National Aeronautics and
Space Administration

PROBABILISTIC RISK ASSESSMENT (PRA)

Probabilistic Risk Assessment identifies, and quantifies risks in business, engineering, operations and manufacturing systems. Our team provides the customer with the analysis and recommendations to make informed decisions to help mitigate risk that leads to loss of life, physical assets and production time.

We use proven PRA tools and techniques along with extensive libraries of historical operations and failure data to quantitatively derive the probability of undesirable events.

Questions a PRA can answer for your organization:

"What could go wrong and what are the consequences?"

"What is the likelihood of an undesirable event?"

"Where should I focus resources to reduce overall risk?"

"What are the uncertainties of my processes and systems?"

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PRA

Probalistic Risk Assessment

- Requirements Development
- Design Analysis
- Verification and Validation

NASA is the leader in the development and application of Probabilistic Risk Assessments to mitigate reliability, quality, efficiency and safety issues within organizational systems.

NEW DEVELOPMENTS

The ideal time to conduct a PRA is at the beginning of the design process to incorporate the necessary safety and risk avoidance measures throughout the development phase.

EXISTING SYSTEMS

PRA can be applied to existing systems to identify and prioritize risks associated with operations. Risk assessments can evaluate the impact of system changes and help avoid compromises in quality or reliability while increasing productivity.

INCIDENT RESPONSE

In the event of unexpected downtime or an accident, our team can assess the cause of the failure and develop appropriate mitigation plans to minimize the probability of comparable events in the future.

Our customer-friendly process lends itself to streamlined business relationships. We are eager to share our unique capabilities with your organization and invite your inquiries regarding application or adaptation of our offerings to satisfy your special requirements. Briefings on general or specific subjects can be arranged at JSC or at your business site.

http://www.nasa.gov/centers/johnson/capabilities/safety/index.html

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