

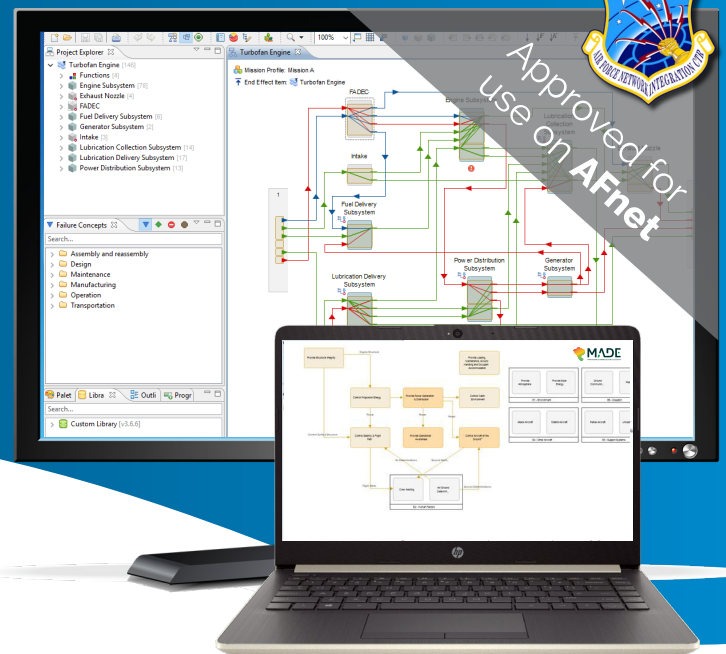
Streamlined Aerospace Certification

The Maintenance Aware Design Ecosystem or MADE is a model-based safety analysis (MBSA) platform that transforms the safety assessment process for aircraft certification under ARP-4761 and ARP-4754A.

By combining simulation-based outcomes, an integrated MBSA workflow, knowledge digitization, standardized taxonomy, and the creation of a digital risk twin, MADE enables faster, more confident certification decisions. It provides a seamless environment to model, analyze, and manage system safety, helping organizations drive consistency, traceability, and risk insight across every stage of development.

The next generation of certification workflow is here, offering;

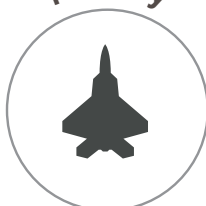
- Digital Risk Twin (DRT)
- Model-based Safety Analyses
- Digitization of Domain Knowledge
- Objective / Traceable Analyses
- Standardized Engineering Taxonomy



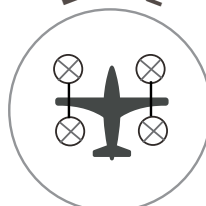
Commercial



Military



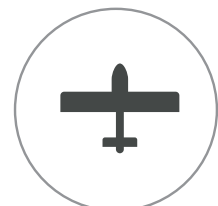
EVTOL



VTOL



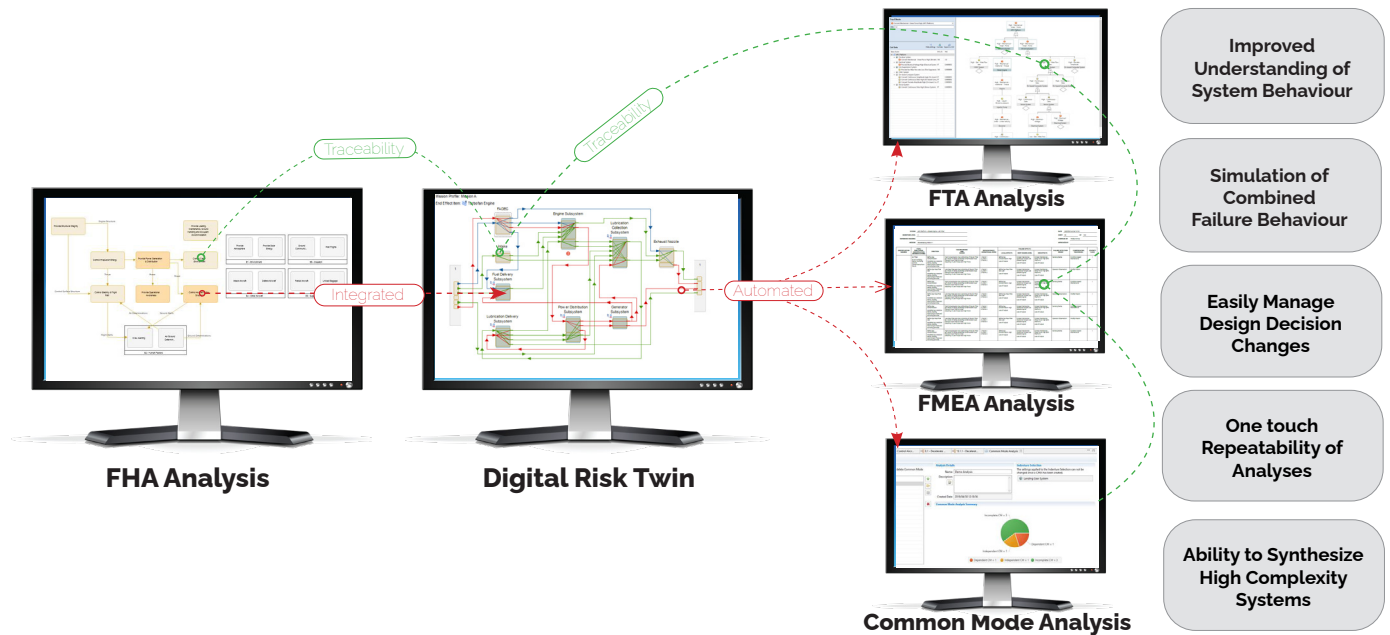
UAV



MADE Safety Assessment for Certification



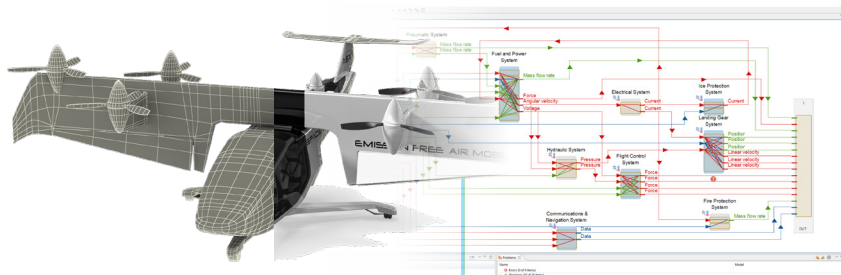
The MADE platform utilises a Digital Risk Twin (DRT) to streamline the Safety Assessment process within the certification process by applying a Model-based Safety Analysis (MBSA) approach to perform the PASA/PSSA within an integrated analyses tool set.



Model-based Safety Analysis (MBSA)

MADE implements the recommended safety analysis techniques called out by ARP4761 and ARP4754. The MADE MBSA approach enforces a common engineering language reducing miscommunication and improving the management & understanding of functional and system complexity in design

Aerospace Certification Artefacts



SRA Safety & Risk Assessment

Functional Hazard Analysis (AFHA/SFHA)
Fault Tree Analysis
FMECA / FMEA's
Common Mode Analysis

Artefacts

Platform

MPD (Flight Phases & Segments)
Environment + Emergency Configuration
Systems Model (Failure Dependency Model)
Annotations (Model Quality Report)

Data & Artefacts

PHM Prognostics & Health Management

Diagnostics Table
Sensor Set Design
Ambiguity Groups
Sensor Set Implementation Trade Studies

Artefacts

RAM Reliability Availability Maintainability

Reliability allocation (hardware budgeting)
Reliability Block Diagram (RBD)
Markov Analysis (MA)
Reliability Centered Maintenance (RCM)

Artefacts