

## Drones to inspect power lines

### The ‘Aracnocóptero’ of the company Arbórea, located in the Science Park of the University of Salamanca, joins the Red Eléctrica de España fleet

**JPA/DICYT** The inspection of power lines is now added to the already wide range of drone utilities. The Remotely piloted Air System (RPAS), designed and manufactured piece by piece by the company Arbórea Intellbird in its facilities of the Scientific Park of the University of Salamanca, in Villamayor de la Armuña, has just been delivered to Red Eléctrica de España (REE) so can use it in reviewing the layouts.

The carrier and sole operator of the electrical system in Spain, which manages more than 40.000 kilometers of high-voltage lines, has relied on the Salamanca company, for the supply of this innovative technology after overcoming a demanding process of evaluation and prospecting of different aircraft, according to company information collected by DiCYT.

This acquisition is part of the REE adaptation programs for new technologies and seeks to explore a new, more efficient, and cheaper line inspection procedure than the employees currently employed. These traditional systems consist of the use of personnel who ascend to the supports or the use of manned helicopters.

This new ‘Aracnocóptero’, as the drones developed by Arbórea are called, “has been specifically designed to inspect power lines with great efficiency and safety”, as indicated by the director and founder of the company, Carlos Bernabéu. The aircraft, fully removable, "can fly even under a tropical storm", has interchangeable arms to operate optimally in various weather conditions and carries a package of sensors capable of taking simultaneous photographs and thermographs of very high resolution, 3D mapped spectra various and automatic operations on laying.

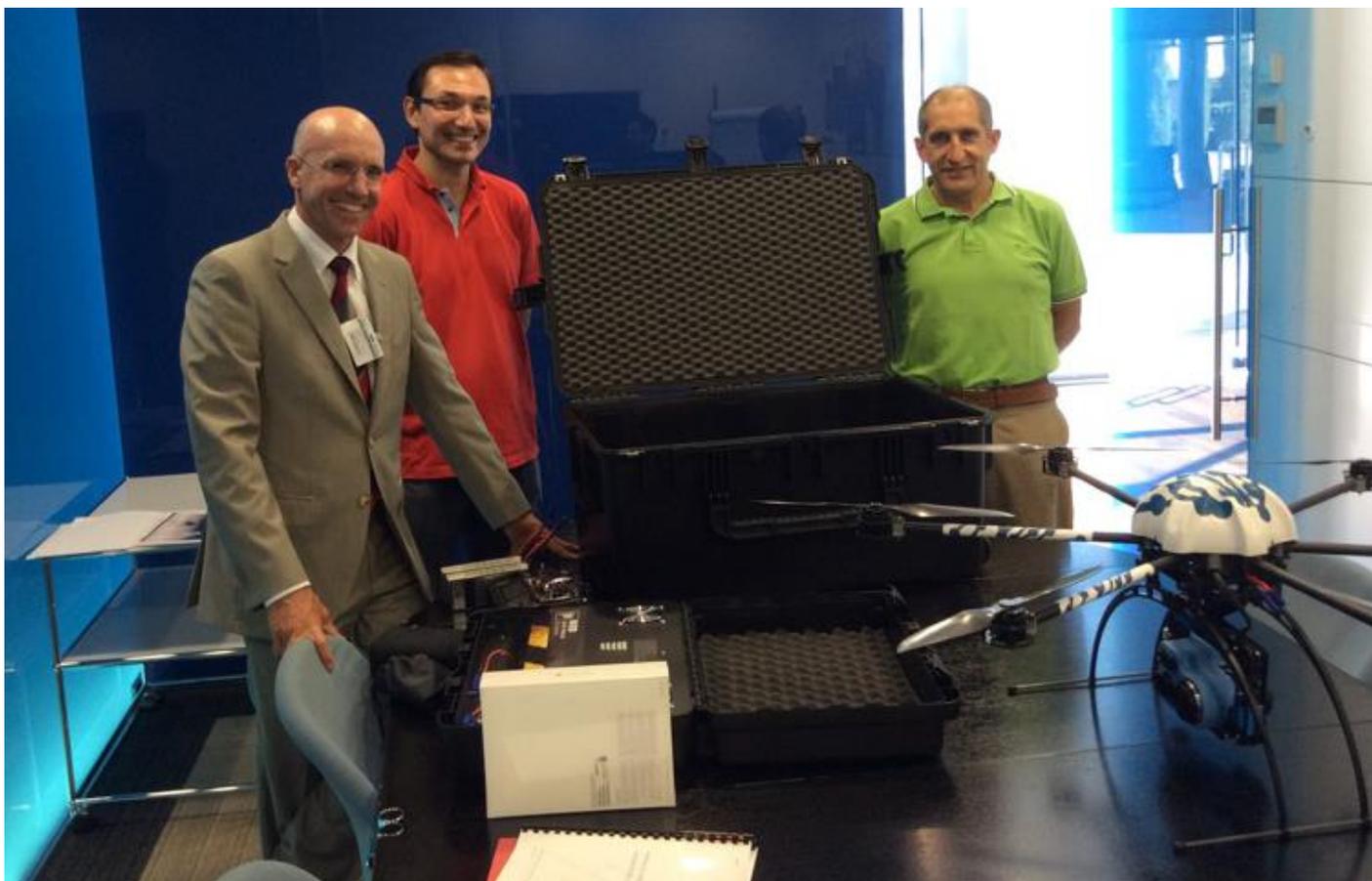
#### Patents

This device, which has some patents, is designed to accurately detect and process hot spots, corrosion, concrete pathologies and other physical alterations of the supports and power lines, with a fast and safe inspection scheme.

Arbórea intellbird, a company that has Iberdrola and the Center for Industrial Technological Development (CDTI) in its shareholding, is also committed to transferring all its experience in data collection and wind turbine processing to the inspection of power lines, area in which it is a pioneer worldwide.

Currently the Salamanca company, which also provides advanced infrastructure inspection services, has among its clients large companies in the energy sector such as Iberdrola, Endesa, Enel and, recently, Red Eléctrica de España.

[Link to original](#) (Spanish)



REE managers receive the 'Aracnocóptero'. Photo: Arbórea Intellbird.