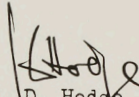




Ref 1988/02A/J
Date Sept. 19, 1957
To S. E. Harper - Chief Experimental Engineer
From J. D. Hodge - Technical Flight Test Co-ordinator
Subject ARROW I TELEMETRY REQUIRED FOR INITIAL FLIGHTS

Herewith a list of the parameters required to be telemetred throughout the initial flights of the Arrow 1, together with their priority order. The required frequency response (in cycles/sec) is shown as brackets following each 'continuous' parameter.

DM/bb


J. D. Hodge
Technical Flight
Test Co-ordinator

CONTINUOUS

Memo Ref: 1988/02A/j

Stability and Control

- 3. Lateral acceleration (10)
- 28. Port aileron angular acceleration (25)
- 30. Port elevator damper servo position (25)
- 31. Port aileron damper servo position (25)
- 29. Rudder damper servo position (25)
- 5. Rate of pitch (10)

Structural Integrity

- 20- Five vibration pick-up accelerometers defined in CF105
- 24 Instrumentation - Issue 7 as numbers 22, 34, 36, 61 and 67
(capable of recording frequencies up to 60 cycles/sec)

COMMUTATED

Stability and Control

- 1. Aircraft static pressure (0-2160 lb/ft²)
- 2. Differential pressure (0-1440 lb/ft²)
- 7. Rate of yaw
- 8. Rate of Roll
- 10. Angle of attack
- 9. Angle of sideslip
- 4. Normal acceleration
- 6. Port elevator angle
- 27. Port aileron angle
- 26. Rudder angle

Flying Control Hydraulics

- 15. Port engine pump inlet temperature.

Engine Installation

- 16. Oil temperature at starboard engine inlet
 - 17. Fuel temperature at inlet to starboard engine burner
 - 12. Centre rear mount, station 711.
 - 13. Top of exhaust inner flange station 803
 - 14. Top flange of I-beam on E through heat exchangers at station 592
 - 14 (a) Top flange of former directly below firewall station 663
 - 32. Gills shut indication lights, starboard (2 per engine)
- } Structural Temperatures

COMPUTED cont'd

Fuel System

- 18. Fuel contents in tank No. 5. Port.
- 19. Fuel contents in tank No. 5. Stbd.

Utility Hydraulics

- 25. Pump inlet temperature

Air Conditioning

- 11. Turbine R.P.M.