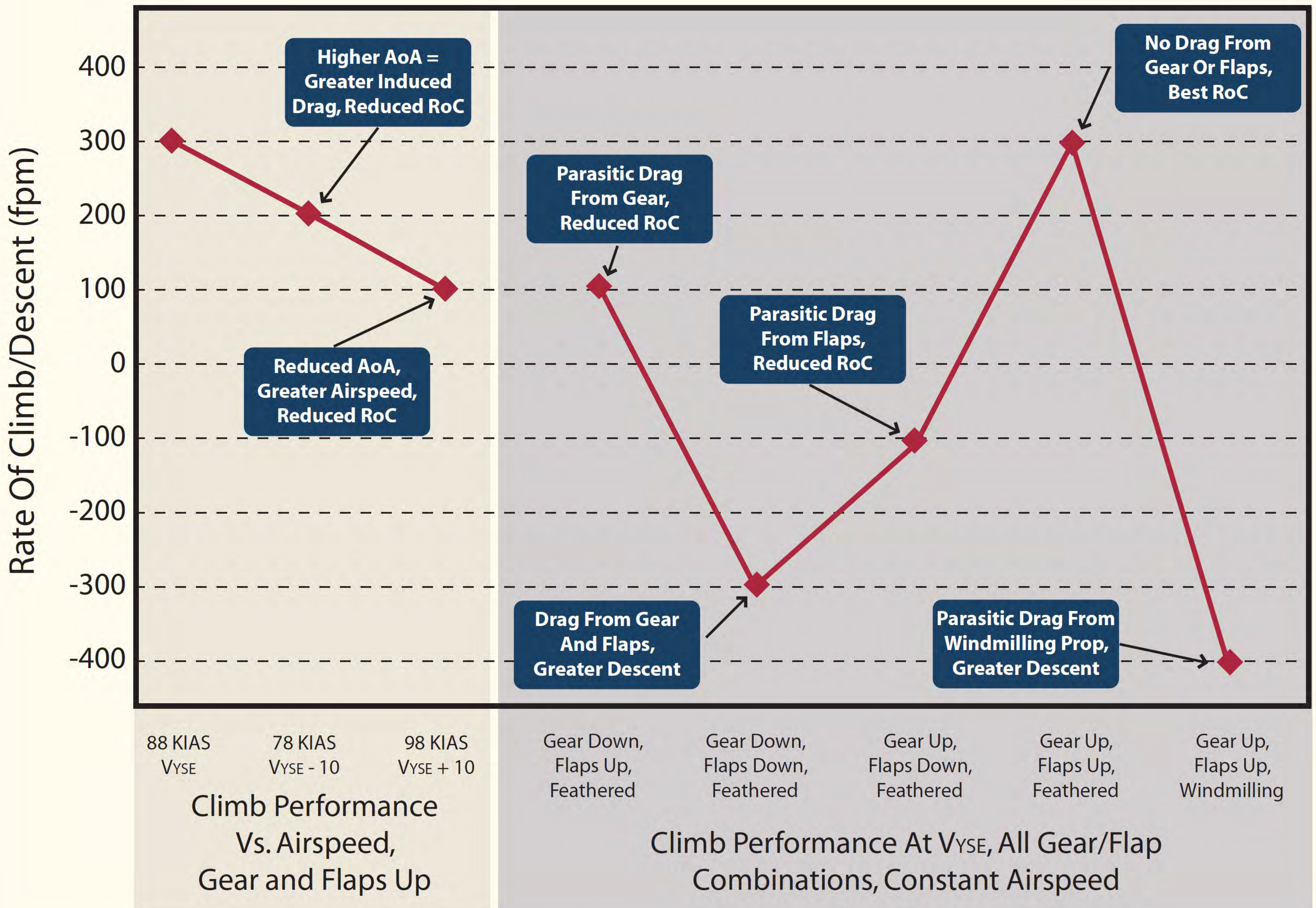


Demonstrating Drag's Effect on Single-Engine Rate Of Climb

Piper PA-44-180T Turbo Seminole, 3500 Feet MSL



The chart above plots rate of climb (RoC) data while demonstrating the effects of various airspeeds and airplane configurations on climb performance during simulated OEI flight. Average values for rate of climb/descent resulting from several flights conducted by the author in a PA-44-180T Turbo Seminole, an example of which is pictured at right, at 3500 msl are shown.

The demonstration's purpose is to better understand the factors impacting the best climb performance during OEI flight: Maintain V_{YSE} ; obtain maximum available power from operating engine, eliminate unnecessary drag, maintain coordinated and straight-ahead flight with zero sideslip.

