



Inter-Departmental Memorandum

Ref: 9663/09/J Date: May 28, 1958 To: S. E. Harper From: T. Roberts Subject: BRAKE TESTS

> Attached herewith is R.F.T. 5055 which covers tests on modified brake control valves and heavier brakes on the Arrow 1.

> > T. Roberts -Technical Design Coordinator FLIGHT TEST

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c.c.

Messrs R. Lindley

J. Chamberlin
F. Brame
C. Lindow
F. Mitchell
P. Martin

D. Scard (6)

J. Ames D. Royston

J. Booth

D. Ridler J. Lynch J. Gale

J. Scott

W/C G. Waterman (2) AVRO T.S.D. RCAF

for transmittal to S/L. K. Owen C.E.P.E.

Detachment

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MALTON, ONTARIO

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R.F.T. NO.	5055	
SHEET NO.	OF	2
DATE:	May 21, 1958	

REQUISITION FOR FLIGHT TEST

AIRCRAFT 25201 ASSIGNMENT NO. \$\textbf{X73}=386 WORK ORDER NO.

1. OBJECT

To assess modified brake control valves and heavier brakes (1* thick discs and thinner brake pads).

2. EQUIPMENT

Goodyear brakes - Serial Nos. E-10331 E-101511 E-101611 E-101811

Brake Control Valves (7-195h-281) Serial No. 1013 1021

3. PROCEDURE

Test and assess the brakes as follows:-

- 3.1 Determine brake pressure as a function of rudder pedal force and deflection prior to taxi trials.
- 3.2 Taxi the aircraft at speeds up to 50 kts. Assess smoothness of brake operation and record brake temperatures after prolonged taxying (e.g. 2 miles).
- 3.3 Accelerate to 100 Kts, and brake the aircraft to a full stop without using the parabrake. Aircraft weight * 60,000 lb. (min).
- 3.4 Accelerate to 120 Kts. and brake the aircraft to a full stop without using the parabrake. Aircraft weight \$\infty\$ 60,000 lb. (min).
- 3.5 Land the aircraft at 165 175 kts. and bring the aircraft to a complete stop using brakes and parabrakes. Aircraft weight = 55,000 lb. (max).

R.F.T. PREPARED BY: B. Jewell	APPROVED BY:	AUTHORIZED BY WIND
DATE FOR COMPLETION	PRIORITY	ESTIMATED COMPLETION DATE:



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R.F.T. NO. _______ 5055 SHEET NO. ______ 0F ____ 2 DATE: _____ May 21. 1958

REQUISITION FOR FLIGHT TEST

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NOTE: Items 3.1, 3.2, are required prior to flight. Item 3.3 and Item 3.4 to be programmed at the discretion of the pilot and project designers.

4. DATA REQUIRED

- (a) Brake pressure vs rudder pedal deflection and force from static calibration.
- (b) Pilot's assessment of handling qualities.
- (c) Brake pad temperatures before and after each test.
- (d) Maximum wheel rim temperatures (from temperature sensitive paints).
- (e) Test conditions, e.g. Aircraft weight, speed, runway used, weather conditions, braking distances.

	R.F.T. PREPARED BY:	APPROVED BY: Da Riller	AUTHORIZED BY:	
DATE FOR COMPLETION	PRIORITY	ESTIMATED COMPLETION		
			DATE:	