8-9. A steel angle has a cross-section area of $A = 3.2\,\text{in}^2$. The smallest redius of gyration occurs about the u-u axis and is $r_u = 0.72\,\text{in}$. The angle is 9-ft-long and is pin-connected in a system. Assume that the modulus of elasticity follows $E \sim N\left(29 \times 10^3, (2 \times 10^3)^2\right)\text{ksi}$. Determine the distribution of the critical axial buckling load that can be applied through its centroid C.

(**Ans.** $P_{cr} \sim N\left(40.707,\ 2.807^2\right)\text{ksi}$)