

Accepted Manuscript

Condition-Based Maintenance for Complex Systems based on Current Component Status and Bayesian Updating of Component Reliability

Gero Walter, Simme Douwe Flapper

PII: S0951-8320(16)30934-6
DOI: [10.1016/j.ress.2017.06.015](https://doi.org/10.1016/j.ress.2017.06.015)
Reference: RESS 5882



To appear in: *Reliability Engineering and System Safety*

Received date: 1 December 2016
Revised date: 29 May 2017
Accepted date: 11 June 2017

Please cite this article as: Gero Walter, Simme Douwe Flapper, Condition-Based Maintenance for Complex Systems based on Current Component Status and Bayesian Updating of Component Reliability, *Reliability Engineering and System Safety* (2017), doi: [10.1016/j.ress.2017.06.015](https://doi.org/10.1016/j.ress.2017.06.015)

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

- Presents a new class of condition-based maintenance policies for complex systems
- Uses the reliability block diagram and the status (working/defective) of components
- Closed-form Bayesian update of system reliability using all available information
- Separate Weibull model for each component type using expert knowledge and test data
- Maintenance decision via minimization of the expected one-cycle cost rate

Download English Version:

<https://daneshyari.com/en/article/5019427>

Download Persian Version:

<https://daneshyari.com/article/5019427>

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