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President : **Suresh Chandra Bhatia**

In this paper, we study an N-policy for single server queueing system with balking and reneging. The server turns on at arrival epochs and turns off (finish) at service completion epoch. When server is busy the failed units may balk with probability $(1 - e_i)$ and renege exponentially with parameter v. Using recursive method, we determine the close form solution for steady state queue size distribution. Using the steady state probability distribution, the expected number of units in the system, and some other performance indices namely the expected number of failed units in the queue and expected waiting time in the queue etc. are determined.

29. The Application of Vibration and Shock Isolation Techniques in HI-Tech. Area.

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Key Words : *Vibration, Shock, Isolation, Air Springs, Engine Vibration.*

An Industry orinted review paper of inter-disciplinary nature depicting the progress in Vibration, Shock and Noise Control through basic Science & Engineering developments. The overview of the developments of isolation techniques and systems and its relevance in design related to mechanical, electronics and hi-tech areas starting from automobile to aerospace systems are covered.

On the application area an attempt had been made to cover the global scenario targeting next decade. This covers the worldwide professionals right from mechanical, electronic & civil engineers, scientists working in hi-tech areas to a neurosurgeon performing a delicate brain surgery in a hospital.