

Drone Training for Environmental Foundation for Africa (EFA)



Theoretical Session, Koinguma giving an overview of the various parts of a drone



Hands on manual flight session



SLFL trainers and EFA participants outside EFA's Biodiversity and Renewable Energy Learning Centre (BRAC)

| OVERVIEW | |
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| Flying Labs | Sierra Leone Flying Labs |
| Location | Freetown, Sierra Leone |
| Date | 16/02/2021 and 17/02/2021 |
| Length (number of days) | 2 days |
| Sector program (optional) | EcoRobotics |

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| Format | In-Person |
| Co-organizer if applicable | None |
| SDGs | GOAL 15: Life on Land |

| SCOPE & OUTCOMES | |
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| Type of training | <ol style="list-style-type: none"> 1. Introduction training to drones 2. Sector specific training of professionals (staff members of the Environmental Foundation for Africa) |
| Goal of the training | <ol style="list-style-type: none"> 1. Develop drone data acquisition skills |
| Expected outcome for participants | The overarching goal of the training course was to disseminate basic concepts, essential knowledge and application skills of drone technologies to allow the Environmental Foundation for Africa (EFA) staff to undertake drone-based monitoring of wildlife and deforestation activities within the Western Area Forest Reserve. |
| Confirmed outcome after training | Participants gained skills and understanding of the various components of a RPAS and their DJI MAVIC 2 Pro. Participants also learned how to confidently operate the DJI MAVIC 2 Pro in a safe and effective manner and how the technology could be integrated into their daily work. |
| Eventual next steps | <p>Sierra Leone Flying Labs (SLFL) will provide support and guidance to EFA.</p> <p>Possible opportunity to provide additional training on drone mapping, image processing and data analysis.</p> <p>SLFL and EFA will explore potential areas to collaborate.</p> |

| PARTICIPANTS | |
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| Profiles and number of participants | <ol style="list-style-type: none"> 1. Staff from Organizations (non-profit/for-profit/research institutes, etc.) – 3 |

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| | participants |
| Name of participants' organizations | The Environmental Foundation for Africa (EFA) |
| Gender ratio | All male |
| Who paid for the training? | Free training |

| CONTENT | |
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| Training components | <p>Getting Started</p> <ul style="list-style-type: none"> ● What is a RPAS? ● Types of RPAS? ● RPAS Applications/ Use Cases <p>Principles and Best Practices</p> <ul style="list-style-type: none"> ● Registration with Sierra Leone Civil Aviation Authority ● Aircraft Systems / Knowledge ● Safety and Best Practices <p>Getting Ready to Fly</p> <ul style="list-style-type: none"> ● Setting up DJI GO4 App ● DJI MAVIC Pro 2 Calibration ● Settings ● Aircraft Maintenance & Battery Management ● Fail-safes and Emergency Handling <p>Manual Flight Exercise:</p> <ol style="list-style-type: none"> 1. Basic Flight Maneuvers 2. Payload Handling 3. Emergency Handling |
| Training resources used | <ul style="list-style-type: none"> ● Resources used (Ipads, DJI Phantom 4 pro, DJI MAVIC 2 Pro, flight maneuver worksheet) |
| Approaches and methods used | <ul style="list-style-type: none"> ● The training was adapted to our specific audience by tailoring examples and scenarios to fit EFA's intended use case of the drone ● The training was hands-on and allowed participants |

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| | <p>the chances to implement and practice what was being taught.</p> <ul style="list-style-type: none">• The instructors created various scenarios throughout the training that provided participants numerous opportunities to put their theoretical knowledge into practice. |
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