

Aerospace Big Data Americas

Miami, 11-12 September 2018

The 60 Second interview: "The power of analytics is becoming more obvious and will only be increasing". - Steve Misenheimer, GE



1. Please briefly introduce yourself and outline your role at GE

My name is Steve Misenheimer and I am the Growth Leader for the VHDM Group within GE Aviation Digital. My role leads me to work with current and future customers to determine how to improve their maintenance activities by providing comprehensive data and analytics. Working with Commercial Airlines, Business Jet OEMs, Rotorcraft OEMs, and Defense-community users, we have shown how connecting what is going on within the aircraft can improve availability and efficiency. I work with commercial, engineering, and sales staff within GE to coordinate the overall improvements.

2. In your view, what are some of the most exciting opportunities and benefits airlines are yet to unlock with predictive maintenance?

Airlines and other operators know that an immense amount of data exists on their aircraft. Unfortunately, it has been very difficult to provide the insights and wisdom that is present because of the overwhelming magnitude of the data. Understanding how data collection, storage, transmission, and analysis can work together and change over time will allow the end consumers to evolve their understanding of what is happening. Coupling this real-world data with Digital Twins of critical systems within the aircraft can allow us to quickly determine deviations and forecasts. Predictive Maintenance will be using the data to make recommendations for early intervention.

3. How is big data analytics and enabling technologies shaking up the industry and your business?

So much of our industry has been focused on data provided through QAR and FOQA channels and we are now seeing the types of results only possible due to the growth in new data sources and analytics. Collecting the right data and evaluating it at the Edge allows for efficient transmission of indicators from the aircraft into the growing analytics ecosystem. By focusing on configurable data collection, storage, and transmission, new systems are performing that data analysis on aircraft in ways that have never been seen before. Using that new information within the off-board analytics space is customers to gain much more focused insights into what is really happening on their aircraft.



4. What are your priority areas in terms of growth?

I see growth coming on both the airborne side of the equation and the analytics side. The airborne side is seeing intelligent ways of gathering data and processing it in the air for efficient real time observations. The power of analytics is becoming more obvious and will only be increasing. GE's analytics team has been able to demonstrate significant improvements in fuel efficiency, scheduling disruption recover, and MRO operations based on the current and new data streams becoming available.

5. In your opinion, what makes this event a 'must-attend' and what are you looking forward to at the conference?

This event is bringing experienced practitioners in the area of maintenance, big data and analytics to the industry and should provide a great way to build a solid foundation for the topic. I am looking forward to hearing many of the sessions and particularly to the presentation on Monday regarding the integration of machine learning into the field.

6. Any game-changers in the fore-seeable future?

Airborne systems are becoming more powerful which should allow earlier and better detection of failures. Integrated solutions with tight collaboration to an analytics back end will be changing the ability to truly understand "what is coming" from an overall maintenance perspective.

Steve will be leading the GE breakfast briefing on the implementation of aircraft data – exclusively for airlines at 08:00-08:45am on Tuesday 11th September and will also participate on the panel discussion – 'Enabling a connected aircraft'.



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