



# NTSU AVIATION SOLUTIONS

SAFE - COMPLIANT - EFFICIENT

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CORPORATE PROFILE



## NTSUAVIATIONSOLUTIONS

SAFE - COMPLIANT - EFFICIENT

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Ntsu Aviation Solutions (Pty) Ltd. provides specialized services to the emerging and established Remotely Piloted Aircraft Systems (RPAS) operators and industry. We use an innovative and engineered problem-solving technique to deliver optimised solutions to future challenges.

Our core business is to assist our clients to obtain an Air Service License (ASL) and RPAS Operators Certificate (ROC) from the Department of Transport and Civil Aviation Authority respectively, and to introduce/integrate drones into their business processes.

We have been delivering business solutions to the drone industry since 2018, for existing and new industry entrants, ROC approvals, operations manual amendments, continued compliance and managing special and complex drone projects.

*“All our services are tailor-made and client-specific ensuring complete applicability to the operation and/or client needs”*



## OUR VISION

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To be the safety ambassadors of the RPAS industry by consistently and innovatively delivering professional and cost-effective solutions to the industry at large.

## OUR MISSION

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To harmonise the co-existence of RPAS systems and conventional aviation by enabling the equitable use of airspace and resources.

Our service delivery approach and principles are based on global trends and standards and conform to the practices emerging from International Civil Aviation Organisation and other civil aviation bodies.

## OUR VALUES

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Safety  
Ethical  
Customer focus  
Passion  
Innovation  
Open-Minded



## SERVICES WE OFFER

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Facilitation of Air Service License (ASL) and RPAS Operators Certificate (ROC) approvals  
Advisory services on the introduction, implementation and integration of drones:

- Needs analysis and assessment (business needs and aspirations)
- Defining goals & objectives of drones in the business
- Defining the problem and identifying gaps and under/unserved needs
- Review of current processes and identification of areas of improvement and integrate drone solution with currently existing solutions
- Partake in business cases development and ascertain alignment with drone legislation

### Assistance with post license issuance regulatory compliance

Operations Manual Amendments  
Safety Management System  
Quality Management System  
Additional permissions, including:

- BVLOS (Beyond Visual Line of Site)
- Controlled, Restricted and Prohibited Airspace
- National Key Points
- Crop Spraying and multi-drone operations
- FPV operations
- Advanced Dual Operator Mode

Day-to-day compliance related activities:

- ROC and RLA renewals
- Flexible Use of Airspace applications
- Landowner permission

Induction and personnel training

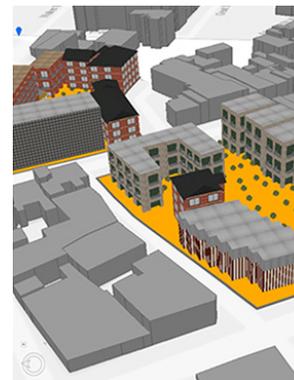


**“All our services are tailor-made and client-specific ensuring complete applicability to the operation and/or client needs”**

## Our expertise and experience include the following industries

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- Security Surveillance
- Crop spraying and smart farming
- Conservation
- Engineering inspections
- Cinematography and filming
- Photography
- Surveying and mapping
- Energy (solar, windfarms, powerlines, etc.)
- Mining applications
- Maritime applications
- Construction and urban planning
- Infrastructure development
- Facilities and inventory management
- Disaster and emergency response
- Real estate Insurance (accident investigations)
- Parcels and medical supplies deliveries
- Waste management
- Sports and broadcasting
- Journalism and news coverage
- Advertising
- Tethered-drone operations



## Interesting and Complicated Operations

We have implemented and obtained all necessary approvals from the SACAA and other regulatory bodies and managed one of the most complex RPAS operations in South Africa for one of our clients in 2018. The scope of the operation was security and includes; night, controlled airspace (within Cape Town Air Traffic Zone), BVLOS (up to 12 kms), in a built-up area.

Special projects we facilitated that received CAA approval include:

- FPV operations for cinematography operations (2018)
- Mobile operations where a pilot sits inside a moving vehicle while piloting a drone (2020)
- Dropping of rugby balls from a drone in a Rugby sevens cup final match (2019)
- Control handover between two pilots using DJI M300RTK (2021)
- Multi drone operations using one controller (agricultural operations) (2021)
- First drone license to be issued to a government department (Western Cape EMS) (2020)
- Beyond Visual Line of Sight (BVLOS) operations up to 15km (2021)
- Placing objects on the power lines using a drone (2020)

*“Our experience and expertise are both in public and private sector – municipalities, SOEs, government departments, small-large corporates”*

**Some of our current and previous clients:**



## Approved reseller of industrial drones

We are the proud official resellers of DJI and MMC industrial drones products in South Africa and SADC as a whole. DJI and MMC Drones are suitable for variety of industrial applications:

- Security Surveillance
- Energy Inspection
- Facility Inspection
- Law Enforcement
- Fire Fighting
- Search & Rescue
- Photogrammetry
- 3D Modelling
- City management
- Delivery
- Communication



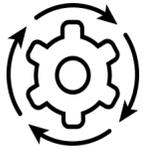
# WHY NTSU AVIATION SOLUTIONS

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## EXPERT LEADERSHIP

Our leadership has more than 10 year's experience in drone technology both in military and civil applications. Our Managing Director is a former employee of the South African Civil Aviation Authority and served as project leader for the development of drone regulations (Part 101). He also served as a South African representative at the international forums such International Civil Aviation Organisation (ICAO) and Joint Authorities for Rulemaking on Unmanned Systems (JARUS).



## OPERATIONS EXPERTISE

We have been delivering business solutions to the drone industry since 2018. Our operations team is competent and qualified Remote Pilot License (RPL) and RPAS Maintenance Technician license holders



## ETHICAL & PROFESSIONAL

Our team is intentional on ethical and professional conduct. We commit to deliver on our brand promise and values



## WE ADD VALUE

Due to our wealth of experience in drone regulations, aviation legislation and years of experience in the private sector, we are uniquely positioned to add value in business case development and drone integration plans particularly in complex or specialised organisations



## CUSTOMER FOCUS

All our services are tailor-made and client-specific. We understand each drone is designed and built for a specific purpose. We also understand no two similar drone applications are the same and intent is key



## QUALITY OF SERVICE

We provide work of the highest quality for both regulated and business aspects of drone operations



## STRATEGIC & IMPACTFUL INTEGRATION

We understand drones serve specific purposes and are not silver bullets nor hold answers to all questions. The benefits of drones are fully realisable when integrated into existing business processes and integrated with existing technologies



SACAA/1553ATO



**NTSUDRONEACADEMY**

TRAINING AND SKILLS DEVELOPMENT



Through our CAA accredited training centre,  
Ntsu Drone Academy accreditation no. SACAA/1553ATO,  
we offer drone pilot training (RPL) and maintenance technician training (RMT).

#### Remote Pilot License (RPL)

RPL (Multirotor) – VLOS (initial and renewal)  
RPL (Aeroplane) – VLOS (initial and renewal)  
RPL (Multirotor) – E-VLOS  
RPL (Aeroplane) – E-VLOS  
RPL – Instructors Rating

#### RPAS Maintenance Technician (RTM)

RMT (Multirotor)  
RMT Aeroplane)

NOTE: RMT license is not drone manufacturer specific.  
A license holder will be able to perform maintenance  
function on any multirotor of appropriate type (MR or  
A).

#### We also offer the following ancillary training courses:

- How to obtain an ROC (Understanding how to obtain a drone license from the SACAA)
- VTOL and Mission Planning (Basic principles of how to pilot a VTOL drone and mission planning)
- Enhanced Radio Telephony (Additional training to assist Remote Pilots to operate within controlled airspace)
- How to start a drone business (How to introduce or integrate drones into existing business. Fundamental concepts how to start a drone business)



NTSUDRONEACADEMY

TRAINING & SKILLS DEVELOPMENT



APPROVED RESELLERS



## GET IN TOUCH WITH US

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**/NtsuAviation**