

TRACK 2: UAV**“EXPANDING THE FULL POTENTIAL OF DRONE OPERATION THROUGH BEYOND VISUAL LINE OF SIGHT (BVLOS)”**

BY
MR CHOK NG YONG
ST ENGINEERING AEROSPACE

ABSTRACT

The use of drones in commercial applications has increased rapidly in recent years. Using drones with the ability to fly beyond the visual line of sight unlocks the full potential of drones for many commercial applications as it allows the drone to cover far greater distances without the need for the pilot or observers to keep an eye on the drone at all times, thereby improving the economics and efficiency of the operations.

In this presentation, we will explore and review on the key technologies and safety requirements used to develop a complete end-to-end drone solution for Beyond Visual Line of Sight (BVLOS) operation in Singapore. We will also look at two use cases on using BVLOS drones for remote island surveillance and reservoir monitoring, and how this solution can benefit our local agencies in providing bigger and further coverage over large and difficult-to-reach areas as well as reducing human resources to perform the physical and manual work.

BIOGRAPHY OF SPEAKER

Ng Yong is a Senior Programme Manager and Technical Manager with 17 years of experience in managing, designing and developing Unmanned Aerial System (UAS) solutions at ST Engineering Aerospace. ST Engineering Aerospace is the world's largest commercial airframe MRO service providers with in-house engineering capabilities that offer customers a wide range of customised engineering and design solutions, including passenger-to-freighter conversion, military aircraft upgrades and unmanned aerial solutions. As a technical manager, Ng Yong is responsible for the design, development and integration of UAS solutions developed by the company. Ng Yong has a B.Sc in Computer Engineering from Nanyang Technological University of Singapore (2002).