Following the sudden disappearance of Malaysian Airlines Flight MH370, John Chisholm asks whether poor cabin security, baggage screening or passport control could provide clues as to its whereabouts



t probably was not aliens. It is worth getting that out of the way first when discussing the potential fate of Flight MH370, whose fate still remains shrouded in mystery. The disappearance of the aircraft has generated a great mass of conspiracy theories, some of which have been advanced in all seriousness, in order to explain why MH370 failed to reach her destination.

The investigation has fallen into two fairly distinct parts: a police investigation into the passengers and crew and, second, the search for the aircraft itself. Of the two, the latter has got by far the greater air time, although the former is the most likely to yield anything interesting. Where the two halves intersect is that, if the aircraft is found or the black boxes recovered, it should help investigators decide if the aircraft was hijacked or if there was some other explanation.

Laying aside hijacking, there are numerous other explanations. Mechanical failure is the most obvious, and still remains a favourite assumption. Boeing, the manufacturer of the aircraft, and Rolls Royce the manufacturer of the engines, have been quick to scotch this theory. Of course the response here is that "they would, wouldn't they?" US satellites detected no explosions in the area, but that only means that it was a not a mechanical failure that caused an explosion. So this idea remains firmly on the table.

Another option is hypoxia - essentially a failure of the oxygen supply. This killed everyone aboard but the plane kept going on autopilot until it ran out of fuel and crashed. Another, broadly similar theory, also places emphasis on the autopilot: a fire in the cockpit overcame both pilots with smoke, and the autopilot was responsible for the plane continuing after both pilots were incapacitated. Both of these explanations consider the possibility of a freak accident - no foul play and no real fault.



But what if there had been? Another raft of explanations are built on the notion of some form of foul play – either intentional suicide or a hijack gone wrong. These veer from being apparently implausible to at least being worth considering. To start with, the dividing line is between some action on the part of one or both members of the flight crew and some form of threat posed by one or more passengers.

A number of theories have coalesced around the flight crew. Possibly the most venal is that of a joint suicide pact between pilot and co-pilot so their wives could draw the insurance money. That two men would agree on such a pact that would take more than 200 other people along with them would certainly mark them out as very special. That this suggestion came from a US Congressman may speak more about the quality of some US legislators than

Slightly more plausible theories have been advanced.

Captain Zaharie Ahmed Shah, 53, was an aviation fanatic who built a flight simulator in his home. Police have removed the simulator from his house, and discovered several routes that he rehearsed. He was related to Malaysian opposition leader Anwar Ibrahim, and attended the court hearing just hours before the flight, in which Ibrahim was sentenced to prison for sodomy (yet again). Furthermore, Capt Shah's wife and three children moved out of the house the day before Flight MH 370 took off, which some people have seen as suspicious. This all seems rather circumstantial, and the Malaysian police have not come up with any real evidence, or at least they have not released any. The co-pilot seems an even less likely suspect; he was due to marry his long-term girlfriend and is said to have been a mild-mannered man who occasionally attended his local mosque, and was a keen car enthusiast. Certainly there does not seem to be a great deal of obvious evidence there; the USA is full of mildly religious petrol heads and they do not hijack aircraft.

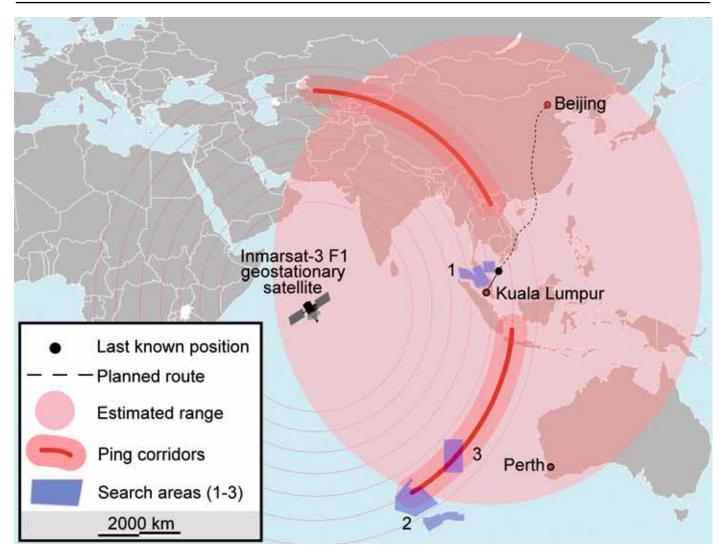
There are good reasons to focus on the flight crew, however, largely because of the advances in security aboard aircraft since 9/11 have been considerable. Pre-9/11, the assumption was that hijackers would land the plane and attempt to extort some form of political gain. Now no-one is going to take the risk that their sole aim isn't to kill everyone for some crackpot religious cult. This has meant, among other things, the fortifying and strengthening of cockpit doors. These are now able to withstand physical assaults by people from outside, and the ability to get in and out is only supposed to be available to the flight crew; even the cabin crew have to be allowed entry by the flight crew. So any attempt to gain control of the aircraft by directly threatening the flight crew should be impossible.

There is the option of threatening to kill the passengers in order to blackmail the flight crew into allowing entry. This is really a very human situation, and could never be legislated for no matter the technological advances. But that brings us to the restrictions upon passengers' hand luggage. The Malaysian Airlines restrictions are quite comprehensive. There is obviously the question of how rigorously these are enforced, but given the nature of the stakes involved it seems hard to imagine any terrorist group getting lucky when they need to unless they took lots of flights and worked the law of averages. An expensive option.

One of the initial pushes that got a considerable amount of media attention was the passenger list. Both Malaysia and China quickly scotched the idea that any of their citizens could be involved in a hijack plot. Instead, attention quickly focussed on two Iranians who were travelling on stolen Austrian passports. Although this generated some initial excitement, the region is well known for people travelling on fake or stolen documents and the clear conclusion drawn was that they were more than likely asylum seekers rather than Islamic fundamentalists. Of course, that only draws the claims by the Chinese and Malaysian authorities about their own citizens into question.



LOST



So, if it was a passenger, or passengers, how could they have done it? Again it is very hard to see how. As explained above, the possibility of getting anything physically threatening on board is very limited, so that only really leaves the possibility of an explosive device. That involves either getting it on the plane intact, or constructing it out of seemingly harmless components when on board.

To take a device aboard intact would be devilishly tricky. Assuming the security services of Malaysia did not intercept such a person before they even got in sight of the airport, such a device would have to be got through airport security. Scanners today are of very high technical standards, particularly at major hub airports like Kuala Lumpur. Electronic devices, such as laptops and tablets, have to be switched on at security to prove that they work and are not simply a dummy casing, and the ability to detect explosives is good. So that leaves the other option: making it. In a previous edition of intersec I demonstrated how utterly implausible it would be to create a THTP explosive in an aircraft lavatory, however, so this seems highly unlikely.

The best possible explanation is that someone managed, somehow, to create an explosive decompression that forced the aircraft out of control and ditch. No one has realistically advanced any way that this may actually have been achieved other than wrenching a door off mid-flight. Nevertheless it has not stopped

Out of sight: the potential search area for Flight MH370 covers thousands of square kilometres

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theories being put forwarded that see the plane being flown to Somalia, Afghanistan and Kazakhstan. But, realistically, this can be looked at in a common sense way. If it was an act of terrorism, why has no one fallen over themselves to claim it? One source in the Taliban commented that he wished it had been them, and no wonder. For them, it would be a much-needed success after a string of failed attempts. Hijackers tend to have demands: none have been made. Terrorists tend to have political points to shout about: no sound has been heard.

This may never be resolved. Air France's flight 447 was not found for two years, and they at least knew where it had gone down. Strikingly, the designated search area seems to have been chosen because a lot of debris was seen by satellite, but none recovered so far are from MH370; it just seems that this flight path is the one most likely to have meant a total disappearance. Although the sea bed here is a far flatter and more search-friendly zone than it was for 447, the geographical area is potentially huge. Countries have waded in with aircraft (and so has Peter Jackson), surface ships and nuclear submarines in an effort to locate any clue as to the fate of MH370. It may all be in vain. Sadly for the families of the passengers and crew they may never know what really happened or where their relatives rest. What seems unlikely is that they were the victims of anything other than bad luck.