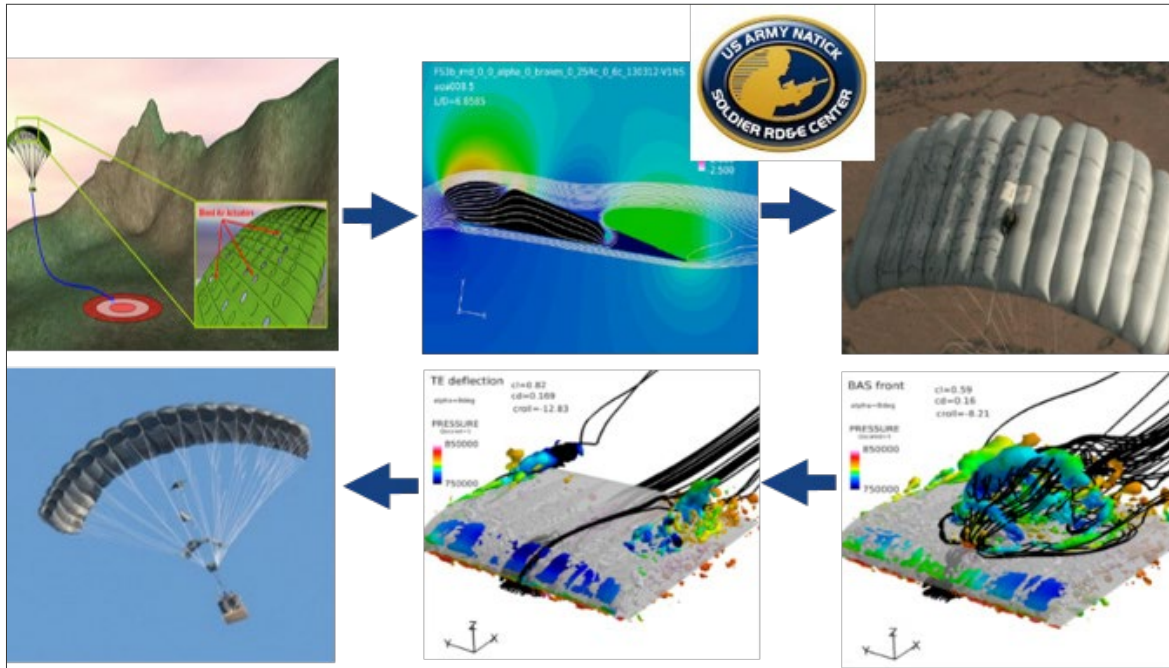


# SOLDIER LETHALITY

## Success Story - Army



HPCMP digital modeling and aerodynamic analysis of Army parachute logistics loads

## ! PROBLEM

The US Army required a method of modeling the complex geometry of parachuting large combat logistics loads into various environments and climatic conditions in order to improve parachute design and operational utilization under combat conditions. A virtual prototype model coupled with the power of supercomputing resources was required to accurately analyze the physics-based performance of various parachute designs, thereby saving costs, reducing risk to combat loads, and saving production time.

Attribution: Army Research Laboratory (ARL) and U.S. Army Natick Soldier Systems Center (NSSC)



## SOLUTION

HPCMP DSRC resources and CREATE-AV Kestrel and CREATE-FT Capstone software enables high-fidelity modeling for precision aerial insertion of personnel and cargo by parachute. Capability supports cost-effective, time-saving analyses, thereby reducing risk to parachute loads.



## IMPACT

Virtual prototype model and resources of HPCMP DSRCs provides Army organizations supporting the Soldier Lethality Cross-functional Team (CFT) with effective analysis of performance of parachute design under environmental and combat conditions in a cost-effective manner reducing risk to combat loads.