

P#20

Ch 14 - pg 457

$$\begin{aligned}f &= 1000 \text{ Hz} \\v_s &= 0 \text{ m/s} \\v_o &= -30 \text{ m/s}\end{aligned}$$

$$f' = f \cdot \left(\frac{v \pm v_o}{v \mp v_s} \right)$$

$$= (1000 \text{ Hz}) \cdot \left(\frac{345 \text{ m/s} - 30 \text{ m/s}}{345 \text{ m/s}} \right)$$

$$f' = 913 \text{ Hz}$$