

SEVEN FINALIST TEAMS TO SHAPE THE FUTURE OF AEROSPACE

News / Manufacturer



Meet the 7 inspiring finalist teams

flyyourideas
2019 COMPETITION

6 key challenges: Electrification, Cyber Security, Artificial Intelligence, Data Services, Internet of Things, Mixed Reality



TEAM OSPREY
University of Strathclyde
Motor Inter-Body Coupling Systems (MIBCS)

TEAM AIRFISH
University of Cambridge
Airbus Integrated Fisheries Information Services

TEAM SEREN
University of Cambridge
The Solar Windmill

TEAM 'ZERO' HEROES
Bath University of Technology
Batteryless Wireless Switches for Airplanes

TEAM VACA
National University of La Plata
Earth-Observation - Data Based Application for Environmental Administration

TEAM MOVE-EZ
Technical University of Milan
Eco- Smart Wheelchair for Air Travel Needs

TEAM AiInspect
Bath University
Automated Intelligent Real Time Quality Inspection Enabling Human Robot Collaboration

Fly Your Ideas 2019

ROUND 1	FINALISTS
72 Countries	5 Countries
80 Nationalities	11 Nationalities
284 Universities	8 Universities
20% Women	32% Women

Since 2008 Launch

6 Competitions	+ 22.000 Students
+ 100 Countries	+ 500 Airbus Staff
+ 700 Universities	+ 1900 Ideas

2012 - UNESCO Partnership

 In partnership with UNESCO
Educational, Scientific and Cultural Organization

www.airbus-fyi.com
#FlyYourIdeas

AIRBUS

There are so many students dreaming to participate in a world-class competition, to submit their idea, to innovate, to develop science and different industries; Airbus is giving that opportunity - Fly Your Ideas - inviting students from around the world to innovate in key areas for the industry: Electrification, Data Services, Cyber Security, Internet of Things, Artificial Intelligence and Mixed Reality.

Fly Your Ideas 2019 got 270 ideas submitted, 80 nationalities from 72 countries and 284 universities involved! If we talk about TOP participants countries, here it is: India with 43 teams, China and HongKong with 17 teams, France with 16 teams, Iran with 15 teams and United Kingdom with 15 teams.

It was so far from easy to select teams for the final, but Airbus experts did it! Seven finalist teams were selected after a three-month development phase working with support

from Airbus mentors.

Fly Your Ideas gives students the opportunity to develop exceptional or radical ideas for tomorrow's aerospace industry. The selected concepts represent a range of trendsetting topics such as a 'Smart Wheelchair' for air travel or a 'Solar Windmill'.

The finalist team members represent 11 countries (Argentina, Germany, Greece, India, Indonesia, Italy, Japan, Moldavia, Netherlands, Norway, United Kingdom), 8 different universities and were selected from over 270 entries worldwide. Their academic backgrounds vary from Engineering to Information Technology and Natural Sciences to Finance.

In June, the teams will travel to Toulouse, France to work in Airbus' innovation and R&D facilities to further develop, prototype or visualise their ideas using state-of-the-art equipment with support from Airbus. On 27th June, the students will present their projects in front of Airbus experts and personalities from the aerospace and academic world, live-streamed in parallel to a global audience.

The students, competing for a share of the €45,000 prize fund and the chance to further evolve their idea in the aerospace industry, are clearly motivated by the digital nature of this year's challenge, and the chance to change the world with their ideas.

The seven finalist teams are:

Airbus Integrated Fisheries Information Services (Data Services Challenge) – *Team AirFish*, University of Cambridge, UK

AirFish is an ocean monitoring system using satellite imagery and video imaging technology. It can help governments combat illegal fishing, reduce bycatch of endangered species, and generally decrease damages to the marine habitat. This project aims to improve the efficiency of fish farming, making food production more affordable whilst reducing open-water fishing and thus environmental impacts.

Automated Intelligent Real-Time Quality Inspection Exploiting Human-Robot-Collaboration (Artificial Intelligence Challenge) - *Team AIQinspect*, Saarland University, Germany

AIQinspect will assist the human operator in performing rivet inspection by using Artificial Intelligence. Quality is predicted based on images and physical parameters while riveting in real time. The resulting information is communicated to the operator via Augmented Reality.

Batteryless Wireless Switches for Airplanes (Internet of Things Challenge) - *Team "Zero" Heroes*, Delft University of Technology, Netherlands

Application of wireless systems in aircraft instead of traditional wired systems. This idea solves the main limitation for IoT in aircraft by removing battery integration - a current challenge for safety and regulation. Furthermore it reduces fuel consumption and weight while simplifying aircraft retrofit and maintenance needs.

Motor Intra-body Cooling System - MICS (Electrification Challenge) - *Team Osprey*, University of Strathclyde, UK

Replacing the traditional method of cooling electric motors with a water jacket or submerged cooling with a cooling system integrated inside the body of the motor itself. This project has the potential to provide mass effective motors for future Urban Air Mobility and Hybrid Electric aircraft.

The Solar Windmill (Electrification Challenge) - *Team Seren*, University of Cambridge, UK

A novel method of electricity generation for spacecraft using trapped high energy particles. Using two concentric aluminium spheres, the energetic electrons flux from solar wind trapped in planetary magnetic fields can be collected and harnessed to generate power. This innovative approach aims to store and generate energy in deep space where the current density from sunlight is low.

Swan – Smart Wheelchair for Air travel Needs (Internet of Things Challenge) - *Team Move-ez*, Technical University of Milan, Italy

SWAN is an innovation that aims to revolutionize the air-travel experience of Passengers with Reduced Mobility (PRM) using IoT technology. It converts a redesigned class of detachable airplane seats into smart electric wheelchairs that passengers can use from check-in to arrival. It is fully controllable by smartphone through a dedicated app.

V.A.C.A. - Earth-observeVation-data based Application for stoCkbreeding Administration (Data Services Challenge) - *Team V.A.C.A*, National University of La Plata, Argentina

VACA is an integrated service for stockbreeders, based on Earth observation, meteorological and IoT data applied to agriculture. VACA aims to provide actionable information to stockbreeders on quality and quantity of pastures, number of animals in paddocks as well as the physical condition of cattle.

Teams will share project updates, photos, sketches and stories using #flyyourideas with their posts captured on the social wall of the competition website.

Airbus Fly Your Ideas is a global competition challenging students worldwide to innovate for the future of aerospace, designed and launched by Airbus in 2008 and organised in partnership with [UNESCO](#) since 2012. Since 2008, over 22,000 students have registered for Fly Your Ideas from over 700 universities and 100 countries worldwide, with more than 500 Airbus employees contributing their mentorship and expertise to support the competition.

For more details and information on the finalists, please visit www.airbus-fyi.com.



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