SOCIETY OF DEFENCE TECHNOLOGISTS

(Workshop on "Reliability Tools and Techniques for Defence Equipments")

Date:- 02nd & 03rd June 2022 Venue:-Royal Orchid Metropole,
#5, JLB Road,
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Programme Details

TIME	EVENT

Day-1   02nd June 2022

TIME	EVENT
01.00PM – 01.45PM	Lunch
02.00PM - 02.15PM	About SODET by Shri Ravindra N, Sec. Gen / SODET
02.15PM - 02.30PM	Key Note Address by Shri K R Radhakrishna, ED, BEML, Mysuru
02.30PM - 03.45PM	Introduction to Reliability, Maintainability & Availability Concepts"
03.45PM – 04.00PM	Comfort Break
04.00PM – 05.45PM	Talk on "Reliability Tools & Techniques" "MTBF, MTTR, FMEA, Fault Tree diagram, Process Flow diagram"

Day – 2   03rd June 2022

TIME	EVENT
09.30AM – 11.30AM	Reliability Case Study & Calculation
11.30AM – 11.45AM	Comfort Break
11.45AM - 12.30PM	Quiz and Feedback
12.30PM – 12.45PM	Vote of Thanks & followed by lunch

About Reliability:-

Reliability engineering is a sub-discipline of systems engineering that emphasizes the ability of equipment to function without failure. Reliability describes the ability of a system or component to function under stated conditions for a specified period of time. Reliability is closely related to availability, which is typically described as the ability of a component or system to function at a specified moment or interval of time. The reliability function is theoretically defined as the probability of success at time t, which is denoted. This probability is estimated from detailed (physics failure) analysis, previous data sets or through reliability testing and reliability modelling.

Availability, testability, maintainability and maintenance are often defined as a part of "reliability engineering" in reliability programs. Reliability often plays the key role in the cost-effectiveness of systems.

Reliability engineering relates closely to Quality Engineering, safety engineering and system safety, in that they use common methods for their analysis and may require input from each other. Reliability engineering focuses on costs of failure caused by system downtime, cost of spares, repair equipment, personnel, and cost of warranty claims.

The word reliability can be traced back to 1816, and is first attested to the poet Samuel Taylor Coleridge before World War II the term was linked mostly to repeatability; a test was considered "reliable" if the same results would be obtained repeatedly. In the 1920s, product improvement through the use of statistical process control was promoted by Dr. Walter A Shewhart at Bell Labs, around the time that Waloddi Weibull was working on statistical models for fatigue. The development of reliability engineering was here on a parallel path with quality. The modern use of the word reliability was defined by the U.S. military in the 1940s, characterizing a product that would operate when expected and for a specified period of time.