

Horse Monitoring: Improving airline and animal safety

Lucas Fernandez, Head of Innovation

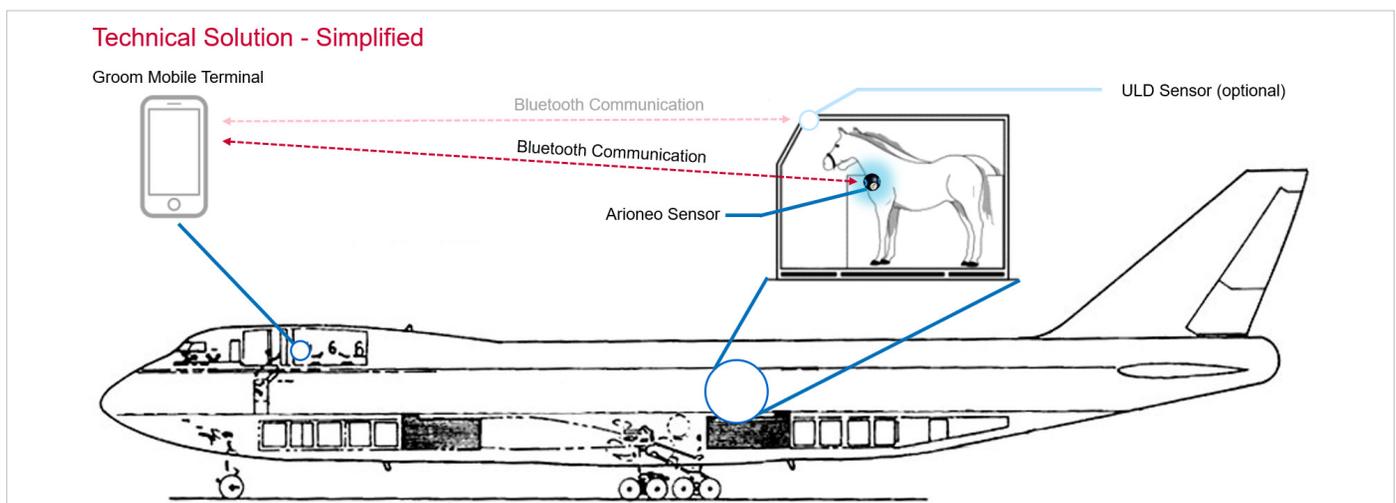
Earlier this year, CHAMP Cargosystems joined the Animal Transportation Association (ATA) to exchange and develop a close partnership with experts involved in animal transportation. Their mission: to work on next generation information systems for the purposes of ensuring animal wellbeing. In collaboration with members of the ATA, the University of Bologna will collect data from live transports for a ground-breaking study on animal wellbeing in air travel.

The Study

Many technologies and data exchange solutions were required in support of this project. The 2-year study is only possible thanks to a collaboration between the University of Bologna, ATA, CHAMP and Arioneo – each contributing a key component to the project. The study aims to monitor horse health - including heart rate, respiration, and temperature - while in travel. Naturally, with improved data visibility, solutions will be developed to provide real-time support during the transportation phase. This project is the first step which will be broadened to study actions that can be taken to improve the safe transportation of all animals in the future.

It will provide an information flow and data that allows the tracking and monitoring in real-time of the safety and wellbeing of the animal being transported. The application - which is currently used for training and monitoring of the wellbeing of the horse in normal on the ground conditions - will allow for the crew and groom to take preventive actions making sure that horses are checked at the right time and provided with the necessary care.

A full report of each horse will be available after every flight allowing trainers and owners to further learn from the experience and optimize the preparation for the next journeys.



The Technologies

CHAMP and Arioneo have provided the technologies required for this study. The horse vital signs will be collected and transmitted by Arioneo's sensor streaming via Bluetooth low energy in real-time (a small monitor strapped onto the horse itself). This information is communicated to the pilot and groom on their mobile devices with CHAMP's data communication capabilities mobile app. The sensor will need to be approved for use onboard the aircraft during flight.

Efficient animal transportation

Understanding how to best keep animals safe is imperative to the success of safe animal transportation within air cargo. Improving the safety of animals during transport means improved safety for airlines and aircraft.

CHAMP will also assess how the technologies, capabilities and findings from this study can be further leveraged to benefit the transportation of other delicate or sensitive cargo.

