

HR0011SB20254XL-01
ALIAS Missionized Autonomy for Emergency Services - SBIR XL
Frequently Asked Questions (FAQs)

1. Does ALIAS anticipate integration with existing wildfire/emergency management platforms, or a stand-alone autonomy solution?

A: ALIAS is the standalone autonomy solution/platform but will be integrating all novel/new/existing wildfire/emergency response management tools and software. It should be clear that the autonomy solution is for flight and the SDK is the gateway to utilizing/building apps on top of the autonomy platform for bespoke firefighting and teaming behaviors.

2. What level of autonomy is envisioned—limited to tactical execution, or also predictive planning and resource allocation?

A: Predictive planning is currently being utilized to fly the aircraft. No embedded algorithms/AI or otherwise will not be allowed to be embedded in the autonomy stack. Software containers will be used to house the applications to drive the autonomy, the core autonomy stack will remain the same. This does not mean we can't utilize AI/ML to operate on top of the autonomy stack to drive specific novel behaviors.

3. Are evaluation metrics focused primarily on operational performance (e.g., navigation, response time), or also on resilience and resource optimization?

A: All of the above. We are using autonomy to optimize both physical parameters within the aircraft and to optimize emergency response, think of the metrics as looking to evaluate whether certain applications or behaviors are a force multiplier.

4. Are firms able to access the ALIAS/MATRIX autonomy stack/systems before submission to ensure integration capabilities and alignment in their proposal?

A: To access the ALIAS/MATRIX Software Development Kit (SDK), a company would need to have a contract and/or NDA with DARPA and/or Sikorsky. Thus, it is highly unlikely companies will be able to access the SDK prior to submission.

5. What are your expectations regarding the user interface for proposed plugins?

A: Interface designs expectations are that they are to be designed to be usable in a high stress environment by non-technical personnel