Abstract

The present paper discusses the problem of estimating the reliability measures of a three-component identical system when the system is affected by Common Cause Shock (CCS) failures as well as human errors. The maximum likelihood estimators of the reliability measures like reliability function and mean time between failures of the present model are obtained. The performances of the proposed estimates have been developed in terms of mean square error, using simulated data.

**Index Terms**

Computer Science  
Applied Sciences

**Keywords**

M L estimation  
CCS failures  
Human errors  
Reliability function  
MTBF  
Monte-Carlo Simulation