

1. Security Classification of this Page : RESTRICTED

2. Type of Document PROJECT DOCUMENT

3. Report No. : 4. Date : 5. Security Classification/
Declassification Schedule
PD AE 8522 : AUGUST 1985 : RESTRICTED

6. Title/Sub-title
PRESSURE MEASUREMENTS IN THE HEAT SHIELD REGION OF 1/80 SCALE PSLV MODEL
IN THE MACH NUMBER RANGE OF 0.8 to 4.0

7. Author(s)
SAJEER AHMED, S. SELVARAJAN

8. Division/Section : 9. Project No.
AERODYNAMICS/NTAF : NTAF-O-104

10. Type of report/ : 11. pages [29] : 12. Approved by/
Period covered : tables [15] : No. of copies
PROJECT DOCUMENT : illustrations [12] : HEAD, AERO/20
1983-85 : :
: M. Shivakumar Swamy

13. a) Sponsoring Agency(s) : 13. b) Participating Agency(s)
VSSC, TRIVANDRUM : NAL

14. Keywords
PSLV, STEADY PRESSURE, HEAT SHIELD REGION

15. Abstract

Pressure measurements were carried out in the heatshield region of a 1/80 scale PSLV pressure model in the Mach number range of 0.8 to 4.0 and at incidences of 0 and 5 degrees in the 1.2M tunnel to supplement the pressure data obtained in 0.3M tunnel where tests on the model covered transonic Mach numbers only and also to have a comparison of the pressure data with that of 0.3M tunnel for any tunnel/support system interference. Results show a good comparison of the pressures with respect to those of 0.3M tunnel at $M=0.78$.