

Since releasing our earlier statement of 17 June 2014, the Independent MH370 Investigation Team, an informal group of individuals with diverse technical backgrounds, has continued to collect information, improve our understanding of the data, and refine our models, in order to better estimate the final location of MH370.

We continue to seek any additional information that can be released to us by the accident investigation team that would help us. The official accident investigation teams can be assured of our continuing desire to collaborate and to share our work.

Information was released by the ATSB in their report “MH370 Definition of Underwater Search Areas,” 26 June 2014, which has assisted our work. We concur that the BTO data provides unambiguous and accurate arcs of position. We confirm that the BFO data and analysis cannot be used to determine precise tracks or the exact end point along the 00:19 arc. For this reason, we would like to better understand the ATSB assumptions.

In particular, we ask the following questions:

- Why do the downlink Doppler values change with aircraft latitude in Appendix G, Table 6?
- Why is there only partial compensation of the downlink Doppler provided by the EAFC function in the pilot receiver? Is it true that the coordinates of pilot source and/or the pilot receiver were incorrectly configured in the pilot receiver?

Other areas in need of clarification include:

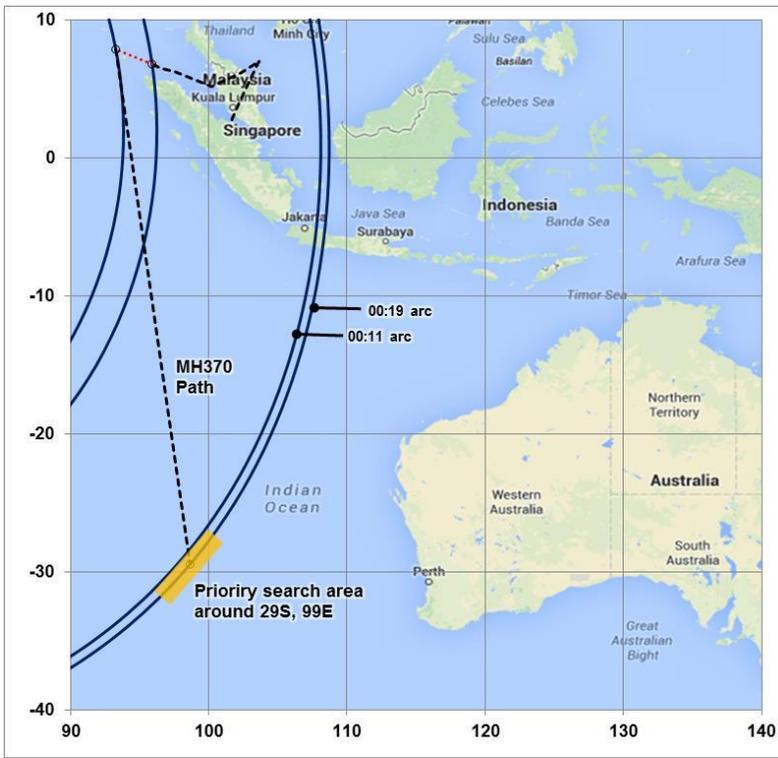
- a) Analysis A (p. 25) of the ATSB report begins the path computation at the 19:41, which is approximately the point of closest approach of the aircraft to the satellite. However, a complete solution of the flight path needs to account for the path of the aircraft between the last primary radar location at 18:22 and the start of the computation at 19:41. To better understand the ATSB results, we have computed a similar path starting at 19:41 that approximately satisfies the BTO and BFO data and terminates in the “priority” search area from the report. This leads to a location at 19:41 which is only about 195 miles from the location at 18:28, indicating a direct path speed of only 160 mph. Possible explanations are the aircraft path was a circling pattern or some other more complex path or scenario. Can the ATSB please provide further clarification of the possible flight paths during this critical time interval? (Please see Figure 1.)
- b) The BFO data is used by the ATSB to help narrow down the possible search area, for example in Fig. 29 of the ATSB report. However, the BFO data at 18:40 appears to be ignored. Including the 18:40 BFO data in the analysis would seem to significantly narrow the allowable paths of the aircraft, and reduce the size of the search area. Can the ATSB please clarify what assumptions were used to determine the location and time of the aircraft’s turn towards the south, and how the BFO value at 18:40 was used in this determination? (Please see Figure 2.)

- c) When the ATSB applied its BTO and BFO models to two known flight paths (Figs. 30/31), there were significant errors in the predicted location at the later times in the flights. The implication is there might be similar discrepancies between the predicted and actual path of MH370. Can the ATSB please provide an explanation for the discrepancies between the predicted and actual flight paths for the examples in the report and how that relates to defining the priority search area?
- d) It would be particularly helpful if Inmarsat were to release the unredacted (raw) data relating to all message exchanges, including both the missing data line items and the missing data fields. Information that appears to have been edited out of the data logs released on or about 27 May 2014 could assist in determining much more about the aircraft movements throughout the whole flight. Can the ATSB please release a complete set of these satellite data?
- e) It would also be helpful to know the Performance Degradation Allowance (PDA) for each engine, and then which engine was on the left, and which was on the right. This information would enable us to propose a more accurate end-point scenario which may help to further limit the extent of the search area. Can the ATSB please provide details about the assumed engine performance?

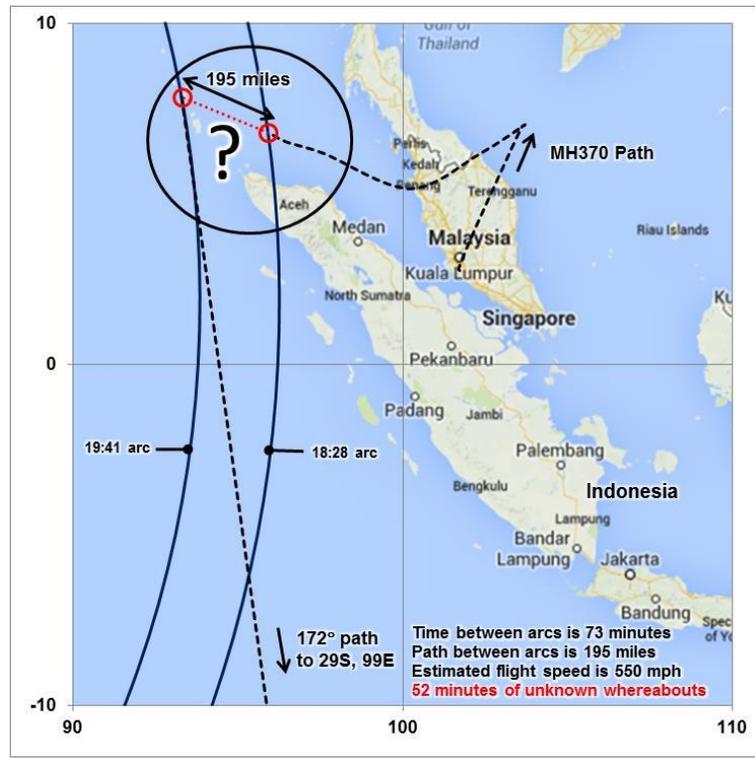
Our group intends to continue to improve our understanding of the models and the data. We will make further public updates when warranted.

The following individuals have agreed to be publicly identified with this statement, to represent the larger collective that has contributed to this work, and to make themselves available to assist with the investigation in any constructive way. Other individuals prefer to remain anonymous, but their contributions are gratefully acknowledged.

Brian Anderson, BE: Havelock North, New Zealand
Sid Bennett, MEE: Chicago, Illinois, USA
Curon Davies, MA: Swansea, UK
Michael Exner, MEE: Colorado, USA
Tim Farrar, PhD: Menlo Park, California, USA
Richard Godfrey, BSc: Frankfurt, Germany
Bill Holland, BSEE: Cary, North Carolina, USA
Geoff Hyman, MSc: London, UK
Victor Iannello, ScD: Roanoke, Virginia, USA
Duncan Steel, PhD: Wellington, New Zealand
Jeff Wise, BS: New York, New York, USA



(a)



(b)

Figure 1. Computed MH370 flight path that ends in the priority search area. (a) Entire path (b) Path over Malaysia and Sumatra, Indonesia

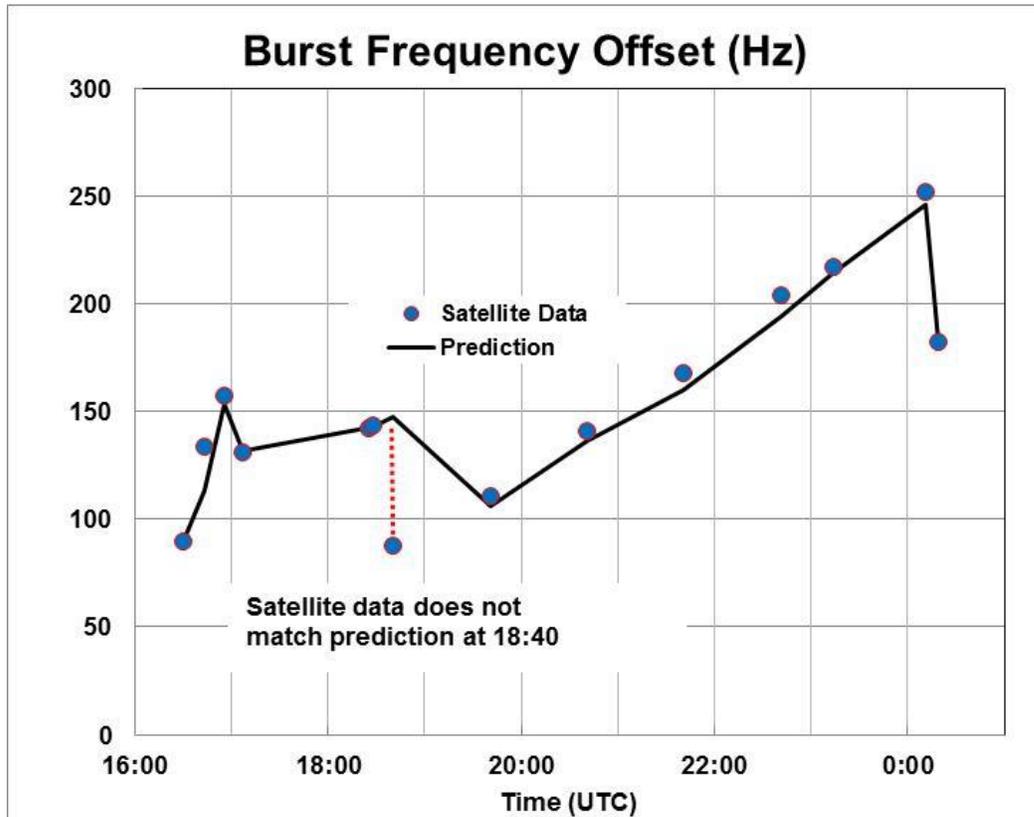


Figure 2. Comparison of measured BFO data and computed values for an MH370 flight path that ends in the priority search area.