

TRACK 5: INNOVATION AND APPLICABLE TECHNOLOGY
“INNOVATION IN MAINTENANCE OPERATION THROUGH CAREFUL ENGINEERING OF TECHNOLOGIES”

BY
 MR LIM TAU FUIE AND DR TAN JUN YUAN JAMES
 SINGAPORE TECHNOLOGIES AEROSPACE LTD

ABSTRACT

The commercial air travel industry has become an integral part of today’s society, providing an affordable mean for people to commute safely. The comfort and speed of air travel is no longer enjoyed by the privileged few. The acceptance of it as a common mode of transportation has driven the entire ecosystem to be price-sensitive and still meeting the quality and safety standards set by the regulatory authorities.

The state of the aircraft, and the service offered by the airline to the passengers are two of the most important components of this ecosystem. There are also strong pressures by the regulators to reduce CO2 emissions and noise pollution. This keen competition has driven the airlines to offer refreshed cabins and a better travel experience for their passengers. ST Aerospace has grown to become a major global player in aviation MRO (Maintenance, Repair, Overhaul) operations. In this highly regulated environment, creativity and innovation are key in maintaining a competitive edge. Automation and smart connectivity in all the processes are the backbone of her innovation. While establishing its brand in MRO market, ST Aerospace moved up the value chain by becoming a retrofit solution provider in the turn of new millennium and interior product OEM thereafter. Openness in adopting new technologies has helped the company to face the challenges for obsolescence issue in the retrofitting market and in competing for sales of interior product (like passenger seats) with the incumbents.

Under the digitisation efforts spearheaded by ST Engineering, ST Aerospace will leverage the combined strength to build up the necessary information so that optimisation can be stretched in its design, process and production. Representative examples will be elaborated in the paper.

BIOGRAPHY OF SPEAKERS


Mr Lim Tau Fuie is the Chief Technology Officer (CTO) of ST Aerospace since July 2010. He is responsible for developing and implementing technology initiatives within the group, as well as aligning the technology vision with ST Aerospace’s business strategy. Mr Lim began his career with ST Aerospace as an electrical and electronics engineer in 1983, after graduating from NUS in Electrical and Electronics Engineering. Since then, he has held various positions in Programme Management, Avionics Technology Development, and several overseas deployment programmes. After leading the avionics system group in the A-4 upgrade programme, he was appointed the Programme Manager for the F5 avionics upgrade in 1991. Mr Lim also played a key role in the conceptualisation of the Falcon ONE programme, a technology demonstrator leading to an upgrade solution for the F16 in the early 2000s. In July 2002, Mr Lim became SVP of EDC, a division that provides customised