Special Problem 8-3.2

Consider the magnetic field:

$$\mathbf{H}(\overline{r}) = z \cos \phi \ \hat{a}_{\rho} + \rho z^{2} \ \hat{a}_{\phi} + \rho^{2} \sin \phi \ \hat{a}_{z} \quad \left[\frac{A}{m} \right]$$

Determine the current density ${f J}({ar r})$ that created this magnetic flux density.

Jim Stiles The Univ. of Kansas Dept. of EECS