



# AIRWORTHINESS BULLETIN

AWB 51-009 Issue 1 – 4 June 2019

## De Havilland Moth - Inspection of Wooden Structures

An Airworthiness Bulletin is an advisory document that alerts, educates and makes recommendations about airworthiness matters. Recommendations in this bulletin are not mandatory.

### 1. Effectivity

All de Havilland Moth series aircraft.

### 2. Purpose

The purpose of this Airworthiness Bulletin (AWB) is to inform operators and maintainers of all de Havilland Moth series aircraft to be aware when carrying out inspections of wooden structure in accordance with CASA [AD/DH 82/18](#), and when carrying out maintenance, servicing, inspections repairs or modifications activities if using de Havilland Support Ltd (DHSL) Technical News Sheet (TNS) Series CT (Moth) No. 32 Issue 3 - Inspection of Wooden Structure, dated 1 December 2008 (TNS 32 Issue 3) that the supporting document has limitations in that unusual defects may not be found in, or be addressed by the TNS 32 Issue 3 document.

By providing additional technical background and guidance to operators and maintainers to support TNS 32 Issue 3, it is hoped that this will assist in achieving a higher level of continuing airworthiness for wooden structures in affected aeroplanes than might be achieved by just following TNS 32 Issue 3 only.

### 3. Background

The initial issue of TNS 32, previously titled “Flight Limitations”, was originally raised by British Aerospace as the immediate response to an in-flight wing failure suffered by a DH82A Tiger Moth whilst performing aerobatics.

As a result of ten years of reported inspection information, de Havilland Support Ltd issued TNS No 32 Issue 3 to promote an evidence-based approach to the depth of structural inspection and provide improved guidance to help in the identification of damage or deterioration in the wooden primary structure of all Moth series aircraft.

CASA mandated TNS 32 Issue 3 via [AD/DH 82/18](#) “Inspection of Wooden Structure” for the de Havilland Moth DH82 aircraft.



#### 4. Discussion

CASA notes there are some aspects of TNS 32 Issue 3 which may be considered deficient.

For example;

Several photographs used in TNS 32 Issue 3 show painted wooden structure, for which TNS 32 Issue 3 recommends application of a clear varnish finish for internal wooden structure protection. Painted structural protection is not recommended in TNS 32 Issue 3 as it may impede a visual inspection of the wood grain for detection of compression shakes.

CASA Defect Reporting System (DRS) feedback from operators and maintainers provides a good resource of discovered defects and findings on other Moth series aircraft on the Australian VH register.

This feedback will provide evidence which DHSL could use to develop Issue 4 of TNS 32.

#### 5. Recommendations

To encourage operators to include the maintenance data contained within TNS 32 Issue 3 in the aircraft's maintenance program or schedule for the affected aircraft.

To encourage operators and maintainers to contribute to the DRS database on discovering any defects in wooden structures when accomplishing maintenance, servicing, inspections repairs or modifications on all de Havilland Moth series aircraft.

To encourage operators and maintainers to regularly review the DRS database for reported defects in wooden structures on all de Havilland Moth series aircraft.

#### 6. Reporting

CASA asks that all operators and maintainers contribute to the DRS database on discovered defects in wooden structures.

#### 7. References

- [AD/DH 82/18](#) - Inspection of Wooden Structure
- DHSL Technical News Sheet (TNS) 32 Issue 3



## 8. Enquiries

Enquiries with regard to the content of this Airworthiness Bulletin should be made via the direct link email address:

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