



CARLOS BERNABÉU, DIRECTOR OF  
ARBÓREA INTELLBIRD.

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## Remotely piloted air systems: Far beyond science fiction

Arborea Intellbird is a pioneer in the design and manufacture of 'drones' with multiple professional applications

**T**hey have revolutionized the almost primitive conception for airplanes and birds that, until recently, had airspace.

The remotely piloted air systems, better known as RPAS, have already made the leap from science fiction and spy movies to a vision so real that it has been necessary to legislate it, although Spain took longer to do so than the surrounding countries. The possibilities that 'drones' offer for civil use are multiple, as Arboreal Intellbird has long shown.

The general director, president of the board and majority partner of this company, Carlos Bernabéu, explains the fundamentals of a firm that has not stopped innovating and whose services are used by multinationals in the energy and industrial sectors and called to expand into international markets.

### **¿How is Arborea Intellbird defined?**

Arborea Intellbird is a small company specialized in the design and manufacturing of RPAS (Remotely piloted air systems), better known as 'drones'. It also trains pilots and provides services with their systems. It is located in the Scientific Park of the University of Salamanca, in Villamayor, it was refounded in 2013, to host Iberdrola and CDTI within its social structure. The entry of Iberdrola and CDTI in the share capital allowed the company to accelerate with an investment of 500.000 euros, which was added to the important initial investment.

### **What is your current staff?**

Ten people and it is a company with a very high I+D component that is starting to invoice products and services. Our activities have a huge component of research, development and innovation. We generate solutions that do not exist in the market, based on the resolution of complex technical problems. We form our own team, composed of people who are mostly engineers of various specialties selected from the best academic records.

### **How was the company created?**

From the Aracnocóptero project, a multi-rotor titanium aircraft that began to be built in 2008 to assist various initially environmental management projects. Today we design and manufacture in our Villamayor facilities all the parts of various aircraft models, integrate state-of-the-art sensors and program advanced software. In addition, we train professional pilots to operate our systems in an increasing number of specialization courses, including agricultural remote sensing and air inspection services, usually in the company of multinational certifiers of the first line.

### **What distinguishes Arborea Intellbird from the competition?**

The quality of our systems made of carbon and titanium, capable of flying under tropical rain or very strong winds and the great technical specialization of our solutions, which give the customer what they need. Iberdrola, in addition to strong support on many different levels, provides us with a first level technical committee, which allows





*Above, the director of Arbórea, with the latest promotion of Aracnocóptero pilots trained in the facilities of Arbórea, in the USAL Science Park. Alongside these lines, inspection work with Iberdrola and TUV group certifiers.*

us to fine tune our products, aimed at a very specialized market.

### **What is your clients profile?**

Fundamentally, multinationals in the energy or industrial sector, but also medium-sized service companies at first or to a lesser extent, liberated professionals who see in our systems an extraordinary professional tool with which to stand out in a very competitive services market. We have an absolutely international vocation. Our natural orientation at the moment, apart from Iberia, is South America and Central America.

### **How are you carrying the crisis?**

Personally, I don't believe in that term to explain the profound economic slowdown that our economy is experiencing during these years. I believe that this term refers to a temporary passenger concept, useful for political purposes, but dangerous, since it creates confusion and breaks businesses. I understand the process rather as a 'era change'. Arbórea Intellbird arises from the deep understanding, already in 2008, that a depression was coming. This leads me to take a drastic turn and to bet everything on our high-tech flying development, financed with our own funds and based on a different client profile from the main service recipient. At that time, our clients were public administrations. Arbórea Intellbird was born later, in 2013, to boost my development of *Aracnocóptero* and, therefore, in a situation of full economic depression. In this difficult environment it grows, creates employment and builds its own market, new and

international. The commitment to internationalization is essential to sustain our growth in a framework like today's Spanish. Arbórea already has distributors and projects outside Spain and expects to grow a lot this year and the following.

### **How is the sector?**

It has been difficult to achieve a basic regulatory standard for 'drones' in Spain, which has arrived late in relation to that existing in the countries around us. This has greatly damaged Spanish companies that have really pioneered the development of SARP systems for civil use. Today these difficulties have been solved and there is a clear willingness on the part of the Administration to go forward in the norm accompanying the development of the industry. The 'drone' sector is boiling from the media point of view, although the market, beyond toys or aerial photos, has not yet crystallized. Arbórea generates very specialized products that today are not affected by the growing competition of flying system manufacturers. The current technical inability of the potential client to distinguish professional systems from others that are not is a small burden, which will be very temporary. A good indicator of this is that Arbórea has just received commission of its systems from Red Eléctrica Española, after a thorough market study of this company, which has analyzed more than 20 manufacturers worldwide.

### **How have you been financed?**

Arbórea has always self-financed in all its I+D projects and for all purposes. We do not depend on subsidies of any kind, which makes us a solid company. I know many I+D generating companies that have fallen as the flow of public aid has dried up. Arbórea has received valuable technical support from ADE Castilla y León and is the first company to receive as a direct partner to CDTI, through its Invest program, which is an honor for us.

### **What projects do you develop?**

In summer 2014, we established an interesting framework agreement with Caja Rural de Salamanca, to enhance the interesting agronomic applications, which allows us to move towards disruptive solutions that we will soon see and that will greatly benefit our professionals in the field. At the same time, Arbórea implements its system for aerial inspection of wind turbine blades, which allows to generate automatic reports of the damages of these expensive structures in an efficient, cheap and safe way. We work in innovative procedures also in other areas of industrial inspection such as power lines or the analysis of large structures, in collaboration with large certification multinationals. This year we have consolidated the growing process of internationalization and we are spreading through different countries, in which our technology and experience has much to contribute.

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