

Title

Denel Land Systems: The Journey to Excellence

Speaker(s)

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Keywords

Survival, quality, business excellence (Johan)

Criticality; Design assurance objectives (Willem)

Abstract

From Survival To Excellence: The Journey (Johan)

This presentation describes the journey that Denel Land systems undertook to evolve from an organization totally reliant on inspection after production to an organization where excellence is becoming the culture of the organization. An organization where the Quality department is growing from being Inspectors to being Business Consultants. The joys, the tribulations and setbacks.

Software Qualification for System Certification: The Software Quality Role (Willem)

When criticality is assigned to software, and the possible effect of anomalous behaviour is serious injury or death, the ball game changes somewhat and the role of the software quality expert becomes critical. The following topics are tackled:

- a. How do you get to a design assurance level for software?
- b. How is the software qualified and what is the influence of the DAL on the software and system qualification?
- c. How do you measure compliance to required objectives?

The presentation will be done using RTCA/DO-178B as reference for the intent of quality objectives for DALs.

Biography

Johan Bezuidenhout has been involved in Business Excellence since 1983, starting his career as a quality inspector and is currently the Senior Manager: Business Excellence at Denel Land Systems. He has extensive personal experience in the fields of quality management, quality assurance, quality control and management system auditing.. Johan is intensively involved in business process improvement and has implemented and refined the Programme Assurance role in highly complex programmes in high-technology industries.

Johan is past director of the South African Society for Quality and past chairman of the Pretoria Branch. He has devoted his work life to the recognition and establishment of the quality profession as a core role within management and industry.

Willem van der Westhuizen is a software engineer and quality expert specialising mainly in the military field where certification of systems for safety is required. Willem has over 20 years work experience and has, amongst other, advised the South African Military Airworthiness Board on the acceptability of software systems in the Rooivalk, Gripen, C130, etc. Willem has a M.Sc. in Computer Science, is a registered SAATCA auditor, as well as a Certified Software Quality Analyst (CSQA) managed by the Quality Assurance Institute (QAI).
