



## "Program Update"

### MRJ Conducts Hot Weather Test Flights

At Phoenix-Mesa Gateway Airport in Mesa, Arizona, Flight Test Aircraft 4 (FTA-4) once again donned its black mask to continue with extreme temperature tests. FTA-4 was deployed in August and spent multiple days in the Arizona heat operating in a maximum temperature of 42° C, or 108° F. Engineers collected data that will be used to further validate the performance of the aircraft's Environmental Control System (ECS), hydraulics system and powerplant. This natural hot weather test was a continuation of the testing completed earlier in the year at the McKinley Climatic Laboratory at Eglin Air Force Base in Florida. With the ground test data evaluated and ECS design improvements identified from McKinley's chamber ground testing, FTA-4 was ready to hit the skies and continue with hot weather flight testing.

The deployment was very successful and the data collected will be used by engineering design teams to further validate their thermal models and ECS design improvements, in order to produce a comfortable experience for MRJ passengers in all temperature conditions around the world. <http://progress.flythemrj.com/mrj-hot-weather-testing-phoenix-arizona>

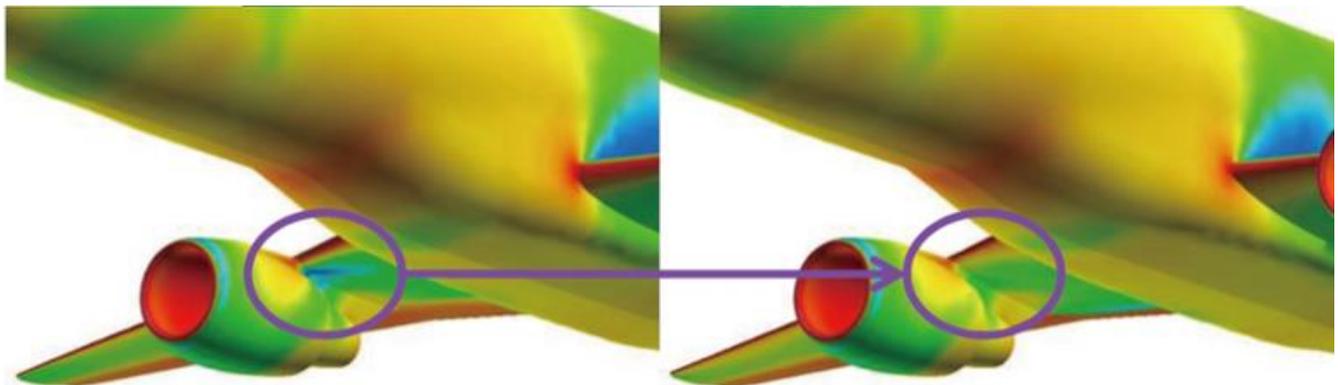


## "Hot Topic"

### Optimizing the MRJ's Aerodynamics Through Advanced Design

As new government regulations call for more environmentally friendly aircraft, aerodynamics will play a key role in how airlines build their fleets for the future. Powered by its advanced aerodynamic design, the MRJ's best-in-class fuel efficiency and lower emissions make it fit for the future. Those aerodynamics are the result of rigorous design work and development of Multi-Objective Design Exploration (MODE). Developed through collaborative research between Mitsubishi Heavy Industries, Mitsubishi Aircraft Corporation and Japan's Tohoku University, MODE is an experimental design method that played a key role in the MRJ's development. With MODE, we could visualize the MRJ from a bird's-eye view and allow designers to make tradeoffs, helping to optimize its performance. Specifically, MODE influenced the design of MRJ's low-drag wing and its lightweight composite structures that helped reduce the aircraft's environmental impact.

Read more: <http://progress.flythemrj.com/optimizing-the-mrjs-aerodynamics-mode>



You can access ongoing updates on MRJ development incl. those in this Newsletter from the following link:  
<http://progress.flythemrj.com/>