The theme for the two day conference is “Innovative Structures and Survivability Solutions for Vertical Lift.” The meeting will consist of unclassified, unrestricted presentations to be held in-person at the Hampton Roads Convention Center. In case of unexpectedly prolonged COVID restrictions, the conference will be moved to a virtual format. The meeting will highlight research and development efforts, both current and planned, related to manned and unmanned rotorcraft structures, crash safety, and vulnerability reduction. Lodging is available at the Embassy Suites by Hilton Hampton Roads.

Presentations are invited on the following topics:

STRUCTURES: Presentations are invited for technology applicable to both developmental and legacy aircraft including durability and damage tolerance, fatigue and fracture mechanics, advanced metallic and composite structures, and structural design criteria. Related topics on affordability, operational sustainability, multifunctionality, weight reduction, novel concepts, and manufacturing methods are desired.

CRASHWORTHINESS: Presentations are invited for all aspects of crashworthiness relating to rotorcraft and V/STOL aircraft. Emphasis is given to the development of new structural design concepts for minimizing occupant post-crash injuries and fatalities, systems integration analyses, crash criteria for rotorcraft, and computational methods for design validation.

VULNERABILITY REDUCTION: Presentations are invited relating to design, analysis, and structures technologies that reduce aircraft vulnerability. Topics may include threat and structural response modeling, advanced structural concepts for ballistic tolerance, integrating ballistic protection into primary structure, and design criteria and concepts for optimizing ballistic protection.

If you’re interested in presenting, please submit an abstract NLT than Friday, August 6, 2021. Abstracts should include presentation title, presenter(s) name and affiliation(s), contact number, and email address. Abstracts should be submitted to structures2021@hrc.vtol.org. Final presentations will be due by October 4, 2021.

General Chair: Mr. Martin Annett, NASA Langley Research Center
Technical Chairs: Ms. Carrell McAllister, Joint Aircraft Survivability Program Office; Dr. Mark Robeson, US Army DEVCOM Aviation & Missile Center TDD-A