S/c Armstrong

Inter-Departmental Memorandum

Ref 9372/09/J
Date December 30, 1958
To Mr. S. E. Harper
from T. Roberts
Subject ANTI SKID SYSTEM TEST PROCEDURE

Subsequent to the issue of R.F.T. 07-5102 and addendum 1, covering anti-skid system evaluation Bendix Pacific Report No. 8-320 has become available, in which the test procedure for the anti-skid system is detailed. This test procedure is included in the attached R.F.T. 07-5102 addendum 2, which supercedes and cancels the original issue of R.F.T. 07-5102.

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AVRO AIRCRAFT LIMITED

MALTON, ONTARIO
REQUISITION FOR FLIGHT TEST

R.F.T. No. 07-5102 Add. 2

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DATE. December 30, 1958

Aircraft	Assignment No.	Work Order No.
25203	Y73-337	

ANTI-SKID SYSTEM EVALUATION

NOTE:- This addendum supercedes and cancels R.F.T. 07-5102.

1. OBJECTIVE

To carry out a preliminary evaluation of the Bendix Pacific anti-skid system.

2. INSTRUMENTATION

	Item Ref.
2.1 Camera and pointer - R.H. leg.	31-063
2.2 Camera and pointer - L.H. leg.	31-064

2.3 White stripes should be painted on the tires so that camera records can indicate wheel skidding.

3. TEST PROCEDURE

After the anti-skid control system has been checked out as per R.F.T. 07-5102 addendum1, and is performing correctly, the following tests should be made:-

3.1 Response Times

The pilot should check the brake response with the engines at idling thrust by releasing the brakes, allowing the aircraft to roll a few feet, then rapidly applying the brakes. This should be repeated at slightly higher speed. The pilot should note the brake response time relative to his rate of application. If brake response time is acceptable, testing may be continued.

3.2 Low Speed Taxi Tests

Bring the aircraft up to 25 to 40 knots, and brake to a stop with moderate application of brakes. Skid control action may or may not be initiated. If the aircraft is stopped satisfactorily high speed stops may be made.

3.3 High Speed Taxi Tests

3.3.1 Bring the aircraft up to 60 to 80 kts. apply moderate braking, and bring the aircraft to a stop.

Repeat this test using hard braking (Hard braking implies full or near full brake pressure application by the pilot).

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REQUISITION FOR FLIGHT TEST

R.F.T. No. 07-5102 Add. 2

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25203	X73-337	

3.3.2 Bring the aircraft up to 120 kts indicated (or maximum practical speed at the discretion of the pilot) and bring to a stop by the application of moderate braking.

Repeat this test using hard braking.

NOTE:- Results of the above tests should permit qualitative evaluation of the operation of the anti-skid system before undertaking landing trials. If there are no flat spots on the tires, and no skidding has been observed, it can be assumed that the anti-skid system is at least preventing locked wheel conditions

Camera records should be examined for evidence of walking prior to undertaking landing trials.

3.4 Landing Tests

Land the aircraft and bring it to a stop using moderate braking. Measure the landing roll distance.

Repeat this test using hard braking, and again measure the landing roll distance.

4. CONDITIONS

4.1 Runway conditions should be as varied as possible, i.e. dry, wet, with icy patches.

4.2 Tires should be examined after each run for flat spots.

5. DATA

5.1 Pilot's comments

5.2 Camera records of undercarriage during taxi.

5.3 Vinten camera records of landings.

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