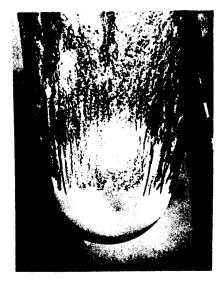


Drag coefficient on a streamlined strut as a function of thickness ratio, showing contribution of skin friction and pressure to total drag [18].

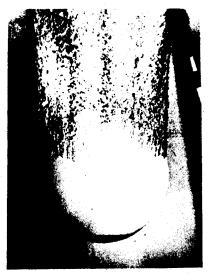
Fig. 7.14 Strong differences in laminar and turbulent separation on an 8.5-in bowling ball entering water at 25 ft/s:

(a) smooth ball, laminar boundary layer;

(b) same entry, turbulent flow induced by patch of nose-sand roughness. (U.S. Navy photograph, Ordnance Test Station, Pasadena Annex.)



(a)



(b)