'

Unlike post-9/11, there should be no knee-jerk reaction to the Germanwings disaster and hopefully common sense will prevail. Lessons - painful ones - will be learned and, as a result, aviation should become ever-safer. For those who have been quick to condemn Lufthansa, an airline which has one of the best safety records in the business and is regarded as an example of industry best practice in all safety and security issues, let's not be too quick to judge; this could have happened to any airline. My thoughts go out not only to the families of those who lost their lives, and especially to the parents of Andreas Lubitz, but also to the staff and management of Germanwings and Lufthansa who are being second judged. We all know of security breaches which take place and in the aftermath of an incident it is very easy to point the finger of blame.

Firstly, in order to plan for the future we need to know the full details of what took place on the flight deck of Germanwings 9525 and that information will take months to amass. Flying an aircraft directly into a mountainside in the French Alps will certainly have made it difficult, if not impossible, to effect a detailed forensic examination of Lubitz's corpse. Secondly, the best lesson we can learn from the past is the need to avoid panic reactions. After all, as I wrote in an article in Aviation Security International last April regarding the loss of Malaysia Airlines flight MH370, which may yet also be proved to be the result of pilot suicide, "One of the most significant concerns about the knee-jerk reaction to install reinforced flight deck doors in the aftermath of the 9/11 attacks is that, whilst it may keep the bad guys out of the cockpit, it can also keep the good guys out too."

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The flight deck door is opened far too frequently in flight. Granted the huge outlay the industry made on such a sophisticated locking and strengthening system, we need much more vigorous protocols for their usage. The industry has resisted calls to have secondary barriers, or doors, despite the relatively low price tag on their installation. Rather, we have an access/egress system which is rarely performed in accordance with recommended practice and where complacency is often the order of the day.

In-flight security procedures need to be rigorously enforced. The consequences of a laissez faire attitude to the last line of defence can be catastrophic. But, let's wait until we know what did happen before we make irreversible decisions and procurements. Also, we must recognise that we can take all the steps in the world to try to secure our aircraft yet still fall victim to the actions of one individual who does not appear on our radar screen as a threat… especially if he or she is at the controls.

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