Reliability Analysis of Phased Mission System with Non-exponential and Partially Repairable Components

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PII: S0951-8320(16)30709-8
DOI: 10.1016/j.ress.2018.03.008
Reference: RESS 6090

To appear in: *Reliability Engineering and System Safety*

Received date: 29 October 2016
Revised date: 7 January 2018
Accepted date: 3 March 2018

Please cite this article as: Xiang-Yu Li , Hong-Zhong Huang , Yan-Feng Li , Reliability Analysis of Phased Mission System with Non-exponential and Partially Repairable Components, *Reliability Engineering and System Safety* (2018), doi: 10.1016/j.ress.2018.03.008

Highlight

- Apply the Semi-Markov Process in the Complex cold standby and partially repairable PMS consisting of non-exponential components.
- An approximation solution is proposed to solve the difficult integrals in Semi-Markov Process.
- The accuracy and calculation efficiency of the approximation method is studied.
- The SMP and approximation method, as well as the modularization method and PMS-BDD method are applied to assess the reliability of a practical multi-phased AOCS of the man-made satellite.