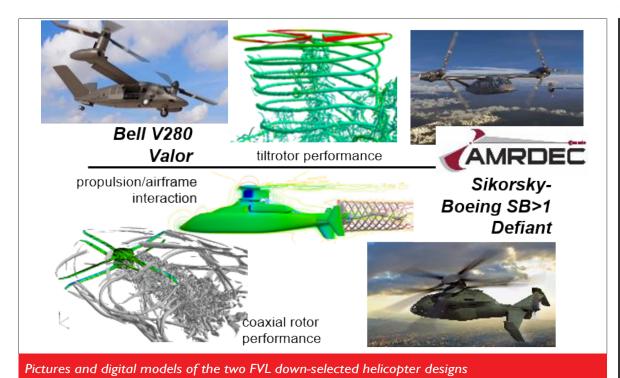
## FUTURE VERTICAL LIFT

Success Story - Army



Helicopter design is one of the most complex of aviation design challenges because many of the physics-based elements that impact the platform are difficult to understand and observe until after a physical model is built and tested. An accurate, repeatable virtual prototyping method was required to allow physics-based, finite element analysis (FEA) of various platform designs for the program to test and compare several industry design options in a controlled, digital environment.

Attribution: Combat Capabilities Development Command Army Research Laboratory (CCDC ARL) and U.S. Army Aviation and Missile Research, Development and Engineering Center (AMRDEC)



## **SOLUTION**

HPCMP CREATE™-AV Helios software used to model the Joint Multi-Role Technology Demonstrator (JMR TD) aircraft to predict performance in helicopter design, testing and comparing design options in a controlled, digital environment.



## **IMPACT**

Future Vertical Lift has reduced the risk though independent technical assessments provided to the JMR TD Program Office. Helios software enables physics-based, finite elements to analyze capabilities for helicopter acquisition.