

Accepted Manuscript

Reliability of multi-state systems with free access to repairable standby elements

Gregory Levitin , Heping Jia , Yi Ding , Yonghua Song , Yuanshun Dai

PII: S0951-8320(16)30817-1
DOI: [10.1016/j.res.2017.05.003](https://doi.org/10.1016/j.res.2017.05.003)
Reference: RESS 5823



To appear in: *Reliability Engineering and System Safety*

Received date: 18 November 2016
Revised date: 6 April 2017
Accepted date: 3 May 2017

Please cite this article as: Gregory Levitin , Heping Jia , Yi Ding , Yonghua Song , Yuanshun Dai , Reliability of multi-state systems with free access to repairable standby elements, *Reliability Engineering and System Safety* (2017), doi: [10.1016/j.res.2017.05.003](https://doi.org/10.1016/j.res.2017.05.003)

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.

Highlights

- The reliability of standby systems composed of multi-state elements with constant state transition rates is quantitatively evaluated.
- The standby elements can be repaired, whereas no repairs are possible in operation.
- The multi-state standby element with the best technical state is activated when an operating element fails.
- An iterative algorithm for reliability evaluation based on element state probabilities is proposed.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/5019477>

Download Persian Version:

<https://daneshyari.com/article/5019477>

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