

The World Cup of Drones

By Raj Madhavan

Organized by the Prime Minister's Office (PMO) of the United Arab Emirates (UAE) government, the Drones for Good Award is dedicated to transforming unmanned aerial vehicles (UAVs), popularly referred to as drones, into practical solutions for improving people's lives today. I had the honor of serving as one of the judges for the competition, which was held in Dubai on 6 and 7 February 2015.

Billed as the "World Cup of Drones," the competition received over 800 submissions from 57 countries and was

divided into three categories: 1) government, 2) national, and 3) international. There were three phases of competition to determine the winners for each category. The first prize was AED 1 million for the national winner and US\$1 million for the international winner. During a remote review phase, the judges selected 34 semifinalists across the three categories and invited them to demonstrate and present their entries in Dubai, UAE. In the final round, five teams from each category competed for first-place prizes in their respective categories.

The international award and the US\$1 million prize went to Flyability SA, a spin-off of École Polytechnique Fédérale de

Lausanne (EPFL) in Switzerland, for their "small, lightweight drone that has the unique capability of being able to collide on obstacles without losing its stability and of being safe to fly in contact with humans." An article from Flyability ("Flyability Wins the UAE Drones for Good Award") follows this one.

It was exciting to see the contestants demonstrate their creative designs in using UAVs for the betterment of humanity! More information on the winners and judges of the awards is available at <http://www.dronesforgood.ae/> and an official video released by the PMO can be found at <https://www.youtube.com/watch?v=zEgqeBTs8Z4&feature=youtu.be>.

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Flyability Wins the UAE Drones for Good Award

By Patrick Thévoz and Adrien Briod

On 7 February 2015 in Dubai, United Arab Emirates (UAE), with applause from an international jury of drone experts, UAE ministers, and international dignitaries, His Highness Mohammed bin Rashid Al Maktoum handed us a US\$1 million check and the first-place prize of the UAE Drones for Good Award, the

"World Cup of drones." The moment was magical and game-changing for Flyability, our young startup dedicated to developing a new generation of robust robots for complex environments.

Invented at Swiss University EPFL in the Laboratory of Intelligent Systems and supported by the Swiss National Centre of Competence in Research Robotics and the Fondation pour l'Innovation Technologique, our spherical, collision-tolerant, safe drone convinced the jury that it

was the most innovative drone out of 800 worldwide submissions. Flyability won because it is tackling one of the major issues in the drone industry: allowing drones to navigate in areas full of obstacles or people. This major challenge is greatly limiting the current field of application for UAVs, for example, for the search of victims and assessment of the situations following disasters. Using the well-known example of the Fukushima power plant disaster, no drone (or any

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