

Seeing is Believing

Copa Airlines is using a new, graphics-based flight data analysis tool from Teledyne Controls to further improve flight safety and aircraft performance.

Copa Airlines has a long and proud reputation for innovation, and being ahead of the curve. It was no surprise, therefore, that it was the first to adopt the new enhanced flight data analysis (FDA) Services tool from Teledyne Controls as a new way of collating, analyzing, and reviewing essential flight data, and creating statistical process control (SPC) charts.

Teledyne's FDA Services is a combination of flight data analytics and powerful graphics that offer multiple, customizable views of an airline's operation. Teledyne Controls creates and uploads 'visualized' data that helps operators to meet their safety-related FDM/FOQA obligations for accident prevention and safety management systems and seek greater operational efficiency.

Copa's view was simple: if it's visually compelling, then its internal clients are more likely to use the tool.

A key reason for choosing FDA Services was to be able to measure and monitor change. Copa wants to 'trend' its performance data and learn what went right as well as what went wrong. It then wanted to be able to share the results with all stakeholders within the airline and predict future outcomes by benchmarking historical performance and analyzing whether investments it made in the past delivered the measurable improvements it was looking for.

A practical example of what can be accomplished with FDA Services is whether an aircraft has exceeded a particular parameter, such as its airspeed on approach to landing. Copa can now look at the desired performance and set goals accordingly. It can also see whether 'non-conformance' behaviors may be linked to a particular airport, in which case further training or instruction can be delivered.

By working closely with Teledyne Controls in developing the new Service, Copa can now



About Copa

- **Headquarters:**
Panama City, Panama
- **74 Destinations / 31 countries**
- **315 flights per day**
- **Average age of fleet: 5.8 Yrs**
- **Current fleet: 88 aircraft;**
737-700's, 737-800's,
Embraer 190
- **Future Fleet growth Total:**
-150 aircraft, including Boeing
737 MAX, 737-800's
- **Company slogan:**
Connected, everything
is possible

present flight safety and performance data in a consistent format, helping those who are reviewing the data to have an instant picture of the operation. It allows Copa to quickly and simply understand the analyses in a way that requires minimal training.

Because the graphics are intuitive and interactive, it encourages operators, including the airline's pilot managers, to become their own safety data analysts, and to consider whether the data they see matches their own experiences and expectations. It enables them to challenge what the data may be saying, ask meaningful questions, and dive deeper into the data to gain further insight.

FDA Services presents the captured data as a combination of dashboards, charts and graphs, customized to the client's needs. Users can 'hover' over data and further detail is then presented to describe what is being measured. Data is encrypted and password protected before being distributed.

Since adopting FDA Services as the first customer, Copa has increased the efficiency of its flight safety teams, describing it as a 'force multiplier', giving it the equivalent of two analysts. It has created a step change in the efficiency of the team and is helping to even further improve the level of safety within the airline.

In working with Teledyne Controls as a collaborative partner, Copa has enjoyed exceptional levels of customer support. All the team members effectively become investigators and ask detailed questions around specific events. Put simply, Teledyne's FDA Services is helping Copa to maintain its tradition as being a true innovator in improving flight safety and performance.

