

52. We use $P = Fv$ (Eq. 7-48) to compute the force:

$$F = \frac{P}{v} = \frac{92 \times 10^6 \text{ W}}{(32.5 \text{ knot}) \left(1.852 \frac{\text{km/h}}{\text{knot}} \right) \left(\frac{1000 \text{ m/km}}{3600 \text{ s/h}} \right)} = 5.5 \times 10^6 \text{ N} .$$