

**TRACK 4: MISSION SYSTEMS / VIRTUAL TRAINING****“DESIGN AND CERTIFICATION CONSIDERATIONS FOR AEROSTAT OPERATIONS IN SINGAPORE”**

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**ABSTRACT**

Land-based surveillance radars have been in use since World War II to detect and track the presence of aircraft. However, their performance is limited by the horizon and, in Singapore’s case, by tall buildings which prevent the establishment of a clear line of sight. Since the 1980s, there has been increasing use of aerostats by different agencies in the world for functions such as early warning and rebroadcast. There have been significant developments in aerostats in the past decades, particularly in terms of reliability and safety. As this is the first time an aerostat is being introduced in Singapore, there are certification challenges peculiar to our environment. This presentation gives an overview of the benefits of aerostats and the certification issues that were taken into account.

**BIOGRAPHY OF SPEAKER**

Mr Benjamin Ang is a Senior Engineer in DSTA Air Systems, and is the platform engineer with the team managing the RSAF 55M Aerostat Radar programme. He is involved in the various factory and flight acceptance tests for the platform, as well as the RSAF airworthiness certification process to introduce the 55M Aerostat for local operations.