

HR0011SB20254-08
Inertially Scaled Aircraft (ISaAc)
Frequently Asked Questions (FAQs)

1. What flight speed is required for this topic?
A: Subsonic at sufficiently high Reynolds number to demonstrate appropriate physics.
2. Is aerodynamics a priority over propulsion? Absolutely.
A: We do not envision propulsion development as part of this effort.
3. If supersonic speed is required, does the material for the scaled aircraft need to be similar to that of the full-scale plane?
A: Supersonic speed is neither required nor encouraged.
4. Some inertially scaled UAVs are sized and used in specific wind tunnels and may be partially constrained or tethered depending on the technical objectives. Does DARPA envision only a 6-DOF free-flight inertially scaled UAV with this DP2?
A: Yes
5. Subscale unmanned air vehicles are usually sized, designed, fabricated and inertially scaled to investigate very specific flight characteristics at certain flight condition/environment for the specific full-scale target aircraft. Does DARPA have an intended target full-scale aircraft for this DP2?
A: No
And what flight regime(s) will the inertially scaled UAV be tested or demonstrate?
A: That is something the offeror is expected to recommend
6. Will the inertially scaled UAV be “powered” to provide thrust or lift?
A: Yes
7. Will the inertially scaled UAV along with its avionics and instrumentation become deliverables to DARPA or will it remain the property of the proposing firm?
A: DARPA will not take ownership
8. Will DARPA provide access to flight test facilities and flight test support services such as launch/recovery, telemetry, datalink, videography, and require TRB/SRB, etc.
A: No