

DG ECHO LEAPFROG

Leading Activities for the enrolment of RPAS units in the voluntary pool

The project has received funding from the European Union's 2018 Call for proposals for buffer capacities for addressing temporary shortcomings in extraordinary disasters under grand agreement ECHO/SUB/2018/BUF01/782233.



Funded by European Union Civil Protection

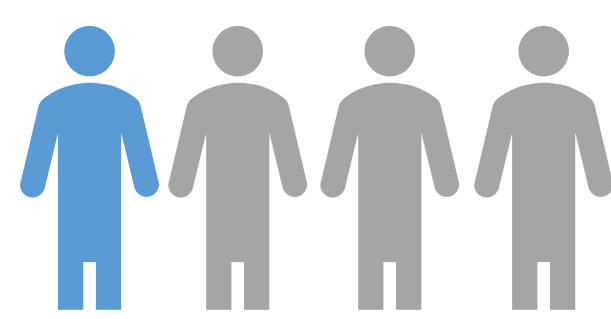


Fact sheet

Field	Description
Country of Origin	Cyprus (Larnaca departure)
Code/Module type/number	Leapfrog (RPAS module)
Ready for departure (in hours)	12 hrs from clearance
Available time period	Available up to 10 days
Structure	4 members with equipment
Operational Readiness on site	1 hour
Emergency Response Operations	Search and rescue (over land and at sea)
Capacity	Live footage (HD and thermal) Real-time image presentation 2D and 3D (offline) maps

DG ECHO LEAPFROG is a joint undertaking between the Cyprus Civil Defence, the KIOS Research and Innovation Center of Excellence, the Ministry of Interior of Bulgaria and the Civil Protection Agency of the Autonomous Region of Sardinia in Italy.

RPAS team structure



SOPs

- Organization Operating Procedures
- Team Operating Procedures
- Mission Cycle
- Data management and protection

Remote Pilot in Command operates the RPAS

Visual Observer operates the payload and inspects the collected data

Technical and Safety officer ensures reliable, safe and efficient operation

Liaison Officer facilitates communication between the RPAS team and the incident commander



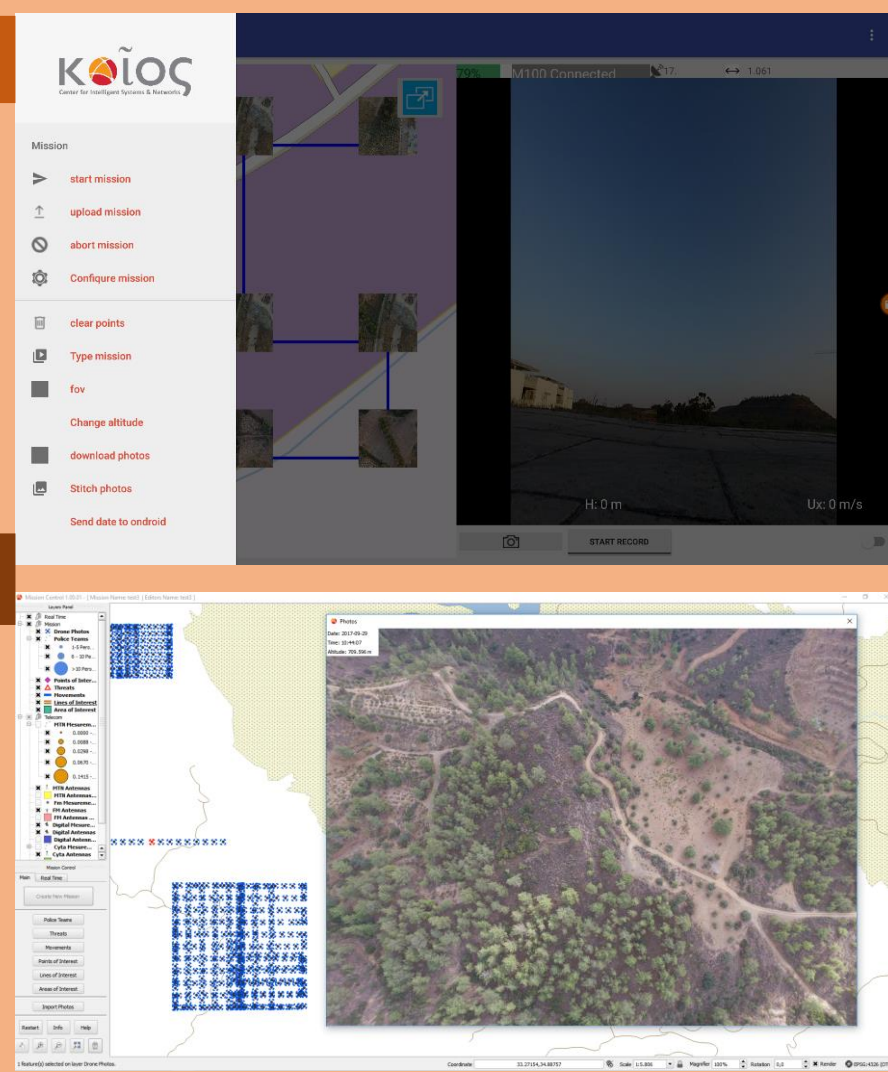
Hardware and Software

Equipment

- DJI M600 (multirotor, 2 RPAS units)
- Thermal and HD camera payloads
- 24 batteries (2 hours continuous operation)
- Auxiliary Equipment
 - 2 Laptop PCs
 - External storage drives
 - Communications (radio and IP)

Tools

- Manufacturer's RPAS pilot software
- SwiftTag RPAS mission planning software
 - Live streaming
 - Data collection and representation
- Mission Control GIS software
 - Data representation and processing
 - Annotation and situational assessment



Training and Exercises



Background: Air Law & Safety, Meteorology, Data protection, GIS and RPAS technologies

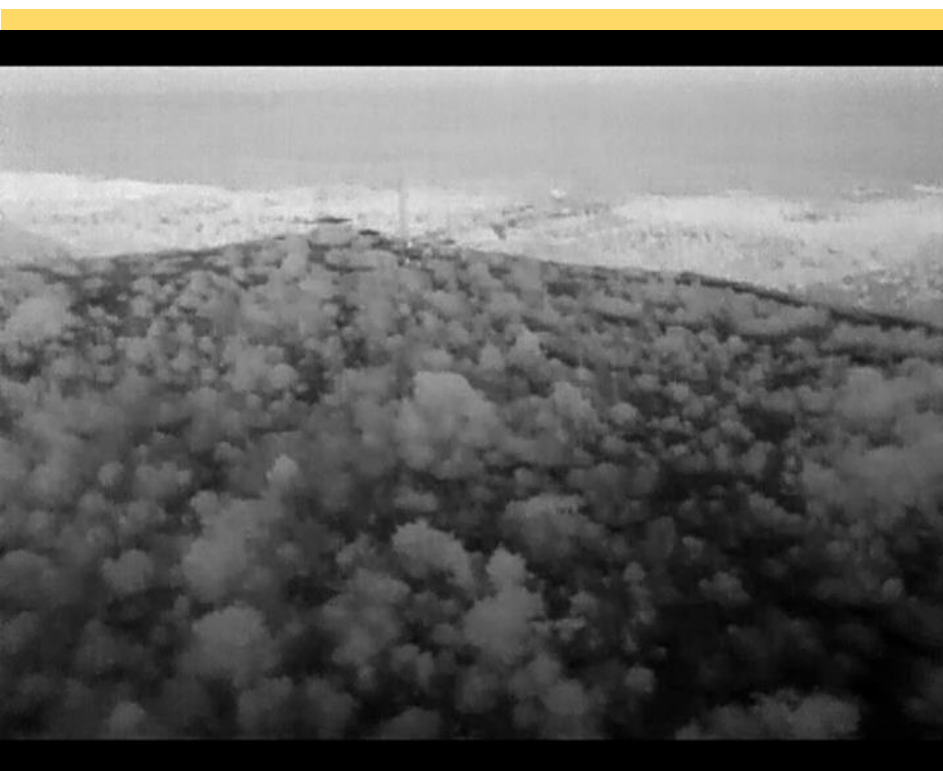
Foreground: Flight principles (day and nights), data management (collection, storage and processing), SOPs



Surveying/ SAR (urban, rural)/ Firefighting



Deployments



Full project description as well as documents and multimedia can be found at: <http://www.kios.ucy.ac.cy/leapfrog/>