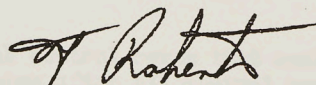


S/L Armstrong

Inter-Departmental Memorandum

Ref 9062/02A/J
Date December 17, 1958
To Mr. S. E. Harper
From T. Roberts
Subject AMTI SKID PRE FLIGHT TEST

Herewith R.F.T. 07-5102, Add. 1. This test is required prior to taxi tests and is a check out of the system.



T. Roberts
Technical Design Coordinator
FLIGHT TEST

/b

c.c.
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Central Files

AVRO AIRCRAFT LIMITED

MALTON, ONTARIO

REQUISITION FOR FLIGHT TEST

R.F.T. No. 07-5102 Add. 1

Sheet No. 1 of

Date. December 13, 1958

Aircraft

25203

Assignment No.

X73-337

Work Order No.

ANTI SKID PRE FLIGHT TEST

The following testing is required prior to the taxi tests as given in R.F.T. 07-5102.

1. Systems check out

1.1 A test receptacle has been provided on both control boxes that enables a complete check out of the skid control system after all control components have been installed in the aeroplane and connected into the wiring system.

1.2 To check out the control system perform the operations and check for correct performance as given in the following instructions:-

1.3 Check out Procedure

Connect the check out instrument to the test receptacle of one control box at a time. If connection is correct and anti-skid switch on pilots instrument panel is "ON" the power indicating signal on the check out instrument should light. Check out of the anti skid system is then ready to be made and the sequence of operation is tabulated on attached sheet. In calibrating the ohmmeter the switches are placed as shown in the top row of the attached table and the ohmmeter calibration knob turned till the needle reads infinite resistance. If on the continuity test a reading on the ohmmeter is appreciably lower than the specified value in the label then it is most likely some form of short circuit exists. On the other hand a higher value than specified infers a discontinuity or poor connection.

2. After the Skid control system has been checked out to be in satisfactory operating condition the following tests are to be made.

2.1 Brake Response

2.1.1 During the right and left wheel functional tests or a repeat of these tests apply the brakes and observe the action of the brakes during step 1 and step 2 release and re-application. The brakes must release completely during step 2 release, and only partially during step 1 release. Upon completion of the releases the brakes shall go back on.

Prepared By: *OK*

Approved By:

Authorized By: *OK*

AVRO AIRCRAFT LIMITED

MALTON, ONTARIO

REQUISITION FOR FLIGHT TEST

R.F.T. No. 07-5102 Add. 1

Sheet No. 1 of

Date. December 13, 1958

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T. Prepared By: *Phanell*

Approved By:

Authorized By: *W. A. Hall*

AVRO AIRCRAFT LIMITED

MALTON, ONTARIO

REQUISITION FOR FLIGHT TEST

R.F.T. No. 07-5102 Add. 1

Sheet No. 2 of

DATE. December 13, 1958

Aircraft

25203

Assignment No.

X73-337

Work Order No.

2.1.1 During brake response tests continuous recordings should be made of the following signals and pressures:-

Brake pressure upstream of valve

Brake pressure at brake unit.

Skid Signals.

Return line press at anti-skid valve.

3. Should the pressure traces show any indication that the operation of the anti-skid valves is having effect on the Emergency system lock out at the brake control valve further tests involving cycling of the anti-skid valves may be necessary.

4. Operation of the Hydraulic fuses must be check as follows:-

4.1 The system just be bled by releasing measured 15 cu/in quantities of fluid at a time during brake application. After all air has been removed from the system repeat the operation twice more each time observing brake operation after closing off flow of fluid.

4.2 Functioning of the fuse should be checked by breaking the joint of the supply line at the cylinder block to simulate a leak. The fuse should prevent flow from the broken joint and should not reset until either the pressure upstream of the fuse has dropped below 90 psi or a pressure not more than 500 psi has been applied to the line downstream of the valve.

4.3 NOTE:- Any attempts to bleed greater amounts through the valve than specified in para. 4.1. should result in the conditions described in para. 4.2 and the fuse should be reset in a similar manner.

R.F.T. Prepared By:

Approved By:

Authorized By:

OPERATION	FUNCTION SWITCH	CONTINUITY switch	METER SWITCH	A.C. SWITCH	METER READING	STEP 1 LIGHT	STEP 2 LIGHT	REMARKS
Ohmmeter Calibration	1	1	ON	OFF	00	OFF	OFF	Adjust Ohmmeter Pot Until needle reads 00
R.H. Rotation alternator		2			320			
L.H. Rotation alternator		3			320			
R.H. rate alternator		4			400			
L.H. rate alternator		5			400			
L.H. valve solenoids		6			120 A			
R.H. valve solenoids		7			120 A			
R. Wheel functional	2	any (inef)	off	ON	Ineffective			
Step 1 push button						ON	OFF	
Step 2 push button						OFF	ON	
Locked wheel & fail								Both lights should go off after 4 seconds
Safe push button						ON	ON	
Arming push button				OFF		ON	ON	A
L. Wheel functional	3			ON		OFF	OFF	
Step 1 push button						ON	ON	
Step 2 push button						OFF	OFF	
Locked wheel & fail						ON	ON	
safe push button						OFF	OFF	Both lights should go off after 4 seconds
Arming push button				OFF		ON	ON	A

~~A~~ Providing no external electrical connection between left and right hand valve solenoids.

~~A~~ Lights are on only while button is depressed. Hold for approx. 10 secs. - fail safe should not actuate.