

## Accepted Manuscript

Reliability assessment of multi-state phased mission system with non-repairable multi-state components

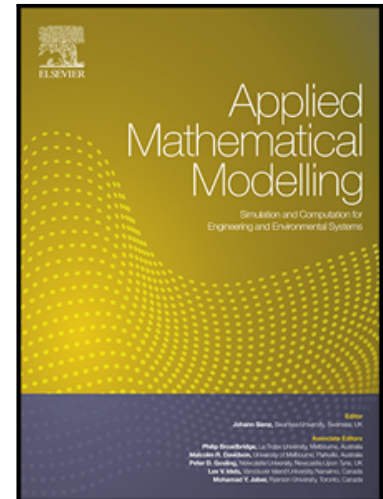
Xiang-Yu Li , Hong-Zhong Huang , Yan-Feng Li , Enrico Zio

PII: S0307-904X(18)30180-X  
DOI: [10.1016/j.apm.2018.04.008](https://doi.org/10.1016/j.apm.2018.04.008)  
Reference: APM 12247

To appear in: *Applied Mathematical Modelling*

Received date: 17 December 2017  
Revised date: 12 April 2018  
Accepted date: 18 April 2018

Please cite this article as: Xiang-Yu Li , Hong-Zhong Huang , Yan-Feng Li , Enrico Zio , Reliability assessment of multi-state phased mission system with non-repairable multi-state components, *Applied Mathematical Modelling* (2018), doi: [10.1016/j.apm.2018.04.008](https://doi.org/10.1016/j.apm.2018.04.008)



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Highlight**

- A MMDD algorithm for PMS and a PMS-MMDD model are proposed to model the non-repairable multi-state phased-mission system.
- A Markov renewal equation-based method is proposed to evaluate system probabilities with non-exponential distributions.
- The comparison to the Monte Carlo simulation method illustrate the computation accuracy and efficiency of the proposed methods.
- An attitude and orbit control system in spacecraft is studied as a practical example to illustrate the proposed methods.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/8051205>

Download Persian Version:

<https://daneshyari.com/article/8051205>

[Daneshyari.com](https://daneshyari.com)