



# Remotely Piloted Aircraft Systems

## The Ghanaian Story

John Kwofie



# Outline

- Introduction
- RPAS Use in Ghana
- Mandatory RPAS Safety Training
- RPAS Operations in Ghana
- Safety and Operational Challenges
- Solutions – Steps towards RPAS integration
- CANSO AFI RPAS Survey
- Conclusion



# Introduction

1. RPAS Operations in **Ghana**
2. Growth in RPAS operations
3. Safety Issues
4. Integration of RPAS into the non-segregated airspace
5. GCAA - GCAD Part 28





# RPAS Use in Ghana

- Customs clearance or importation
- Approval process for recreational and private operations
- Approval process for commercial operations
- Approval process for flights above 400ft above ground level (AGL) and Beyond Visual Line of Sight (BVLOS) Operations
- Approval Process for Special Authorization
- Procedure for pilot and pilot instructor licensing
- Procedure for approval for sale of RPAS
- Procedure for change of ownership of an RPAS
- RPAS Associations/clubs





# Mandatory RPAS Safety Training

## ➤ Overview

## ➤ Module 1 – Regulatory Overview



## ➤ Module 2 - Flying Safely



## ➤ Module 3 – Safety occurrences and the Dos and Don'ts of Flying





# RPAS Operations in Ghana

There are the 6 major RPAS Operators who have registered and obtained approval from GCAA

Operator	Type of Approval
Rocketmine Aerial Data Solutions	<b>Surveying &amp; Mapping</b> , Safety Inspections, Infrared Imaging, Aerial Photography & Videography
SKT Aeroshutter	Asset Inspections, <b>Surveying &amp; Mapping</b> , Aerial Photography & Videography, Beyond Visual Line of Sight (BVLOS) Operations
Zipline International	Carrying and discharging of medical supplies, <b>Surveying &amp; Mapping</b>
Rudan Engineering	<b>Surveying &amp; Mapping</b>
Axis Drone Surveys	<b>Surveying &amp; Mapping</b> , Aerial Inspection Commercial Videography and Photography
Sahara Natural Resource Ltd.	<b>Surveying &amp; Mapping</b> , Safety Inspections, Infrared Imaging, Aerial Photography & Videography



# Safety and Operational Challenges

1. RPAS Operators have one thing in common – **approval to conduct area surveying and mapping**
2. **Unrestricted RPAS operations**
3. Safety issues including **risk of collision and loss of control**
4. Safety Reports
5. There are only 3 authorized RPAS retailers.
6. Altitude reference datum between RPAS and manned aircraft





# Steps towards RPAS integration

1. Prevent illegal entry of unapproved RPAS
2. Safety Assessments
3. Establish operational procedures
4. Effective application of geo-fencing
5. Enhance the means of conflict detection and separation with manned aircraft operations
6. Application of detect-and-avoid (DAA) technologies
7. **TRAINING** of all stakeholders is paramount to implementing solutions!







# CANSO

# AFI RPAS SURVEY



# RPAS Survey

- What is the CANSO RPAS Survey?
- Survey Description
- Delivery Mode



# Conclusion

1. The presence of a pilot on board an aircraft or not should be (largely) irrelevant from an ANSP perspective (IFATCA)
2. Ghana is committed to implementing the best practices that would be consistent with the ICAO aviation safety framework.



THANK YOU!