



3DEXPERIENCE™

## AEROSPACE & DEFENSE **TEST TO PERFORM**

Deliver with full confidence



**ARE YOU CONFIDENT  
YOUR PROGRAM  
IS SAFE, RELIABLE  
AND MEETS  
REQUIREMENTS?**

Aerospace & Defense manufacturers agree earlier testing and better testing would provide significant benefits for programs. Avoiding late discoveries of flaws or failures in aerospace systems and vehicles preserves brand image, avoids cost overruns and missed delivery dates. With Test to Perform, an Industry Solution Experience, aerospace and defense companies can expand how they test and better define when to test. Test to Perform connects test teams, engineering and program management. Eliminating silos allows traceability throughout all phases of testing and provides full management visibility.

## EXTEND TESTING INSIGHT

Improving overall integration, verification, validation and qualification processes – Test to Perform uses a single, open platform that connects all disciplines across your program. Realistic multi-physics simulation allows for a significant increase in the amount virtual testing possible throughout the development process. Virtual testing extends the scope and understanding of the insight provided and lowers costs compared to physical tests.

## TEST TO PERFORM—DELIVER WITH FULL CONFIDENCE

### Better Decisions

Decision Support provides program managers with the ability to visualize test results in context through a Functional Digital Mock-Up (FDMU) or Functional DMU. Incorporating system behavior using a Functional DMU, Test functions work with a more complete, true-to-life design definition allowing the program test community to work in harmony with engineering. With this capability, the test community has a better understanding of test results to make the right decision.

Management is also positioned to drive decisions through a dedicated test cockpit. With full traceability and a comprehensive and real-time view of all test activity, results, and performance measures, program management and experts make better, more informed decisions.

### Test Better

- Lean test governance using data and model configuration management
- Test “cockpit” tracks planning, schedule and results
- Closer integration across design, analyst, and test teams

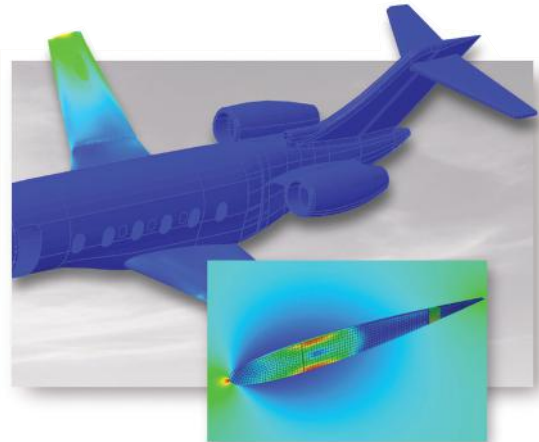
### Test Earlier

- Earlier physical test campaigns thru virtual simulations
- Test with partial component availability with hybrid of modeling in the loop, hardware in the loop
- Delay costly iron bird hardware tests

### Collaborative Test Platform

Meet system or vehicle performance targets on schedule. Providing your test users the ability to define and deploy proven simulation methods across the enterprise offers powerful economies of scale. Users automate and execute simulations on high-performance computing systems and manage both simulation and test data.

One collaborative platform allows better performance-based decision making while specifications and compliance with regulations are met with confidence. The ability to test design concepts early improves designs and improves testing, resulting in shorter test cycles for validation.



Lower risks. Allow your test community to test earlier and more in-depth using advanced non-linear solvers and multi-physics simulation.

### Cohesive Test Teams

Testing occurs at each phase of vehicle and system development. Full visibility into what, when and how testing occurs improves efficiency and keeps programs on budget. Test teams, analysts and designers share one test platform, which reduces errors and provides one common dashboard for planning and results tracking and analysis.

With the Test to Perform industry solution experience from Dassault Systèmes, all program test teams can efficiently ensure vehicles meet performance requirements and deliver to market with full confidence.

### Test Wider

- Increased virtual testing uncovers the unknown
- Exceed physical test limitations such as vacuums, zero gravity etc.

### Test Right

- Minimize premature failure probability and avoid delays
- Increase confidence with strong correlation between real and virtual tests
- Use robust modeling tools

## Our 3DEXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 190,000 customers of all sizes in all industries in more than 140 countries. For more information, visit [www.3ds.com](http://www.3ds.com).

