



NASA SBIR 2018 Phase I Solicitation

A1.09 Vehicle Safety - Inflight Icing Hazard Mitigation Technology

Lead Center: GRC

Technology Area: TA15 Aeronautics

NASA is concerned with the prevention of encounters with hazardous in-flight conditions and the mitigation of their effects when they do occur. Under this subtopic, proposals are invited that explore new and dramatically improved icing mitigation technologies and research tools related to inflight icing hazards for manned and unmanned vehicles. Of particular interest are technologies that can address emerging icing issues applicable to future On-Demand Mobility vehicles. Taken together, these hazards require a systems-level approach for integration with the airframe, propulsion system and control/avionics system. Technologies of interest should address the detection, measurement, and/or the mitigation of the hazards of flight into supercooled liquid water clouds and regions of freezing rain/drizzle. These technologies include but are not limited to on-board remote-sensing of environment, sensing of local environment, system identification, adaptive control and threat mitigation/protection, as well as new, very-low-power, ice-protection systems.