Posted January 10, 2017 at 2:10 AM

@KarenK. "The search will end very soon and thats the end of it all, unless another benefactor stands up and swallows the cost."

With the lack of any other solid evidence the principal aim as to cause is to find the wreckage. Speculation as to motive still seems unlikely to get us far.

While the current search is approaching its end there is the intention to continue with researches, particularly drift analysis, which offers the hope of pinning down the 'specific location' of a search site. The three countries are leaving it open whether they will re-open the search but clearly will not be funding the proposed new area-search, one whose most likely spots have been investigated already.

In the meantime work continues on most likely routes and what digressions were made in the NW corner. This can help with major uncertainties.

However they are not the elephant. Were there was a pilot at the end he could have pushed his nose down sharply (if BFO are to be satisfied) then glided beyond search areas past, proposed, or otherwise might be. He could have extended fuel consumption on the way by step climbing. He could have been responsible for both logs-on.

While there is no evidence there was a pilot there is none ruling it out either. Therein I regret to say is a stopper to finding a 'specific location' in which there can be confidence.

So as to your above remark, as things stand there is little prospect of either the three countries or any benefactor standing up and swallowing the cost unless that elephant can be shot.

My two bob's worth.

David

Posted January 11, 2017 at 4:17 AM

@Jeff Wise. The ATSB suspension-of-search report could be a what-next statement, essentially refinements to the drift analysis; though it is possible it could extend to what has gone wrong and why. I hope so because past errors might continue to mislead otherwise.

To me the confidence in the current search area stemmed from the likelihood that it would cover 90% of the PDF.

Unfortunately this was not qualified by any probability assessment of the PDF being sound, particularly its underlying assumptions.

As I have posted already, I think the most egregious factor affecting this was the assumption of no active pilot at the end.

After the ATSB decided, necessarily, to make this assumption, for the search area to be practicable, the effect of that on search success probability went unremarked, at least publicly.

Without evidence either way the possibility of there being a pilot was around 50/50. Had it been assumed there had been one the search area would have been multiplied (glide distance say 100 miles) and the prospects of finding the wreckage in the search area settled on would have been less than halved. A 50% chance of there being a pilot still lowers the 90% a good deal and to that should be added the like effect of other assumptions (eg route weightings and simplifications).

The outcome is that had the funders been aware of the much lower search probability they might not have approved the search, that is unless politics overrode. In either case the next-of-kin and public were misled, presumably inadvertently.

In the future the next-of-kin, funders and public should be under no continuing like misapprehensions.

Were the ATSB search report to reflect on this, and bearing in mind the prospects of there having been a pilot now remain much the same, there might well be grounds to abandon the search for wreckage rather than suspend it on the grounds the prospects are unlikely to improve enough, clearing the way for a final report by Malaysia.

Naturally any unexpected development could lead to reopening of the investigation. There is precedent for this

Jeff Wise

Posted January 11, 2017 at 8:38 AM

@David, You bring up an interesting and important topic.

I wouldn't directly equate the issue of a live pilot with that of a potential glide-to-impact end scenario. There could have been a live pilot who dove the plane into the sea after fuel exhaustion. In fact, the downward acceleration implied by the last two BFO values seems to me more consistent with someone pushing the nose down than with an unpiloted spiral dive.

According to the ATSB/DSTG, the people who make the plane's sat com equipment say that the final BFO values could only come from a steep descent. If they are wrong, then the only other explanation I can come up with is that the data has been tampered with.

David

Posted January 11, 2017 at 3:08 PM

@Jeff Wise. Thanks. I started with a post three times as long! Yes a pilot could have dived initially, happening to produce the BFOs. That would have shortened subsequent diving distance if he pulled out; and bring him in close to the 7th arc if not, altering the odds as you say.

Another simplification is that reducing the search area to 40% of that needed if piloted does not bring the odds down proportionately.

On the other side, what I did not include was that there was just the husk left to search in the new search area, the most likely portions having been searched already and that would have a marked effect on probabilities.

However my message was in its thrust, not detail. I think the funders, next of kin and the public were misled, probably inadvertently, into believing there was a much higher chance of wreckage find than was warranted and I was trying to paint broadly how that happened.

The same factors have, or should have, a direct consequence on confidence in a new search. I do not think that refinements in drift analysis will alter the residual probability much.