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"Skye Air can create drone-delivery ecosystem for govt & private companies in digital healthcare sector"

17 June 2021 | Views

Unmanned air ambulances will be the future of India's healthcare scenario where rural areas can be connected easily. Wing Commander S Vijay (Veteran), COO, Skye Air Mobility, New Delhi reveals more in an interaction

How can Skye Air bring a revolution in providing healthcare facilities in rural and remote areas?

Unmanned aerial vehicles (UAV), commonly referred to as drones, are capable of reaching remote areas autonomously with minimum effort, time and energy. One of the most promising drone applications is the delivery of packages to previously inaccessible areas. Understanding the capability of drones, the Government of Telangana along with the World Economic Forum conceived the 'Medicine from the Sky' project to deliver healthcare items like medicines, COVID-19 vaccines, units of blood, plasma and other lifesaving items from the distribution centres located in urban and semi-urban areas to PHCs / CHCsin rural areas and back. Skye Air is taking part as a Drone Service Provider (DSP) in these trials and part of three consortiums out of eight consortiums selected for the trial. Skye Air will operate drones, develop applications, perform data analytics, integrate workflows with government systems, design and develop drones. Thus, Skye Air is a complete solution provider and can create a delivery ecosystem for central, state government health departments and private companies in the digital healthcare sector for revolutionising healthcare facilities in rural and remote areas.

What kind of healthcare logistics will you provide?

Skye Air will start with deliveries of emergency medicines for trauma care, units of blood or plasma, vaccines, longtail medicines and diagnostic specimens. Also, we aim to support organ transplant by transporting organs from donor hospital to recipient hospital. In future, Skye Air will be operating unmanned air ambulances for moving patients safely and timely to higher echelon medical facilities to save lives.

With vaccination drives in full swing, how can the drone assist in this initiative?

The vaccination drive for COVID-19 is going to be a gigantic task even though India has a well-structured vaccination delivery system owing to its universal immunisation programmes. While the country has the world's largest railways and road networks, a new, efficient mode of transporting vaccines would be required to overcome the logistical challenges because India is a vast country with 67 per cent of the population living in rural India.

This is where a drone-based distribution system plays a vital role. Using drones could make the delivery of critical vaccines especially to remote areas, more accessible and faster. Using drones to deliver medical supplies will help in better resource management of the limited supplies and facilitate just-in-time delivery to the current supply chain system. Smart inventory management and overcoming stock out issues will help lighten the current burden and deal with the crisis efficiently.

The company plans to start trials for BVLOS Drone flights. Who will be going to conduct the trials and by when it will be over? Did you tie-up with the government for the same?

Skye Air as DSP in three out of eight consortiums will be conducting the BVLOS delivery trials. The trials are expected to start in the last week of June 2021 and will finish by the third week of July 2021. These trials are for the Government of Telangana on a No Cost No Commitment (NCNC) basis. The government of India's think tank 'Niti Ayog' is closely monitoring the trials to replicate the model across all Indian states at the commercial level.

In which part of the country do you plan to launch the services?

The Government of Telangana is planning to implement the drone delivery model in three to four districts by the last quarter of this FY. As mentioned earlier, Niti Ayog is keenly observing the progress of these trials for implementation all over India to connect rural India and improve the reach of healthcare items. We are currently in discussion with various state governments for the implementation of the drone delivery model. We are planning to launch the services all across Indian states and UTs.

What type of technology has been used in BVLOS Drones?

Since delivery drones are required to cover ranges beyond visual line of sight, the radio telemetry used will be superior to ordinary drones and will be capable of operating on 4G/5G telecom network for improved ranges. Additionally, delivery drones are designed to take off and land vertically for ease of pickup and delivery of goods. Along with VTOL (Vertical Take-off and Landing), the design incorporates improved battery power and aerodynamic refinements like the hybrid design of airframe for achieving better cruise speeds, long ranges, greater stability, ability to recover from the loss of power due to glide potential and a parachute for a safe landing in the event of loss of propulsion.

What is your business model? What will be your five-year growth strategies?

Skye air is a drone delivery service provider and product design and development company. We developed delivery drones for use in our projects and also for sales. We are closely working with the Indian Armed Forces to develop customised delivery solutions. Skye Air's current focus is on healthcare and emergency logistics delivery for the government and private sector and expands services to other deliveries like food and e-commerce packages as the policy and regulation evolves in India. We tied up with domestic and global, logistics and e-commerce companies for seamless integration of drone delivery along with their current surface-based delivery network. We want to improve urban air mobility by introducing Sky Taxi and unmanned air ambulance services in India.

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