ON THE WAY OF DEVELOPMENT – USING UAV-S IN DEVELOPING COUNTRIES

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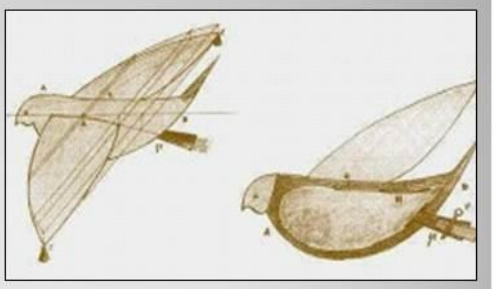
UAV in developing countries

The poster, shows the use of drones in developing countries. The poster also focuses on civilian applications of unmanned aerial vehicles (UAVs) in developing countries. The author studied a plenty of literatures in different materials and used personal experiences in similar environments. The result of the paper is that UAVs are in a lot of shapes and sizes and are useful both in developed and developing countries. They have been used to obtain imagery for disaster risk assessment and response. UAVs also have been used in protection of the wildlife and of the environment, carry of medical samples to distant places, mapping disaster risk. This special vehicle provides an effective, fast and less expensive solution to save more lives and the environment in the developing countries.

In general about UAV

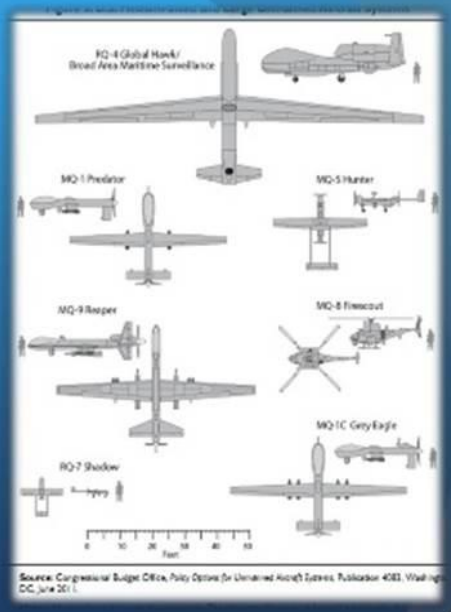
- **UAVs are aircrafts without a human operator on the aboard. According to the Department of Defence Dictionary of Military and Associated Terms an unmanned aerial vehicle is "a powered, aerial vehicle that does not carry a human operator, uses aerodynamic forces to provide vehicle lift, can fly autonomously or be piloted remotely, can be expendable or recoverable, and can carry a lethal or nonlethal payload." "Unmanned" infers complete absence of a pilot on the aircraft. This means that UAVs can be operated remotely or completely autonomously.**



Different Types of Drones

Fixed-wing Drone Rotary-wing Drone

- Micro-UAVs
- Biomimetic UAV
- Blimps or balloons



Types of drones

- There are many types and sizes of UAVs with different weights, configurations and capabilities. The smaller vehicles are more portable, such that it can be carried, launched or operated with much ease. The miniaturization of UAVs also has brought about the positive outcome of significant price. It is at the larger end, and can fly for 40 hours to an altitude of up to 25 000 fee. The larger UAVs are also more stable than the smaller ones, especially in windy situations. Moreover, they allow for a larger arrangement of payloads, especially for surveillance or search and rescue purpose. However, the small UAVs are more capable to produce higher resolution imagery because imaging devices are now lighter than before.

Current use of UAV

- 2006 – MONUC; in Democratic Republic of Congo (DRC)
- 2006-2009 – to monitor Sudanese border with Chad, during invasion from Darfur
- 2007 – MINUSTASH; the peacekeeping force in Haiti
- 2009 – MINURCAT; eastern Chad and north-eastern Central Republic
- 2013 – MONUSCO; in DRC,
- 2015 – Timbuktu; Ornen, Svalan and Korpen were deployed by Swedish peacekeepers

Conclusion

- **This paper presented a historical overview of the UAVs, the classification on the basis of size. UAVs, having been initially designed for military use have found their way into the civilian arena. While the developed world uses UAVs for various applications; the developing countries benefit tremendously. This is due to their general lack of resources, remote rural locations and prevalence of various kinds of catastrophes. UAVs provide an effective, fast and less expensive solution to save more lives and the environment in developing countries. Although there are still challenges in the use of drones, they are outweighed by benefits.**

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