AVRO AIRCRAFT LIMITED

Inter-Departmental Memorandum

Ref 7949/22/J Date April 8, 1958 To S. E. Harper From T. Roberts Subject ARROW 1 - FIRST FLIGHT R.F.T.

> Herewith Addendum 5, of R.F.T. 07-5024, giving the flight plan and fuel used for the fourth flight of the initial series of flights.

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T. Roberts Technical Flight Test Co-ordinator

c.c.

Messrs J. C. Floyd J. A. Chamberlin R. N. Lindley F. H. Brame C. S. Marshall C. V. Lindow
F. P. Mitchell
P. Martin D. N. Scard Booth J. Ames J. Scott J. Lynch J.

D.

J.

(6) Gale G. Hake Rogers Zurakowski

W/C G. Waterman

W/C G. Waterman (2) AVRO T.S.D. RCAF for transmittal to S/L K. Owen C.E.P.E. Detachment.



MALTON, ONTARIO

R.F.T. NO. <u>07-5024 Add 5</u>

SHEET NO. <u>1</u> OF <u>2</u>

DATE: April 8, 1958

REQUISITION FOR FLIGHT TEST

AIRCRAFT 25201 ASSIGNMENT NO. WORK ORDER NO.

This addendum covers the flight plan and fuel used for the fourth flight of the initial series of flights, and supersedes Addendum μ_{\bullet}

1. INSTRUMENTATION

1.1 Telemetry

Telemetry requirements are identical to those for flight Number $2 \, .$

1.2 Oscillograph

It is requested that roll rate signal be added to the oscillograph channels, either as an extra measurement or in place of emergency aileron angle signal, if possible.

1.3 Tape Recorder

A tape recorder is required to enable recordings to be made in the event of radio transmission failure.

2. FLIGHT PLAN

2.1 Take-off

Prior to take-off inform 'Frank' of RPM, = J.P.T. and pressure ratio at military throttle setting.

Take-off without afterburner. Normal damper, gear down mode may be engaged at the pilots discretion.

Raise landing gear, select normal damper gear up mode and accelerate to 350 kts. EAS.

2.2 Climb

Climb to 350 kts. EAS to 10,000 ft. level out and accelerate at 10,000 ft. to 450 kts. EAS.

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



MALTON, ONTARIO

07-5024 R. F. T. NO. _ __ .OF _ SHEET NO. _ April 8, 1958

REQUISITION FOR FLIGHT TEST

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DATE:

2.2 Climb Contid

Climb at 450 kts. EAS to the altitude corresponding to M = 0.9, (approximately 15,000 ft), and continue climbing at M = 0.9. Light the afterburners individually at 10,000 ft. and continue climbing to 45,000 ft. Report to 'Frank' RFM, J.P.T. and pressure ratio every 5,000 ft. during climb.

2.3 Test Period

Level off at 45,000 ft, disengage the damper and assess engine handling - throttling one engine back to idling and dive brake operation.

Accelerate to M = 1.1 and repeat as for M = .9.

Engage normal damper gear up mode, and accelerate to $M \approx 1.3$ in increments of 0.05M carrying out aileron taps at M = 1.15, 1.20, 1.25 and 1.30 in conjunction with ground operations controller. Repeating engine handling and dive brake operation at M = 1.20 and 1.30.

Continue to accelerate to M = 1.4, if necessary the aircraft may be dived to 35,000 ft. without exceeding EAS limitation.

2.4 Descent

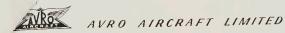
Reduce speed to M = 0.90 and descend to approximately 25,000 ft, continuing to descend to circuit height at 350 kts. EAS.

Approach and land.

3. FUEL USED AND TIME

- 3.1 Attached appendix 2f shows an estimate of fuel used and time for the above flight plan.
- 3.2 During taxi the aircraft is estimated to use 1400 lb/hour/engine.

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MALTON, ONTARIO

REQUISITION FOR FLIGHT TEST

R.F.T. NO. 07-5024 Add. 4 SHEET NO. ____3____ OF ___3____ DATE: April 8, 1958

WORK ORDER NO. ASSIGNMENT NO. AIRCRAFT

3. FUEL USED AND TIME

3.3 2500 lb. of fuel shall remain unuseable in addition to any fuel used to ballast the aircraft.

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

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