

*UAV helicopter FLUFF<sup>IQ</sup> Copter  
Platform controlled by the UniMoCom Network<sup>®</sup>*

(Suggestion 25.01.2014)



## 1. Basic description

- Project: Unmanned helicopter or fleet of helicopters
- Advantages compared to existing similar systems:
  - ✚ Autonomous, unmanned flying in an urban area (trees, buildings, electric wires,...).
  - ✚ Exploiting the advantages of the UniMoCom Network<sup>®</sup> system – transmitted information coming out from the Platform (Platforms) are being received by all participants involved in the real time (for instance police cars, ground control centers, rescue cars, etc. Or other authorised bodies as well as the mutual communication between Platforms sharing the same system UniMoCom Network<sup>®</sup> .
  - ✚ System UniMoCom Network<sup>®</sup> enables to communicate and coordinate all Platforms flying as well the communication between the Platforms.

## 2. Features

Fully automatic, autonomous, flying Platform FLUFF<sup>IQ</sup> Copter with applicated elements of the Artificial Intelligence making full use of all possibilities being gained by system UniMoCom Network<sup>®</sup>.

Supposed parameters of the FLUFF Copter as a Platform of the UniMoComNetwork System are as follows: Main Rotor Diameter 3,4 m, Lenght 3,2 m, Height 1,4 m, Payload 50 kgs, Flying Endurance 6 Hours, Max.Altitude 5500 metres, Max.Speed 220 km/

The design of the Platform is based on the open architecture which enables further changes of power plant,electronics and equipment required by the mission.

There are 2 computers on-control and communicating one, both powerful,furnished by the SSD Memory Medias to store all gathered datas, visible or IR videos, GPS navigation, communicating elements (GSM,WiFi..) and laser and ultrasound sensors.

Control computer enables the Platform to opetrare in challenging areas of urban areas of cities , among trees, wires, poles, mountainous terrain, etc..

Video information,information related to the actual position of Platform,its speed,real time are being transmitted in real time for all desired places of the Platform simultaneously(another Platforms,special cars,ground commanding posts or other authorised bodies. All information are stored directly inside the Platform or in the selected commanding posts.

The UniMoCom Network<sup>®</sup> system enables mutual intercommunication which means the possibility of a mission coordination in case more flying Platforms participating.

The Platform can take-off and be flying idependently, to procceed to the nominated point defined by the GPS ,to carry out the mission and return to its base or to land on predefined position. In case of the fuel shortage it can return back to the base or to make an emergency landing and transmit an emergency signal of its position.

There is a possibility to built up a mobile platform for Platforms take-offs and landings which can be mounted on a car and can also accomodate control centre,logistic and technical support unit. The respective project is the scope a special request and an additional fundings.

Components of the Platform as video cameras etc., and flying Platform can be Remotely Controlled from the ground commanding post.

## 3. Applications.

Protection and monitoring of the selected areas or objects (power station,rafineries,chemical plants)

Pre-programmed regular inspection flights over selected objects (timing including duration)

Transmitting the situation from selected areas or objects.

Border protection

Monitoring traffic situation,in case of a car accident police patrol can be familiarised with the situation well ago before reaching the real place of the accident.

Monitoring areas effected by the natural disastres and catastropes.

Searching for the survivors by the IR cameras (more Platforms can be deployed simultaneously),

Maping and photographing tasks

Transport of the biological materia (blood banks,transplatation,,)

Wide and multirole military application. Platform can reach its destination from various directions.

Image attachment

