## **Accepted Manuscript**

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

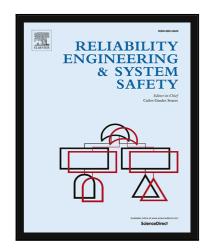
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#### ACCEPTED MANUSCRIPT

#### Highlights

- Presents a new class of condition-based maintenance policies for complex systems
- $\bullet$  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

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