



DRONE CON
2019



**Redefining the Future of Work
with Drones 4.0**

Africa's leading Drone Conference

15 - 16 October 2019 | Durban International Convention Centre (ICC)

Programme

Day 1 – Tuesday October 15, 2019

Theme: “Redefining the Future of Work with Drones 4.0”

08h00 Arrival and Registration

09h00 Opening Remarks by Programme Director

Track 1 – Regulatory and Policy Framework - Moderated by the Acting Director – Air Transport at the National Department of Transport, Ms Andries Ntjane

The safety record of the aviation industry owes it to very strict regulatory regime that is enforced by the South African Civil Aviation Industry (SACAA). In 2015 South Africa became one of very few countries that enacted regulations that gave birth to the drone industry. Part 101 is the section of civil aviation regulations that govern the use of remotely operated aircraft systems or RPAS, which are commonly known as drones or unmanned aerial vehicles (UAVs). This panel will be taking stock of where the industry is and what challenges it has experienced, especially will illegal operations.

Presentation by the Manager:

Airworthiness Engineering & the Co-Chairperson of the RPAS Interdepartmental Technical Work Group at the South African Civil Aviation Authority, **Mr Lobang Thabantso**

09h10

Other Panellists:

- RPAS Integration into Airspaces - by the Executive: ATM/CNS Planning and Standards at ATNS, **Mr Jeffrey Matshoba**
- ICASA Spectrum Regulations: The Hidden Hurdle - by the CEO of Fly Robot and EXCO Member of Commercial Unmanned Aircraft Association of Southern Africa (CUAASA), **Mr Allan Ball**
- Privacy and data protection - by the Cyber Security Practitioner at Bowline Security, **Mr John Cocorozis**
- Need for Progressive Regulations - by the President of the South African Federation of Unmanned Aircraft Systems (SAFU), **Mr Sam Twala**

Track 2 – A Panel Discussion: A View from the Security Cluster Moderated by the CEO of UAV Industries and Exco Member of the CUAASA, Mr Ken Venn

Whilst drones have brought in positive results in key sectors of the economy, they have also heightened the risk on safety and security especially in controlled air spaces. Incidents like the 36hour closure of Gatwick Airport in last December is a case in point. This interview will look at what the SA Air Force is working on to help prevent such incidents and also how to deal with such eventualities.

09h50

- Managing Operational Risk and Safety in Drone Deployment - by the Senior Staff Officer: Air Certification at the South African Air Force, **Lt. Colonel Andre Meredith**
- Drones and National Security and Protection of National Key Points - by the South African Air Force, **General Elma de Villiers**
- Enforcement of Drone Regulations and Curbing of Illegal Operations - by the Section Head at South African Police Services Air Wings, **Brigadier Simon Mahlangu**
- Harmonisation of Military and Civil Drone Regulations - by the Manager: Airworthiness Engineering and the Co-Chairperson of the RPAS Inter-departmental Technical Work Group at the South African Civil Aviation Authority, **Mr Lobang Thabantso**

10h20 Tea/Coffee Break

Opening Plenary Moderated by the Host of the SABC Network Technology Show, **Mr Siphumelele Zondi**

10h40 Opening Remarks by the Moderator

10h50 State of the Industries – by the President of the Commercial Unmanned Aviation Association of Southern Africa and CEO of United Drone Holdings, **Mr Sean Reitz**

11h10 Preparing the KZN Youth for the Future of Work – by the KZN MEC for Economic Development Tourism and Environmental Affairs, **Ms Nomusa Dube-Ncube MPL**

11h20 Keynote Address – by Hon. Minister of Telecommunications and Postal Services, **Ms Stella NdabeniAbrahams MP**

11h40 VIP Tour of Drone Exhibition and Drone Cage

11h45 Another major distribution is brewing in the aviation industry now prototypes are being developed and tested to air transport passengers. Major aviation OEMs like Bell and Airbus are testing various prototypes and expect to deploy this technology before 2030. One of the world's biggest disruptors in the transportation industry has entered the race, and the future will never be the same again.

Keynote Presentation: A look to the future of passenger drones with Uber Elevate – by the Head of Public Policy at Uber Technologies South Africa, **Ms Yolisa Kani**

12h05 Networking Lunch and Demo's in the Drone Cage

Track 3 – Building a Start-up Culture for the Drone Industry - Moderated by the Chief Operations Officer at Enterprise Ilembe, Ms Thuthu Ngcobo

As is the case with manned aviation, the drone industry has barriers to entry that limits the role of SMMEs and emerging drone service providers (DSPs). These barriers include the time it takes for the SACAA to issue remote operating certificates (ROCs), lack of access to finance for working capital, cost of drone equipment and above all, access to market. The Drone Start-up Accelerator aims to accelerate the development of these small aspiring drone enterprises that are located in townships and other marginalised areas. The programme will also target SMMEs that are owned by youth and women. The SMMEs will be given intensive 6-month training that will include drone flight operations, application training in key sectors, on-the-job training and how to run a drone business.

13h30 Presenting the New Drone Start-up Accelerator Programme by the CTO at Mzansi Aerospace Technologies, **Mr Victor Radebe**

Other Panellists:

- Small Business Innovation and Technology Funding Options – by the Senior Manager: Incubation at SEDA and Member of the Presidential 4IR Commission, **Mr Tervern Jaftha**
- Growing Women-Led Tech Start-ups from Townships – by the Digital Lead at Ndlovukazi Online Media, **Ms Amanda Mathe**
- Catalysts for SMMEs: Market Access – by the Founder of Nafasi Za Angani and General Secretary of Wonders of Aviation, **Mr Gift Kgadima**
- Cutting the Red Tape for SMME Start-up Acceleration – by the CEO of Enterprise Ilembe, **Mr Nathi Komzwayo**

Track 4 – Skills Development for the Next Generation of Drone Pilots, Technicians and Data Scientists Moderated by the Executive Officer – Aerospace Chamber at the Transport Education Training Authority (TETA), Mr Gaborone Lesito

Drone technology is leading digital transformation in key sectors like agriculture, mining, real estates, security, built environment, etc. This has placed a huge demand on new skills for those young people entering the job market and the incumbents whose jobs are being redefined. Moses Kotane Institute has been working on a high-level skills study on drone technology and will presenting a paper on this topic.

Presentation:

Drone Industry Skills Audit and Future Demand Drivers, by the Head of Research at Moses Kotane Institute, Dr Simphiwe Buthelezi and Research Practitioner: ICT Research & Repository at Moses Kotane Institute, **Ms Enhle Kheswa**

14h10

Other Panellists:

- Sector-specific Application Training for Drone Pilots - the Flight Instructor at RPAS Academy, **Ms Itumeleng Mokoena**
- The City's 4IR Skills Gaps and Opportunities for Drones - by the Chief Learning Officer in the City of Durban, **Dr Mpilo Ngubane**
- Upskilling the KZN Youth in Designated Interest Groups: SMMEs, Youth, Women & Rural Economies - by the Director: Youth Economic Empowerment at KZN Dept. of Economic Development Tourism and Environmental Affairs, **Mr Thami Zondi**
- Funding the Skills Revolution in the Drone Industry - by the CEO of MICT SETA, **Mr Mdu Zakwe**

Track 5 - Emerging Use Cases for Drone Technology Moderated by the Deputy Director General in the Department of Trade and Industries, Mr Zeph Nhleko

This panel will look at key emerging use cases for drone technology and other potential ones that have yet to be exploited in Africa. A number of South African private and public enterprises have launched drone programmes with mixed results. The panel will also unpack the myriad of regulatory hurdles facing these enterprises.

Presentation:

How to implement an ideal enterprise drone programme by the Aviation Compliance Advisor at AVI Comply, **Ms Sonet Kock**

14h50

Other Panellists:

- Private Security Industry Perspectives - by the CEO of Private Security Industry Regulator, **Mr Manabela Chauke**
- Rail Inspections and Security - by the Executive Manager: Security at Transnet Freight Rail, **Mr Nndwakhulu Rambau**
- Powerline Inspection - by a Researcher at Eskom, **Mr Freddy Duiker**
- Surveying, Mapping Town Planning - by the MD of Advanced Aerial, **Mr Thabo Mogawane**

15h30

Summary of Day's Deliberations and Preview for Day 2 - by the Event Director, Mr Sean Reitz

15h55

Networking, Speed Meetings and Demo's in the Drone Cage

17h30

Mayoral Cocktail Reception



08h00 Arrival and Registration

09h00 Drone demonstrations in the Drone Cage

Track 6a: Precision Farming and Conservation Moderated by the Chief Operations Officer of the KZN AgriBusiness Development Agency, Mr Siyabonga Mazibuko

Agriculture is one of the biggest sectors that plays a huge role in just about all major economies. In order to bring efficiencies and improve yields, AgriTech has emerged as one of the factors that drives competitiveness. Drone technology has been introduced into the agricultural sector with amazing results. This panel will unpack the importance of drone technology in this sector.

Presentation:
Driving Efficiencies and Competitiveness in AgriTech - by the Author of "Precision Farming from Above", Ms Louise Jupp

10h00

Other Panellists:

- Improving Crop Output Using Drone Technology, by the MD of Unmanned Volitation Solutions SA, Mr Farrell Alderton
- Conservation with the Use of Drones, by the Ecosystems Ecologist at the KZN Ezemvelo Wildlife, Dr Debbie Jewitt
- Opportunities for Small Farmers - by the Senior Projects Manager at KZN Agri-Business Development Agency, Ms Rechi Dlamini
- Data Processing and Advanced Analytics - by the Head of Data at Aerobotics, Mr Michael Malahe

Track 6b: Smart Cities Integration of Drone Technology - Moderated by the CEO of Innovate Durban, Ms Aurelia Alberts

Aspiring global smart cities have turned to the drone technology in areas like emergency services, law enforcement, disaster management, infrastructure inspections, mapping, surveying, etc. This panel discussion will cover case studies from local and global cities that have implemented drone programmes.

Presentation: Drone global smart cities use case studies - by the Business Architect at SAP, Mr Mervyn George

11h00

Other Panellists:

- Proof of Concept on key use cases - by the Chief Digital Officer in the City of Durban, Mr Lunga Madlala
- Aerial view of rapid urbanisation of our major cities - by the National Coordinator (NUSP) National Department of Human Settlements, Mr David Morema
- Developing an Inclusive Smarter City Programme - by the Digital Lead at Hatch Africa, Mr Thessygan Moodley
- Data Processing, Analytics and AI - by the Provincial Leader of Radical Digital Transformation at Microsoft, Mr Sandile Mahlaba

11h50 **Keynote Partner Presentation - by the Executive Head Technology at Vodacom, Mr Ishmael Mathinya**

12h10 Keynote Interview: Ground-breaking Drone Delivery Initiatives in Africa - A by the Founder and CEO of Astral Aerial, Mr Sanjeev Gadhia Interviewed by the CEO of sUAV News, Mr Gary Mortimer

12h30 Networking Lunch

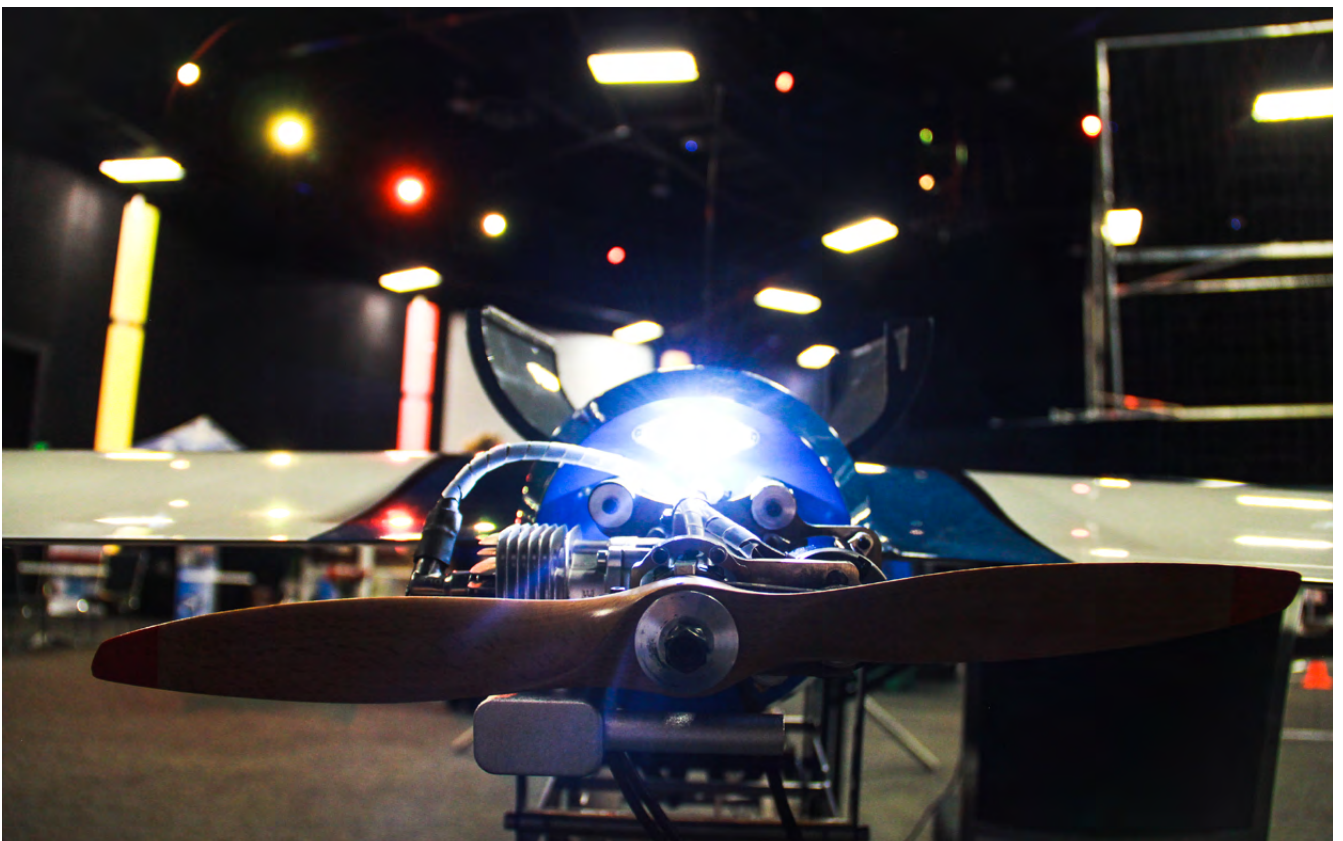
Design Thinking Workshop for the Adoption of Drone Technology in Smart Cities Programmes Facilitated by the Business Architect at SAP, Mr Mervyn George and the Leonardo Engagement Lead at SAP, Mr Colin Banks

14h00 The objective of this workshop will be to identify use cases for drone technology in smart cities programmes of South African cities. Participants will be drawn from key municipal departments, drone industry players, SALGA, COGTA, SA Cities Network, SA-CAA, etc. Outcomes of this workshop will be incorporated into a blueprint that will be used to develop standards for adoption of drone technology in municipalities. Format of workshop will include breakout discussions in no less than 4 key areas:

- Citywide Regulations: Educating the Public, Enforcement, Counter-Drone, Privacy
- Built Environment: Construction, Infrastructure, Human Settlements, Geospatial, Surveying, etc.
- Drone Data Analytics and Interoperability
- Best Practices for Implementing a Drone Programme

16h00 Summary of Day's Deliberations and Closing Remarks - by Event Director, Mr Sean Reitz

16h20 Closure and networking



Contact Us



www.dronecon.co.za



+27(0)74 945 1000