

Reliability Centered Maintenance Analysis Software

Built on the powerful and adaptable Relyence® platform, Relyence RCM offers a best-in-class solution for Reliability Centered Maintenance analysis. By making informed decisions using the visual decision tree diagrammer and documenting the resulting maintenance strategies in comprehensive Worksheets, Relyence RCM enables you to develop the most efficient and cost effective maintenance plans for your organization.

KEY HIGHLIGHTS

- Full RCM Analysis
- SAE JA1011 & JA1012
- MIL-HDBK-2173
- NAVAIR 00-25-403
- Guided Decision Diagrammer
- Built-in & custom Worksheets
- Customizable Dashboard
- Integration with FMEA
- Role-based permissions
- PC, Mac, tablet, smartphone
- Available on the Web or installed
- Zero-client, browser-based

Reliability Centered Maintenance Analysis. Enabling you to develop maintenance plans utilizing the most efficient combination of reactive, proactive, and predictive methodologies, Relyence RCM offers a compliant and flexible framework for the most effective analyses. Relyence RCM supports the most widely accepted standards for RCM analysis including SAE JA1011, SAE JA1012, MIL-HDBK-2173, and NAVAIR 00-25-403.

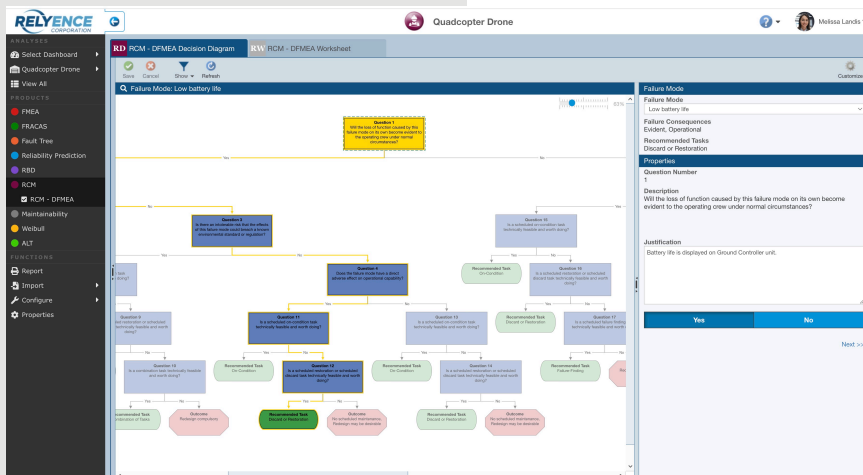
Guided Decision Diagrammer. Relyence RCM incorporates our *Guided Decision Diagrammer* to direct you expertly through the series of questions in order to help you determine the most effective maintenance strategy to employ. Our built-in decision trees can be used as-is or can be modified if needed. Or you can create your own set of questions and build a custom Decision Diagram. The Relyence RCM Decision Diagram offers an easily navigable tree, guiding you along the process in order to reach a conclusion. The Decision Diagram also has handy features to allow you to zoom in and out for optimal viewing, coloring coding for quick visual evaluation, and filtered viewing to allow you to zone in on the most important branches of your tree.

Adaptable RCM Worksheets. Relyence RCM Worksheets are the core of your Reliability Centered Maintenance analysis. There are several built-in Worksheets that support the RCM standards and enable you to get up and running quickly. The supplied Worksheet formats can be modified if needed, and you can create an entirely custom Worksheet. Relyence RCM Worksheets support failure information from any type of FMEA you perform – Design, Process, FMECA, FMEA-MSR, and piece-part FMEAs.

Feature Rich. Relyence RCM includes an array of additional capabilities to create another trademark best-in-class software solution from Relyence, and can operate as part of the Relyence Studio platform or in stand-alone fashion. Relyence RCM and Relyence FMEA work in tandem for important data sharing. The *FMEA Worksheet Insight* capability allows you to view the relevant FMEA data as needed when progressing through your RCM analysis. RCM

data is auto populated when applicable for efficient and consistent analyses. Added features such as flexible and comprehensive reports, audit tracking, custom Formulas, Dashboards, and more provide a powerful RCM package.

Deployment Choice. Relyence RCM, as all Relyence software tools, is built on the Relyence Platform - a highly adaptable and mobile-friendly framework constructed with today's workplace in mind. Relyence RCM can be installed on-premise at your location, hosted in the Microsoft Cloud to take advantage of Microsoft's industry-leading Azure platform, or hosted in your own private secure cloud. All platforms offer the same features and functions. The choice is yours!




A Well-Organized Approach for RCM Analysis

Built-in Worksheets supporting SAE, MIL, and NAVAIR Standards

Support for RCM based on any FMEA Type

Customizable Worksheets



Relylene Corporation

ANALYSES

- Select Dashboard
- Quadcopter Drone
- View All

PRODUCTS


- FMEA
- FRACAS
- Fault Tree
- Reliability Prediction
- RBD
- RCM
- RCM - DFMEA**
- Maintainability
- Weibull
- ALT



FUNCTIONS

- Report
- Import
- Export
- Configure
- Properties

RD RCM - DFMEA Decision Diagram

RW RCM - DFMEA Worksheet


Quadcopter Drone



Melissa Landis

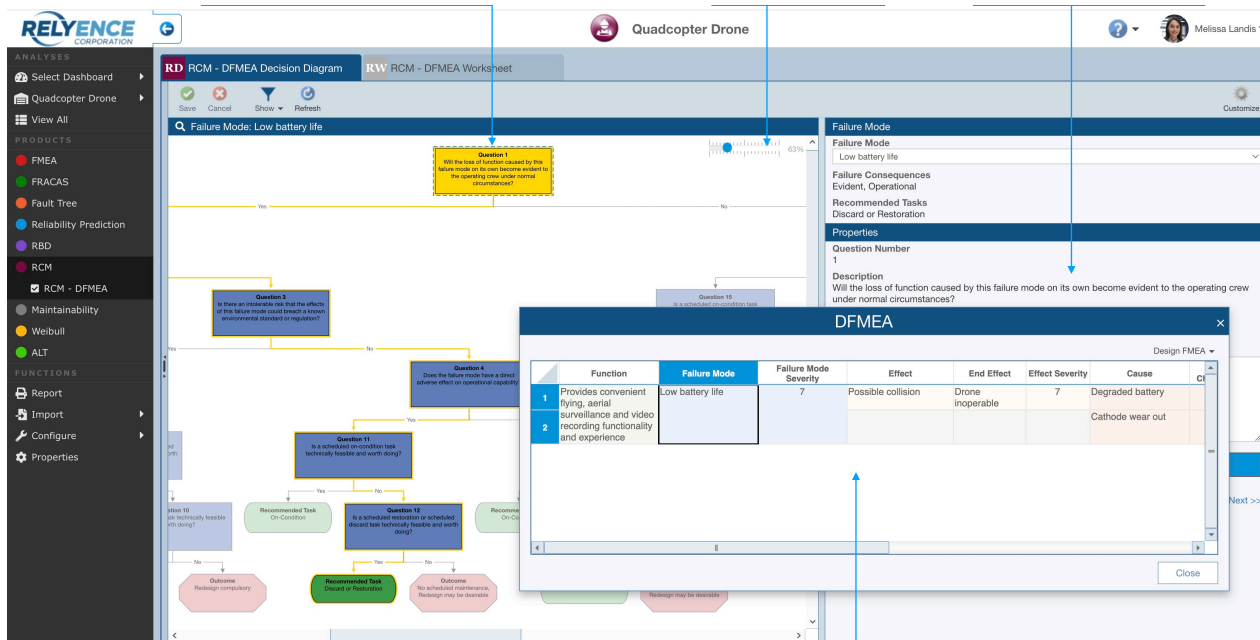
	Failure Mode	Failure Consequences	Recommended Tasks	Outcome (Non-Task)	Task Type	Justification	Task Number	Task Description	Task Interval
1	Low battery life	Evident, Operational	Discard or Restoration		Discard or Restoration	A scheduled discard and replacement of the drone battery can mitigate this Failure Mode.	BTR-3Y	Periodic battery replacement	3 Years
2	Battery leaking	Evident, Safety and Environmental	Combination of Tasks		On-Condition	To mitigate issues caused by manufacturing and packaging defects, we select an On-Condition task to inspect the battery upon package opening.	OC-00B	Inspect the battery immediately upon package opening	
3					Discard or Restoration	Periodic battery replacement following the initial battery inspection can be used to further mitigate this Failure Mode.	BTR-3Y	Periodic battery replacement	3 Years
4	Structural imbalance	Evident, Safety and Environmental		Redesign compulsory		Failure Mode can be caused by a structural failure. There is no Task that can be used to thoroughly restore its condition. Redesign of structural elements is required.			
5	No communication between controller and drone	Evident, Operational		No scheduled maintenance, Redesign may be desirable		Operator does not have the technical skill required to determine the Failure Mode's root cause. No scheduled maintenance needed as Failure Mode affects only economic factors.			
6	Motor malfunction	Evident, Safety and Environmental	On-Condition		On-Condition	Motor units can be periodically checked for wear. Wear occurs at a predictable rate over time and provides a consistent, early indicator of a potential failure.	OC-01	Check for wear	6 Months
7	Error in motor controller	Evident, Operational		No scheduled maintenance, Redesign may be desirable		Operator does not have the technical skill required to perform the needed maintenance procedures. No scheduled maintenance needed as Failure Mode affects only economic factors.			
8	Irregular motor speeds	Evident, Safety and Environmental		Redesign compulsory		Operator does not have the technical skill required to perform the needed maintenance procedures. Redesign required. Suggest enhancing emergency landing procedures to mitigate this Failure Mode's safety concerns.			
9	Camera mounting plate cracked	Hidden, Operational		No scheduled maintenance, Redesign may be desirable		Failure Mode is caused by a hard landing of the drone. This event does not occur regularly so we are unable to determine an appropriate Task schedule. No scheduled maintenance needed as Failure Mode affects only economic factors.			
10	Mounting holes not found at 4 corners of rectangular camera mounting plate	Evident, Operational	On-Condition		On-Condition	Occurrence of the Failure Mode can be discovered by the operator during the assembly process.	OC-00MP	Inspect camera mounting plate during assembly	

RCM Worksheet

Guided Decision Diagrammer

Scalable Diagram

Customizable Questions



RCM Decision Diagram

Integration with FMEA