## Certification and Testing of UAV'S in South African Airspace

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**Abstract:** UAVs have operated in South African segregated airspace for many years but UAV regulations do not exist that allow UAVs to be certified to "file and fly" in civil un-segregated airspace. South Africa is however in a very advantageous position because of its physical location, large open spaces and low airspace usage and could use the opportunity to execute UAV research while fulfilling a number of important operational and strategic requirements at the same time.

Research is being conducted by the Stellenbosch University together with other role-players such as the South African Civil Aviation Authority and the South African UAV industry to find ways to operate UAVs within existing airspace arrangements by identifying risks and proposing methods that could be used to allow UAVs to operate safely while the necessary research on airspace integration takes place.

The presentation will discuss the latest trends in the South African approach to UAV certification and testing, and will propose innovative methods to fulfill the South African operational requirements while still complying with existing regulations. Finally, guidance for testing UAVs in order to prove compliance with South African regulations will be given for UAV manufacturers who intend to operate UAVs in South Africa in the future.