

# FORMULAS

## **To Find Mils of Displacement:**

$$\begin{aligned} \text{Oz. In. Meter Reading} \div \frac{1}{2} \text{ Rotor Weight (if two plane)} \\ = \underline{\text{Oz. In. Per Lbs}} \div 16 \times 1000 \\ = \text{Mils of Displacement} \end{aligned}$$

$$\text{Mils} \div 1,000 \times 16 \times \frac{1}{2} \text{ Rotor Weight} = \text{Oz. In.}$$

## **To Find Velocity:**

$$\begin{aligned} \text{Mils} \times 6.28 \times [\text{RPM} \div 60] = \text{Mils/Sec} \div 1000 \\ = \text{In/Sec} \end{aligned}$$

## **To Find acceleration:**

$$\begin{aligned} \text{Mils} \times [6.28 \times [\text{RPM} \div 60]]^2 = \text{Mils/Sec}^2 \div 1000 \\ = \text{In/Sec}^2 \end{aligned}$$