

Inter-Departmental Memorandum

Ref 3041/09/J Date August 21, 1958
To Mr. S. E. Harper
From T. Roberts

TESTS OF FABRIC BASE LAMINATED TREAD TIRES. Subject

> R.F.T. No. 5082, covering tests of Goodyear fabric base laminated tread tires on aircraft 25202, is attached.

WE/b

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Central Files

AVRO AIRCRAFT LIMITED

MALTON, ONTARIO

REQUISITION FOR FLIGHT TEST

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AIRCRAFT 25202 ASSIGNMENT X73-4012 WORK ORDER NO.

FABRIC BASE LAMINATED TREAD TIRES

1. OBJECT

To evaluate fabric base laminated tread tires by comparing their performance with that of standard ribbed tread tires.

2. EQUIPMENT

- 2.1 Pyrometer for measuring tire tread temperatures.
- 2.2 Fabric tread tires should be fitted to the L.H. rear and R.H. forward wheels, and standard Type VII tires to the remaining wheels. If possible, the standard type tires should be unused.

3. PROCEDURE

3.1 Taxi the aircraft out and from the rolling gate up Runway 11/32 and return, performing turns. The Stress Department states that controlled radius of turn must be used to prevent excessive induced torque in the undercarriage legs. The suggested minimum radius of turn, measured from the centreline of the aircraft, is approx. 27 feet for 68,000 lb. aircraft weight. If possible an equal number of L.H. and R.H. turns should be made to give equal severity of use to R.H. and L.H. units. Taxi speeds should be recorded if practical, if not they should be estimated.

The tires should be examined at:-

- (a) Rolling gate before start.
- (b) The far end of the runway.
- (c) Rolling gate on return.

comparing wear between the old and new types of tires. The tires are to be examined for tread chipping, cutting, and tearing, and the temperature at the tread should be recorded.

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APPROVED BY:

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MALTON, ONTARIO

R.F.T. NO. 07-5082

SHEET NO. _____ OF ____ 2

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- 3.2 On satisfactory completion of the taxi test, one take off and landing should be carried out, again recording the tire condition before and after the flight.
- 3.3 When the type VII tires require replacement, they can be replaced by Fabric Tread Tires, and the flying program on the aircraft continued. The tires should be examined before and after each flight, and their condition should be recorded. The number of landings effected, the approximate mileage run before replacement, and the reason for replacement should be recorded for each tire. All tires should be photographed if any substantial difference in rate of wear between type VII tires and fabric tread tires becomes evident.

This test is to continue until the original four Fabric Tread tires on the aircraft have all been replaced.

4. CONDITIONS

- 4.1 Personnel concerned with the maintenance and inspection of Fabric Tread tires should be acquainted with the fact that they can be safely used with the fabric showing due to tread wear and that there is no need to replace a tire until it is worn down to the bottom of the growes in the tread pattern.
- 4.2 Goodyear personnel are to witness the taxi test and the first takeoff and landing.

5. DATA

- 5.1 Report on taxi test of section 3.1.
- 5.2 Report on pre-flight and post-flight tire examinations.

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DATE FOR COMPLETION	PRIORITY	ESTIMATED COMPLETION DATE: