

The Big Winners of the Commercial UAV Expo Europe



[Commercial UAV Expo Europe](#) took place between the 20-22 June and counted over 500 visitors from 50 different countries and 52 exhibiting companies which presented the most exciting drone innovations. During the Expo, an international jury of drone professionals selected and presented the [“Drone Hero” awards](#) to the most creative drone innovations.

The awards, which represent a cooperation between the European drone cluster EUKA and Commercial UAV Expo Europe, were handed over by the Belgian Defence Minister Steven Vandeput, to [5 stunning innovations](#). The winners get an all-access pass and/or an exhibit space in Las Vegas at [Commercial UAV Expo Americas](#), from 24-26 October 2017.

High potential drone hero

The high potential drone hero is Drone Radar (Pawel Korzec, Poland). The aim of the DroneRadar is to vastly improve airspace safety by providing a simple, available to all solution to performing, monitoring and integrating UAV operations with the manned aviation flow in European airspace. A rapidly growing number of Unmanned Aerial Vehicle operations have caused major concern over flight safety. Air Traffic Management institutions, like ATC, FIS are finding it difficult to track such operations as the majority of those are conducted by amateurs with no aviation background and little or no knowledge of both airspace structures and flight rules. Up to now there has been no means or concept of integrating such operations into the mainstream ATM flow, which would allow for creating awareness of them and their monitoring. DroneRadar is the first, ANSP integrated system platform allowing for such integration.

Creative drone hero

The most creative drone hero is Mine Kafon Drone Project (The Netherlands). Growing up on the edge of Kabul in a little town called Qasaba in Afghanistan, Massoud and Mahmud Hassani, the brothers behind the Mine Kafon Drone project, currently living in The Netherlands, experienced the horrors of land mines from an early age. These experiences fuelled older brother Massoud to develop a solution for a safe and smart solution to detect and clear land mines. Massoud and Mahmud Hassani stunned the world in 2012 with Mine Kafon, a wind powered anti land mine ball looking like a dandelion. The Mine Kafon is approximately the height and weight of an average man, allowing it to trigger landmines as it rolls over them using the power of the wind. After three years of work, the team is ready to present the Mine Kafon Drone: an unmanned airborne demining system that uses a three step process to map, detect and detonate land mines. The Mine Kafon Drone, an airborne demining system developed to clear all land mines around the world in less than 10 years.

Innovative drone hero

The most innovative drone hero became the Voliro hexacopter which has been developed, assembled and programmed as a student project of Cliff Li at ETH Zurich (Switzerland). It has the unique capability of being able to hover in any arbitrary orientation, even vertically or upside down. Unlike standard multicopters, the position and the orientation are completely decoupled and can be steered independently. This is achieved by six additional tilting motors which allow the rotor units to turn around its axes.

Start-up drone hero

The most promising start-up drone hero is Vectrino (Jelena Petković, Croatia). In recent years, mosquitoes represent a growing health threat because new cases of mosquitoes carrying diseases are constantly evolving. This is why a group of authors designed a new way of larviciding with unmanned aerial vehicles (drones) using edge spectra of visible red light (NIR) to clearly notice the places where mosquitoes breed. By locating those places and with automatic calculation of area and volume of water, it is possible to automate the drones to independently perform larvicidal treatment dosing exactly the optimal amount only where such treatment is necessary. Vectrino Ltd. is a dynamic company that creatively uses the latest advanced technology combined with knowledge/experience from specific areas and activities in achieving various business goals.

International drone hero

Ampyx Power (Richard Ruiterkamp, The Netherlands) is awarded as international drone hero. The Ampyx Power Airborne Wind Energy System can generate cost-effective power and has minimal impact on the environment as it comprises less than a tenth of the material than a wind turbine with the same capacity. The system consists of an autonomous aircraft and a drone tethered to a generator on the ground. Wind drives the tethered aircraft at an altitude of 450m. Tensile force causes the tether to be reeled out from a winch. Once the tether is reeled out to a predefined length, the aircraft automatically descends towards the ground causing the tether to reel in; it ascends and repeats the process. The aircraft utilizes a vast array of sensor suites which provide the autopilot with critical information to perform the task safely.

Public award

The public award went to Guy Verhoeven (Belgium). He is the founder of Skycan, a fast growing Belgian drone-company. Guy's latest project is all about search and rescue. He found the perfect thermal-fusion camera, specially built for drones and works together with Idronect (a drone platform that will allow rescue services to create an online scenario in minutes). Now Guy wants to realize his project:

- Working with different rescue-services.
- Finding pilots who will learn to fly with the 'Salvator'-drone.
- Have different drones spread across the country so help can get there fast.
- Installing a tracking system for "Salavator" that will allow rescue teams track exactly where the drone is... in real time.
- Installing the best solution for the rescue teams to see the drone's camera in real time.

For more pictures and footage of the European Drone Heroes, please visit: <https://www.dronecommunity.biz/drone-hero-europe/>

<https://www.gim-international.com/content/news/the-big-winners-of-the-commercial-uav-expo-europe>
