1033-34-27 **Daniel C. Biles*** (daniel.biles@wku.edu), Department of Mathematics, Western Kentucky University, Bowling Green, KY 42101. *Numerical Approximation of Solutions of Singular Second Order Differential Equations.*

We consider application of the backward (implicit) Euler method to the problem

y"+p(t)y'+q(t,y(t))=0,

y(0)=a,y'(0)=b,

in which p might be singular at t=0. We present results on consistency, global error and stability. We also present numerical results. (Received July 27, 2007)