Drones: still an emerging technology in Africa

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Drones still an emerging technology in Africa

In recent times, there have been a steady rise in autonomous vehicles in Africa, both in military applications as well as in the civilian sector. While Nigeria has placed an outright ban on the use of civilian and commercial drone technology, forward thinking countries like Rwanda have been utilizing the technology for improving its healthcare delivery sector.

Zipline, the world's first commercial regular drone delivery service for the Rwandan health service have been delivering urgent medicines, mainly blood to 19 hospitals. Zipline currently distributes up to 40 essential medical supplies.

Zipline blood delivery has reduced mortality and life threating conditions significantly, especially in remote Rwanda where would have taken over 4 hours for a car to reach. The term drone or Unmanned Aerial Vehicle (UAV) should not be confused with hobbyist remote control (RC) aircraft which is inferior in terms of capability.

The decision of the Nigerian government to prohibit the use of drones in Nigeria is equivalent to shooting one's foot with own gun. As countries across the globe scramble to build self-reliance in the area on innovative technologies, coupled with the Nigerian government focus on diversifying the economy, drone technology of-

fers an explosive growth in the moribund aerospace industry since various tech start-ups and companies would directly contribute in the design, development and sales of the various components and sub-system required for drone assembly, maintenance and operations.

This initiative would provide essential jobs for several thousand technologists and also prevent capital flight and brain-drain in the aerospace sector, in view of the fact that much needed funds would be kept within the country.

Granted, in the wrong hands, drone technology can be used for criminal activities as seen in the recent Dublin Airport drone attacks. In the attack, Dublin Airport officials were forced to suspend all flights due to drone sighting over an airfield, the incident lasted for more than three days.

Nevertheless, as with every other emerging technology, there are usually a negative aspect. A drone can be used by terrorists to recon troops movement and disposition, or it can be fitted with explosives and used in a kamikaze fashion however, we cannot always throw away the baby with the bath water.

Instead of prohibiting the use of drones, and destroying a viable multi-million-dollar aerospace industry, the Nigerian government as well as other African countries could explore developing counter UAS solutions which are commercially off the shelf and are being offered by various Defense technology providers.

With the current ban on civilian drone op-

erations in Nigeria, the country is currently losing billions in potential revenue. According to industry analysis, the global market for unmanned aerial vehicles (UAVs), or drones, is anticipated to reach $25 billion by the end of 2023, witnessing a compound annual growth rate of 18.2% over the next decade owing to the significant use of drones in various sectors.

The report also underlines non-military drone development will reach an astonishing $88.3bn in the next decade while it was $13.1bn in 2017 and $4.4bn in 2018.

While the civilian drone market is expected to service the energy, construction, insurance, delivery, communication, photography, and mining sectors.

Agriculture is presently an essential market for commercial UAS, due to the added-value drones provide for the sector. This various sectors are seen as the major drivers behind the growth of the drone sector.

Specialized drones with long range capabilities are finding use in urban surveillance, border monitoring and maritime security duties. Such drones are also highly sought after in United Nations peacekeeping operations, disaster management and law enforcement.

Although a sizeable market as a whole, African technology landscape remains fragmented as a result many different legislations and certifications processes combined with a political environment less favourable to innovation and entrepreneurship which impairs African companies from growing as they should.

Drone service prices are falling rapidly to accommodate the large influx of providers. Tough government rules in regards to violation of privacy as well as low design, fabrication and mass production capacity are estimated to hamper the growth of the African drone market in near future.

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