

## **DEBRIS EXAMINATION REPORT**

### **SAFETY INVESTIGATION FOR MH370**

Malaysia Airlines MH370 Boeing B777-200ER (9M-MRO) 08 March 2014

Identification of Debris (Item 8 in the "Summary of Possible MH370 Debris Recovered") recovered at Gris Gris Beach, Mauritius on 24 May 2016

Updated on 30<sup>th</sup> April 2017

Issued on 28th February 2017

Ref: DB/03/17



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#### 1.0 Introduction

This item was recovered at Gris Gris Beach, Mauritius on 24 May 2016. It has been identified as Item No. 8 of the items found; refer to the "Summary of Possible MH370 Debris Recovered".



The item was brought back to Malaysia for identification and further examination by the "Malaysian ICAO Annex 13 Safety Investigation Team for MH370".

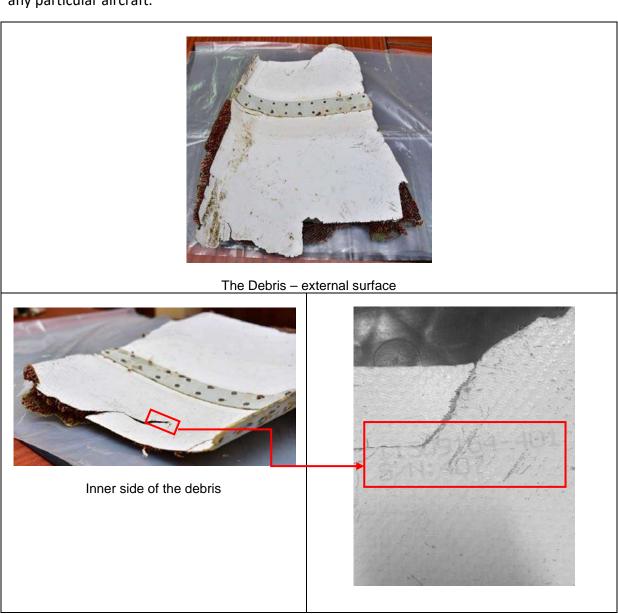
#### 2.0 Part Characteristics

The part was a typical Carbon Fiber Reinforced Plastic (CFRP) with Honeycomb Core. The part weighed 1.21 Kg. A metal strap was still attached on the inner skin, complete with its fasteners.

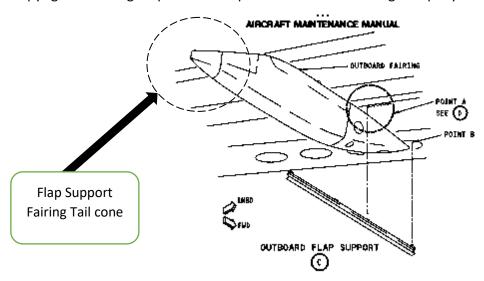
#### 3.0 Identification

Initial assessment indicated that this could be a flap support fairing tail cone of a B777. The part was identified from the legible numbers that were observed on the inner surface. The following part number 113W9154-401 and serial number 407 were visible on one side. The profile of the part resembled the wing flap support fairing tail cone.

The part number was cross referenced to the Boeing component maintenance manual and drawings. This identified it as a component of the wing flap support fairing assembly and the fit closely matched that of the No. 1 flap support fairing. As the records of where these fairing tail cones are fitted are not normally kept by airlines, the serial number 407 could not be tracked to any particular aircraft.



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The location of where the part was found, considering that MH370 (aircraft registered as 9M-MRO) ended its flight in the South Indian Ocean, is consistent with the drift path modeling produced by the Commonwealth Scientific and Industrial Research Organisation (CSIRO). This suggests that the part is highly likely from MH370 given that the likelihood of it originating from another source is very remote. The Australian Transport Safety Bureau (ATSB) reports on the drift modeling can be found at <a href="http://www.atsb.gov.au/media/5772107/ae2014054">http://www.atsb.gov.au/media/5772107/ae2014054</a> final-first-principles-report.pdf and <a href="http://www.atsb.gov.au/media/5771939/ae-2014-054">http://www.atsb.gov.au/media/5771939/ae-2014-054</a> mh370-search-and-debris-update 2nov-2016 v2.pdf.

#### 4.0 Structure Examination

The fracture line on the part showed the fibers to be 'pulled out' showing tension failure. Most of the core was intact and there was no sign of excessive crush.

#### 5.0 Conclusion

Based on the legible numbers and the fit, it is confirmed that the part is the tail cone of the No. 1 flap support fairing of a B777 aircraft. From the location where it was found, and being consistent with the drift path modeling for debris from an aircraft ending its flight in the South Indian Ocean, it is highly likely that it is from MH370 (aircraft registered as 9M-MRO).