(EXAMPLE) [C-2-1]

Image of X-43 (Source: NASA)

Consider a thin (close to a flat plate) supersonic airfoil with chord length c = 10 ft in a Mach 3 flight at an altitude of 22,000 ft. The airfoil is at an angle of attack of 5 degrees. Estimate the lift and wave drag coefficients, as well as the lift and wave drag per unit span.