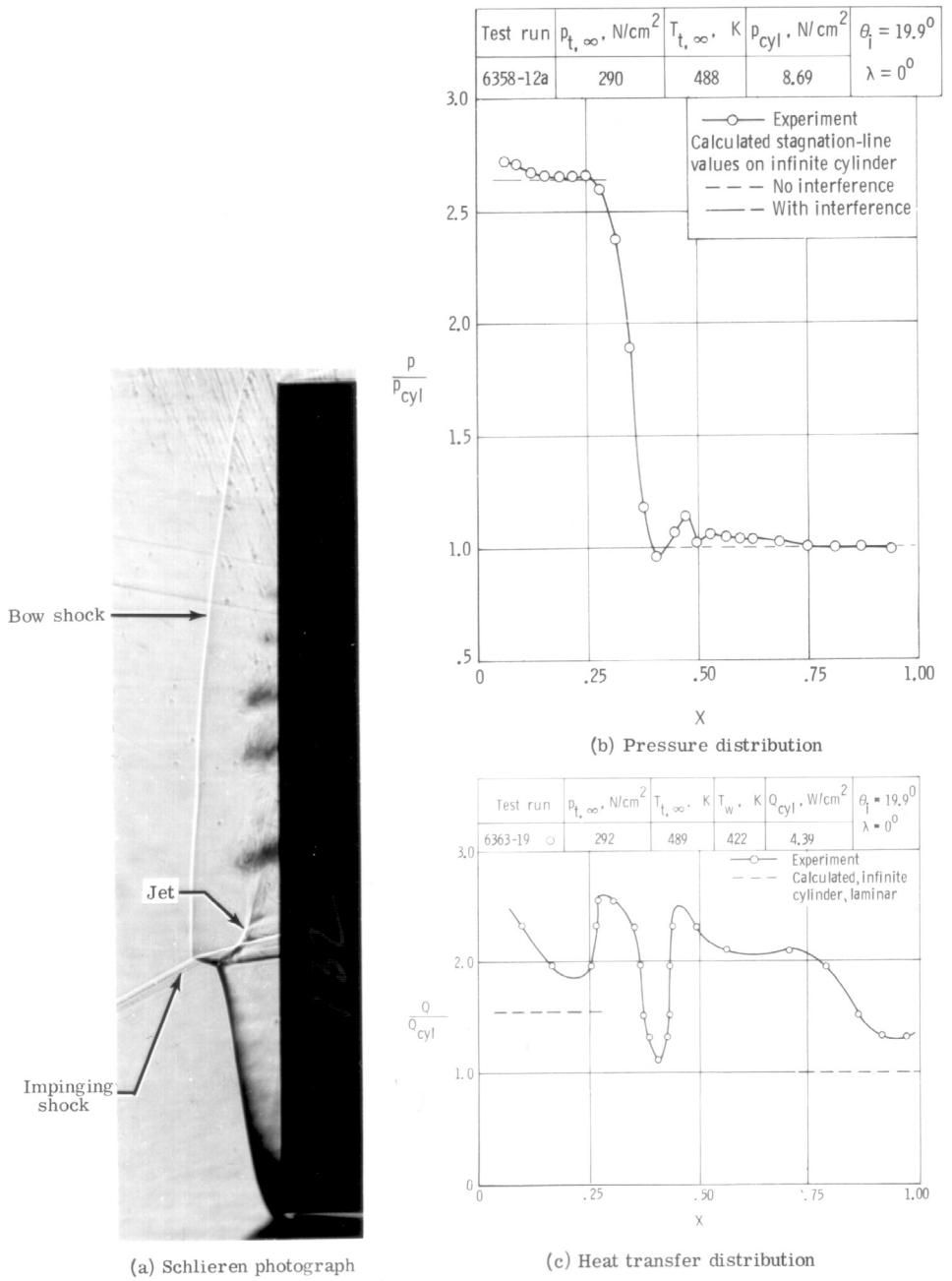
From J.W. Keyes and F. D. Hains, "Analytical and Experimental Studies of Shock Interference Heating in Hypersonic Flows", NASA-TN-D-7139, May 1973. Original photos duplicated by NASA Langley photo archive, here scanned into gray scale at 300 dpi.

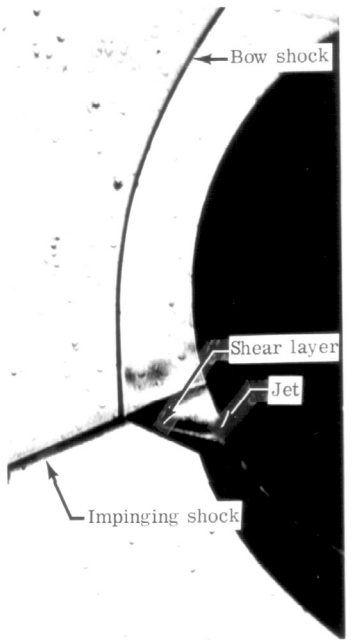


(a) Schlieren photograph

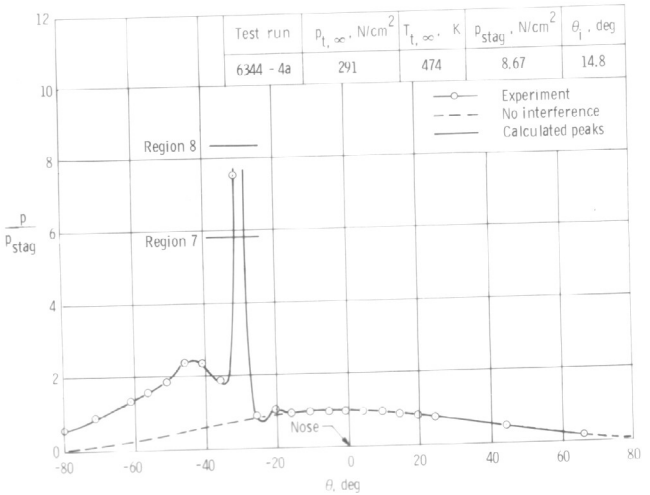
(b) Pressure distribution

(c) Heat transfer distribution

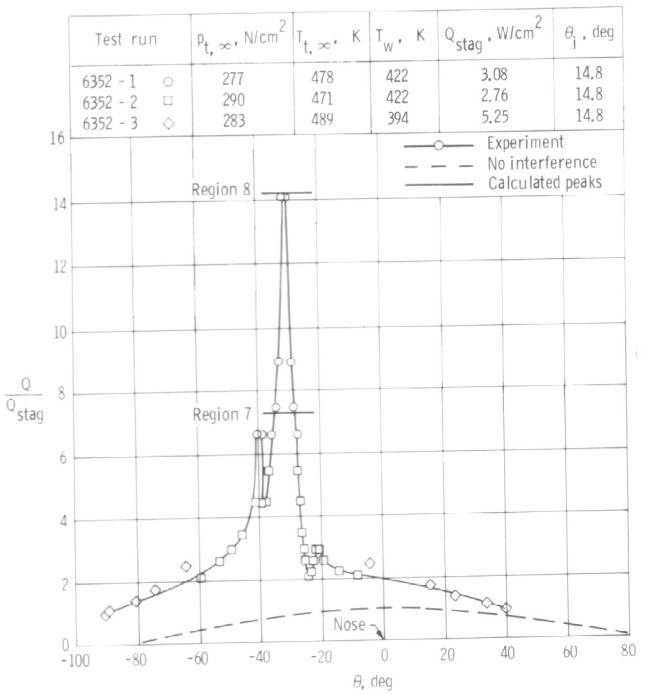
Figure 1-27.- Type IVa interference on a fin at Mach 6 in air. $\Theta_i = 19.9^o$, $N_{Re,\infty}/m \approx 25.8 \times 10^6$, $\gamma = 1.4$.



(a) Schlieren photograph.



(b) Pressure distribution.



(c) Heat-transfer distribution.

Figure I-22.- Type IV interference on a 0.051 m diameter hemisphere at Mach 6.00 in air. $\Theta_l = 14.8^o$, $N_{Re,\infty}/m \approx 25.7 \times 10^6$, $\gamma = 1.4$.