



DEBRIS EXAMINATION REPORT

SAFETY INVESTIGATION FOR MH370

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

Identification of Debris (Item 6 in the "Summary of Possible MH370 Debris Recovered") recovered south of Chidenguele, Mozambique on 24 April 2016

Updated on 30th April 2017

Issued on 28th February 2017

Ref: DB/01/17



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Safety Investigation Team for MH370

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1.0 Introduction

This item was recovered south of Chidenguele in Mozambique on 24 April 2016. It is identified as Item No. 6 from the items recovered; 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

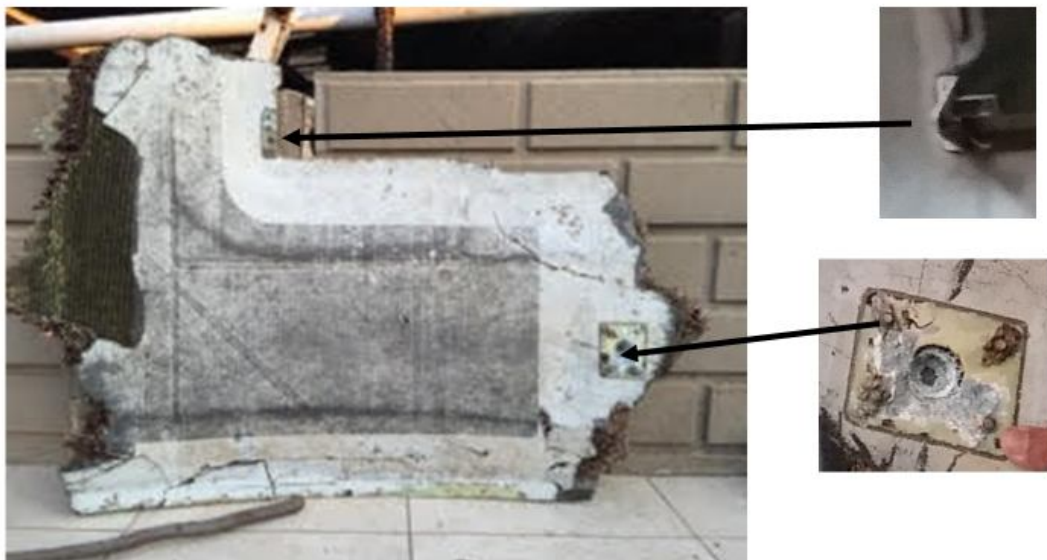
The part was measured to be approximately 54 inches in length and weighed 8.44 Kg.

The structure was of composite honeycomb sandwich with non-metallic core. It had a number of fracture lines and one of the sides which was the 'end of part', was intact. The external skin was dark grey in colour and the inner skin was white.

A part of a metal bracket was still attached on the debris and it was observed that another one had broken off. This was the attachment for the "Hold-Open Stay Rod"

3.0 Identification

The part was taken to a B777-200ER, formerly operated by Malaysia Airlines (MAS), undergoing a maintenance check at Subang, Malaysia, for identification purposes. The possible location of the part on the aircraft was determined.



The hinge bracket, number of fasteners and fasteners' pitch on the part were consistent with those on the right engine fan cowl on the aircraft. The mount found on the part was also consistent with the mount of the fan cowl "Hold-Open Stay Rod" in regards to its location, shape and size of the mounting bracket.



The words "HOIST POINT" were still visible and in the correct location. The fonts used for the words on the part matched those on the fan cowl of the aircraft.



The dimension from the forward edge of the part to the start of the core ramp, which was 18 inches, was also consistent with that of the fan cowl on the aircraft, as shown in the above figure.



The part was brought near to the right fan cowl and was found to physically resemble it in terms of shape, size, colour and features.

Based on the above, the part is confirmed to be part of the ***Right Fan Cowl*** of a B777 aircraft.

4.0 Structure Examination

The fracture on the laminate appears to be more likely a tension failure. The honeycomb core was intact and there was no significant crush on the honeycomb core. All the metal parts were detached and the fastener holes for the hinge door brackets were clearly visible. The attachment for the "Hold-Open Stay Rod" was detached and corrosion was visible on the remaining metal part.

5.0 Conclusion

It has been concluded that the debris is part of the ***Right Fan Cowl*** of a B777 aircraft. As the right fan cowls on both the engines are similar, there is no conclusive evidence to determine whether it belongs to the left (No. 1) or right (No. 2) engine. Based on the other features on the recovered part it has also been determined that the part is almost certain from MH370 (aircraft registered as 9M-MRO).