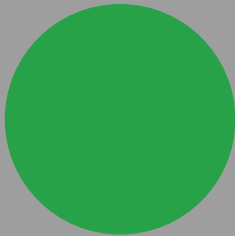


# Safety & Reliability





## **ALD Software**

**Industry standard since 1984**

**Failure Analysis**

**Event Data Management / FRACAS**

**Safety Management System (SMS)**

**System Safety Assessment**

**Software Reliability and Safety**

**Integrated Fault Tree Analysis (FTA)**

**FMEA / FMECA**

**MMEL**

**Testability**

**Weibull**

**Markov Analysis**

**ILS**

**RCM / MSG3**

**LCC**

**Spares Provisioning & Optimization**

**Risk Analysis & Management**

**Quality Management System**

**Reliability Prediction**



# Safety & Reliability Software



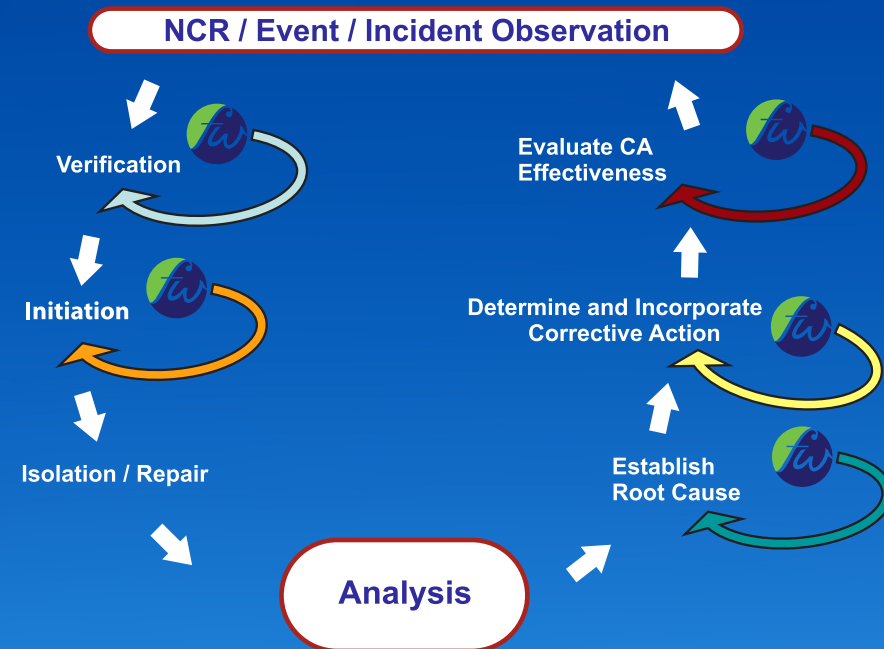
Reliability  
Safety  
Quality

# FavoWeb

## Incident / Failure Prevention

FavoWeb is an integrated platform for incidents/failures management and prevention. Based on over 25 years expertise, FavoWeb is a pioneering solution for incident data streamlining, analysis and corrective/preventive actions. FavoWeb is the foundation for achieving your reliability and safety goals

- Global Incident Data Repository
- Multi Lingual , Cross Industry Application
- Web based Dynamic Interface
- Proven ERP Connectivity (SAP, BAAN, IFS, ORACLE Etc.)
- Built-in Reports Generator (including Weibull, MTBF, MTTR, Reliability Growth, Pareto Analysis etc)
- Automated Alert Service
- Advance Data Partition / Permission Capability
- Voice Enabled / PDA Compatible



The screenshot displays the 'Open Failure' form with the following fields and values:

Rep#	107
Date	05/03/2005
Reported By	John viber
System	ENGINE
Sub System	ANTICE SYSTEM
Part Name	ICE DETECTOR
Part #	4AS787002
Remark	The valve should be replaced



# Software Outputs and Deliverables

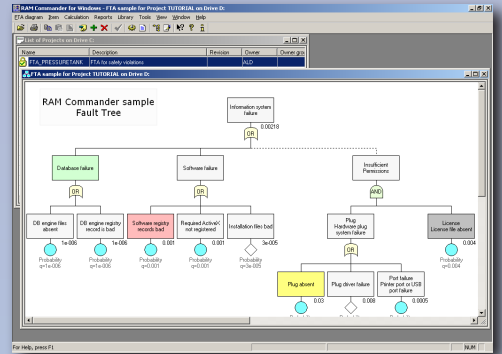


**RAM Commander**  
**FavoWeb**  
**DLCC**



# Supporting Safety

## Powerful Fault Tree Analysis



**FAVO/EB**

**DI2 JET**  
In-Service Difficulty Reports-Completed

Model: 0000 ISSM: 300 Date: 11/09/2001  
S/N: 023 ATW: Tech Sup: 11/09/2001

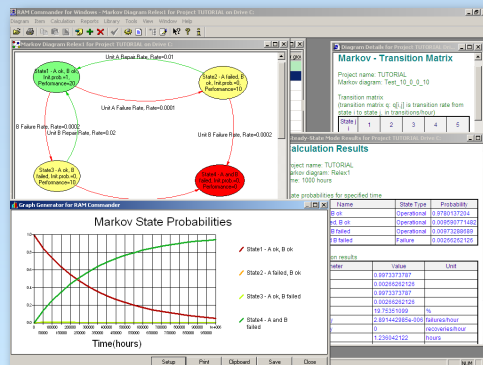
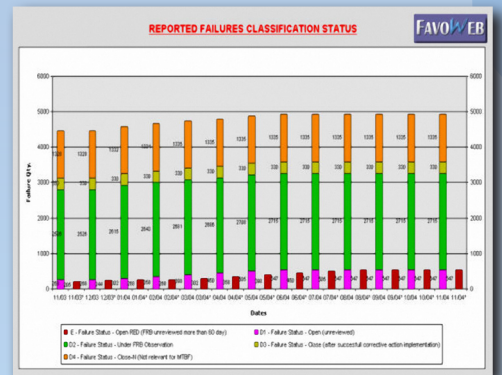
Description of Difficulty: Wing damaged and dented on lower surface due to skewed landing.  
Suspected or Known Cause: Unknown

Part Name REF: VORLEY A321 S/M Part Number REF: 48170002-501  
S/N REF: 23 Vendor:

Remarks:  
Corrective Action:  
Flight score, CA not required  
Remarks:

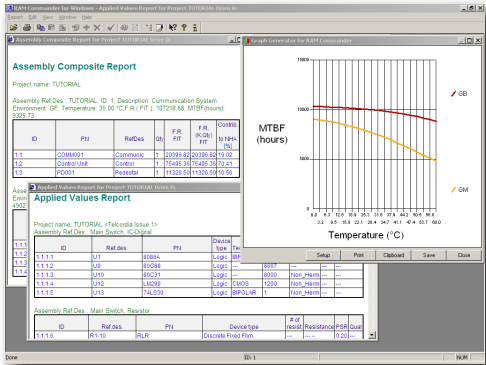
## Flight Safety Report for the FAA

## Safety Monitor

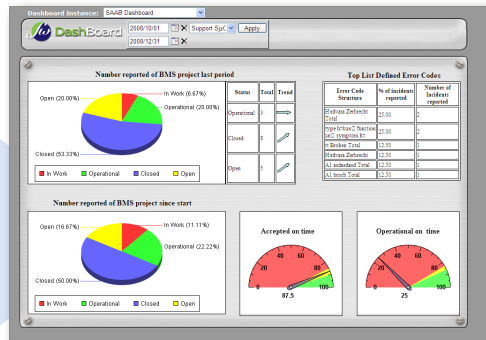


## In-depth Markov Analysis

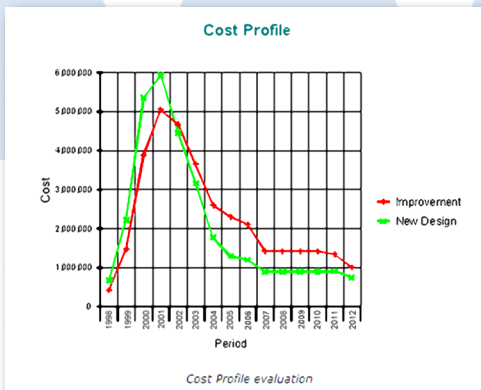
# Sustaining Reliability



**Predicting MTBF**

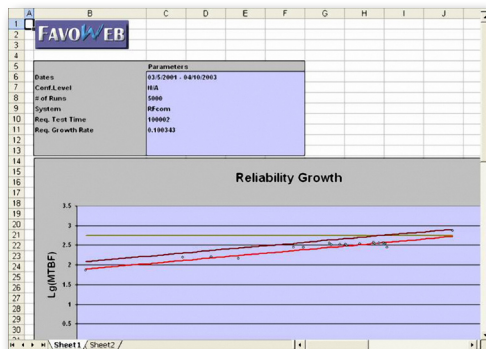


**Monitoring Reliability**



**Controlling Cost**

**Tracking Reliability Growth**





Reliability  
Safety  
Quality



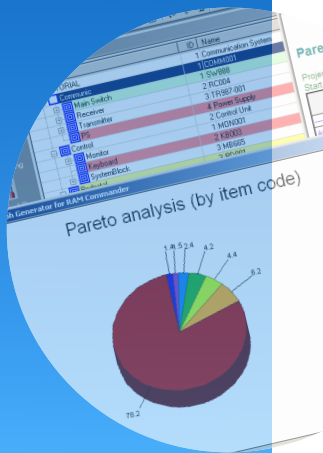
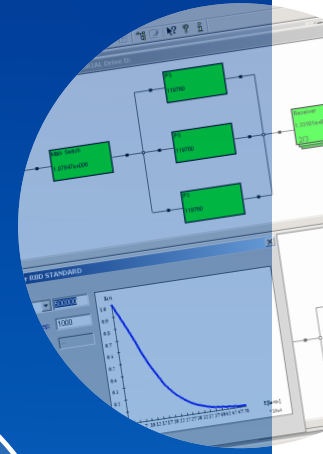
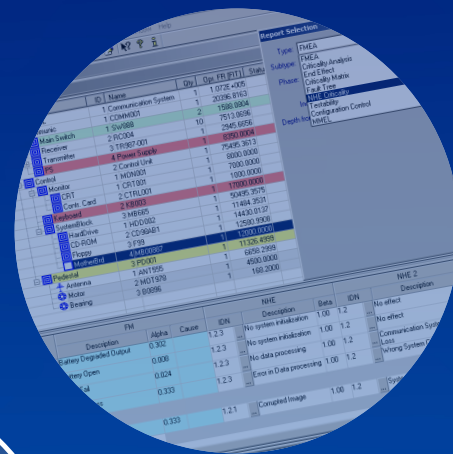


# RAM Commander

## Reliability, Availability, Maintainability, Safety (RAMS)

RAM Commander is a world renowned RAMS Toolkit, covering all Reliability Engineering tasks.

Clear concept and ingenuity are the trademarks of RAM Commander software, supporting hundreds of R&M engineers around the world.



### Safety

**ARP 4761, FAR 25(1309)**

Functional Hazard Assessment (FHA), Preliminary System Safety Assessment (PSSA), Common Mode Analysis (CMA), Particular Risk Analysis (PRA), Master Minimum Equipment List (MMEL), Markov Analysis

### ILS

Dispatch Reliability, Logistics Support, Maintainability, Maintenance Engineering Analysis, Initial Provisioning, Spares Optimization, Reliability Centered Maintenance (RCM), MSG-3

## RAM Commander

### Failure Analysis

**MIL-1629, SAE J-1739**

Failure Mode Effects and Analysis (FMEA), Failure Modes Effects and Criticality Analysis (FMECA), Testability Analysis, Fault Tree Analysis (FTA), Event Tree Analysis (ETA)

### Reliability

**MIL217 PLUS, FIDES, Telcordia, UTEC, Alcatel, Siemens, CNET, NPRD-95, NSWC, Strength-Stress, RTLKIT-95**  
MTBF, Derating, Stress-Strength, Reliability Block Diagrams, Mission Profile, Temperature Curves

# DLCC

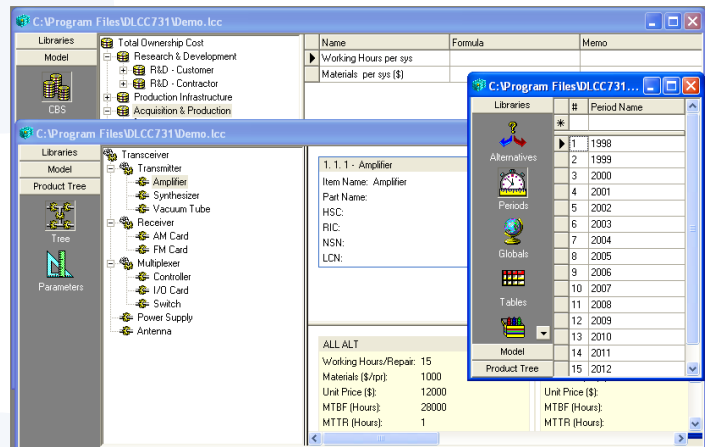
## Life Cycle Cost, Total Ownership Cost Software

DLCC is a key tool for managers, decision-makers, engineers, ILS personnel, and other staff involved in system acquisition, proposal writing, management, development, production and through-life support.

DLCC (Decision by Life Cycle Cost) makes the LCC analysis easy and comprehensive.

### DLCC Capability :

- Total Cost of Ownership
- Cost Analysis
- Net Present Cost (NPC)
- Cost Profile Analysis
- Sensitivity Analysis
- Cost-Effectiveness Evaluation
- Cost Item Analysis
- Optimal Repair Level Analysis (ORLA)



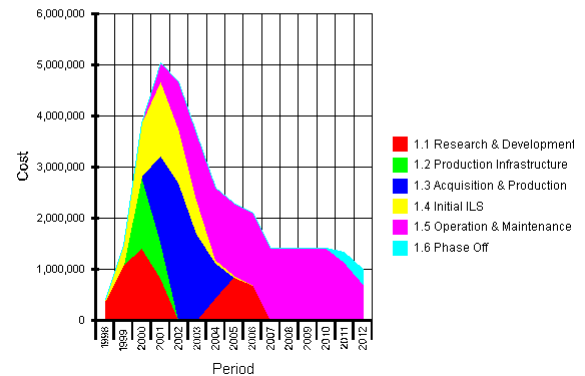
### DLCC main reports and analyses :

- Total and Detailed Costs
- Cost Profile
- Cost Profile by Elements
- Cost-Effectiveness
- Basic CBS Tree
- Optimal Repair Level Analysis
- Versatile User-definable Graphs and Tables

Advanced Logistics Developments  
D-LCC 7.1 - LCC Software  
Project : Demo

Cost Profile by CBS Elements

Alternative : Improvement





## Your Reliability & Safety Partner

ALD Group is a worldwide provider of Reliability and Safety software, services and training, since the establishment in 1984. ALD has participated in hundreds of cutting-edge aerospace, military and commercial projects. ALD's Reliability, Safety and FRACAS off-the-shelf software is used by hundreds of devoted customers. ALD Group has subsidiaries in the USA and Israel and representatives in Europe, Asia and Australia.

## Customers:

A&C Medical, **ABB**, ADI, AEL Industries, AF Robotics, Agis, AKKA Technologies, Aeronautics, Airslide, Airspan Networks, **Airbus**, Alenia, **Alstom Transport**, Alcatel Lucent, AMDOCS, **Applied Materials**, Arko Electronics, Astronautics, AT&T, ATLAS, Avaya, Avion Systems, Avionitek, Aviva, Avondale Industries, **BAE Systems**. B.M.C. Software Israel, B.Y.R, Baran, Bezek, Biosense, Biotechnologies, Bitman Engineering, Boeing, Carmel Olefins, **Caterpillar**, CMM, Cognitens, Comverse, Controp, Corrigent Systems, Dekson, Delta, **Deutsche Bahn**, Dimex, EADS - SODERN, E.c.l., El-Al, Elbatronics, **Elbit Systems**, Electra, ELF Electronica, Elik-tronics, Elisra, El-Op, Elta, Embry Riddle Aeronautical University, ENEL, Enerco, Eurocom, EZ CHIP, FAA, Ferrero, Finland Defence Forces, Flomerix, Galtronics, **General Electrics**, Giat Industries, Gulfstream, Halevy Dvik Industries, Harmonic Drive, Hemodynamics, **Hewlett-Packard**, Home Flow, Hyper Roll, ffiM, IDE Technologies, Ikerlan, Inserco, **INTEL**, IQC, ISAS, Iscar, ISD, IsraAir, **Israel Aircraft Industries**, Israel Ministry of Defense, Israeli Military Factories, IVECO, Johnson & Johnson, Israel nuclear research center, Kinetics, Kramer Electronics, Kur, L-3 Communications, Landys & Gyr, Lear Astronics, **Leach International Corp**, Licorad, Lipman, **Lockheed Martin**, Lumenis, Lynx, MAN, Marconi Selenia, Maxbill, **MBDA**, MDT, Medicard, Metrolight, Microsoft, Mikes Microwave Electronic systems, More Energy, **Motorola**, NATO, **NASA**, Ness, New Horizon, Nexus, Nice, Nisko Advanced Solutions, Nortel Networks, **Northrop Grumman**, NOVA, Novel Power Systems, Orange Mobile, Orbit, Orbotech Ordan, Ormat, ORS, **Philips**, Pitney Bowes, PixarTechnology. Plastic Crown, Power Spectrum, Prizma, PRO, Q-Systems, QTEL, Qualcom, Qualitech, RAD, RAD Vision, Radware, Radwin, Rafael, Reutech Systems, **Rohde & Schwarz**, RR Satellite, **SAAB**, SAGEM, SAT Paris, Sukhoi Civil Aviation corp., **SELEX SAS**, SenSonor, Serconet, Sextant Avionique, **Siemens**, Sigma, Silent Communication, Silver Arrow, Sisco, Skylab, Smart Robotics, Snecma, Tadiran, Turkish Aerospace Industries, Tallowillow, Taro Pharmaceutical Services, TEGA Systems, Telebit, Teko Telecon, Teledata Networks, Telkoo&OPS, Telmania, Telrad, Tel-Ran, Tetra Electronics, Teva Medical, TOMSON, THALES ALENIA SPAC, TKS Electronics, nw; Trak Microwave, Treplex, Trio-Ex, Turbomeca, Unibarcol, **US Navy**, USR Electronic Systems, VAHAL, **VALEO**, Veraz Networks, **Vibro Meter**, Vishay, Visual Defense, Vitalife, Voltaire, VSOFT, VUMII



Reliability  
Safety  
Quality

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