12.113-58/03

INTER-DEPARTMENTAL MEMORANDUM

Ref 6865/01/J

Date March 3, 1958

S. E. Harper

From J. D. Hodge

Subject FLIGHT CHECKS OF NAVIGATION AIDS

R.F.T. No. 5028, covering calibration checks for the AN/ARN-6 Radio Compass, the AN/ARA-25 U.H.F. Homer, and the J-4 Compass during the Phase 1 Engineering Flights of aircreft 25202, is attached.

WE/bb

Technical Flight Test Co-ordinator

c.c.

Messrs J. Chamberlin

F. Brame

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

AVRO AIRCRAFT LIMITED R.F.T. No. 5028 MALTON, ONTARIO. Sheet No. 1 of 2 REQUISITION FOR FLIGHT TEST Date. March 3, 1958

NO. WORK ORD	ER NO.
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CALIBRATION CHECKS FOR NAVIGATION AIDS

1. OBJECT

- 1.1 Air swings are required:
 - (i) to check calibration and to compensate the AN/ARN-6 Radio Compass.
 - (ii) to check calibration of AN/ARA-25 U.H.F. Homer
 - (iii) to check calibration of J-4 Compass.
- 1.2 Station passage characteristics of the AN/ARN-6 Radio Compass and the AN/ARA-25 U.H.F. Homer are to be determined.

2. EQUIPMENT

- 2.1 A K-24 camera (or equivalent) is to be mounted in the aircraft so that it can photograph a check point while the aircraft is flying over it.
- 2.2 A recorder camera (or an auto-observer) is to be mounted in the aircraft to record the AN/ARN-6, AN/ARA-25, and J-4 Compass displays.

3. PROCEDURE

3.1 With the AN/ARN-6 tuned in to a Broadcast station and the AN/ARA-25 tuned in to a U.H.F. station, runs will be made from a number of directions over a known checkpoint.

The complete procedure for the AN/ARN-6 Radio Compass is given in T.I.B. 7-13-2, and the same procedure can be followed for the AN/ARA-25 U.H.F. Homer.

The true course of the aircraft can be obtained from the photographs of the checkpoint, and can be compared with the readings photographed by the recording camera to check out the navigation aids.

alus.			
R.F.T. Prepared By:	J.K. Hughes Approved By .	Authorized	By:
Date for Completion	Priority	Estimated (Completion

AVRO AIRCRAFT LIMITED

MALTON, ONTARIO.

REQUISITION FOR FLIGHT TEST

R.F.T	. No	502	8		
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AIRCRAFT

ASSIGNMENT NO.

WORK ORDER NO.

X73-096

3.2 Station passage characteristics of the AN/ARN-6 Radio Compass and the AN/ARA-25 U.H.F. Homer should be obtained by the procedure given in T.I.B. 7-13-2.

4. CONDITIONS

4.1 The tests described in this R.F.T. should be carried out at the earliest practical time in the Phase 1 Engineering Test program. The Radio Compass calibration and compensation is particulary important, as this is the most useful navigation aid for operation of the aircraft from Malton.

5. DATA

- 5.1 Calibration and Compensation curves.
- 5.2 Station passage data.

R.F.T. Prepared By:

Approved By:

Authorized By:

Date for Completion

Priority

Estimated Completion Date: