

PORTO ALEGRE AEROMÓVEL CONTROLLED VIA TABLET WITH ELIPSE MOBILE

Elipse Software technology allows monitoring speed, brakes, and doors of the vehicle that connects Salgado Filho Airport's Terminal 1 to Trensurb's train station

Augusto Ribeiro Mendes Filho Elipse Software's Media Relations

Needs

In August 10, 2013, the Brazilian president Dilma Roussef attended the opening ceremony of Aeromóvel (*Aerodynamic Movement Elevated*), in Porto Alegre, South of Brazil. This pioneering project, developed with Brazilian technology and implemented by Aeromóvel Brasil inc., connects up to 150 passengers from Salgado Filho Airport's Terminal 1 to Trensurb's train station in an 800-meter long route.

In order to cover this route safely and reliably, the Aeromóvel uses <u>Elipse E3</u>, a solution developed by Elipse Software. Through the software screens, operators can monitor several aspects of the vehicle, such as blower rotation, propeller valves statuses, station doors opening and closing, position, speed, and brakes.

For better controlling these settings, Aeromóvel Brasil has adopted, in addition to E3, the company's latest technology, <u>Elipse Mobile</u>. With this software, operators are able to access E3 application screens via mobile devices such as smartphones and tablets, which allow them to monitor the vehicles from anywhere, regardless of where they are.

Solution

Thanks to Elipse Mobile, it is now possible to follow all variables monitored by E3 (speed, brakes, voltage, position, and the opening or closing of the vehicle's doors). All these are done with a tablet or a smartphone, in a quick, easy, and secure way.

"The software is very easy to be used, we have no problems with it," said Fernando de Melo Nunes, operational assistant at Trensurb.





Figure 1. Nunes monitoring pressure on brake's hydraulic system of Aeromóvel with his cell phone via Elipse Mobile

According to him, their day-to-day operations were greatly improved with Elipse Mobile. For example, something that previously might have required moving operation and maintenance teams to the site is now accomplished fast and accurately, a benefit Nunes makes a point of emphasizing.

"Some time ago, if I was on Aeromóvel and wanted to get more details about the vehicle's position, or simply if I wanted to open or close its doors, I could not have done it. With Elipse Mobile, now I can access quickly all data and commands via cell phone," he said.



Figure 2. Nunes monitoring Aeromóvel's functionality via Elipse Mobile



When questioned about the main improvement brought to his and his 14 colleagues' work by using Elipse Mobile on their cell phones, Marco Antônio Casara, Aeromóvel's operational manager, was categorical: "now we are able to operate the automation system from wherever we are, and to access the vehicle's variables regardless of its location."

"This software fits perfectly with what we wanted for the vehicle's automation system. Our plan not is to install it on A200 (our latest model, capable of transporting up to 300 passengers at the same time)," he said.



Figure 3. Aeromóvel A200

Aeromóvel

A pioneering project in Brazilian engineering, developed with national technology and managed by Aeromóvel Inc., this vehicle operates seven days a week, from 5AM to 11:20PM. Currently, its fare is integrated to train fare and costs R\$ 1.70 (less than one dollar). About R\$ 37.8 million (around U\$ 12 million) were invested by the federal government in it, and it is now the most modern transportation mode in Porto Alegre. And since this vehicle moves using an air propulsion system, there is no emission of pollutants to the atmosphere. More information can be found at www.aeromovel.com.br.



Benefits

- E3 application screens are accessible via mobile devices, so Elipse Mobile operators are able to monitor and control several aspects of the vehicle, such as blower rotation, propeller valves statuses, station doors' opening and closing, position, speed, and brakes via tablets e smartphones.
- Aeromóvel is controlled remotely via tablets and smartphones, regardless of where the operator is.
- Software can be easily installed and programmed.
- Interface is simple and modern.

TECHNICAL INFORMATION

CLIENT: Aeromóvel Brasil S.A. and Trensurb SYSTEMS INTEGRATOR: Aeromóvel Brasil S.A. ELIPSE PACKAGE USED: Elipse Mobile NUMBER OF COPIES: 1 PLATFORM: Windows 8