

- 13 The IKAROS satellite has mass 320 kg and moves through space using a solar sail of area 20 m^2 . The average solar wind pressure is $1.0 \times 10^{-5}\text{ N m}^{-2}$.

What is the acceleration of the satellite caused by the solar wind?

A $3.1 \times 10^{-8}\text{ m s}^{-2}$

B $6.3 \times 10^{-7}\text{ m s}^{-2}$

C $3.2 \times 10^{-3}\text{ m s}^{-2}$

D $6.4 \times 10^{-2}\text{ m s}^{-2}$

Space for working