

Darpa Awards First-Phase Contracts for 'Gremlins' UAS Project

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Darpa emphasizes the use of low-cost, reusable small unmanned aircraft systems for its 'Gremlins' project. (Image: Darpa)

The U.S. Defense Advanced Research Projects Agency (Darpa) awarded first-phase contracts to four companies under its "Gremlins" program to develop a means for aircraft to launch "volleys" of low-cost, reusable unmanned aircraft systems (UAS) and also retrieve them in mid-air. The program aims to conduct a proof-of-concept flight demonstration that would validate "an air recovery concept of multiple gremlins."

Composite Engineering in Roseville, Calif.; Dynetics, in Huntsville, Ala.; General Atomics and Lockheed Martin were awarded Phase 1 contracts for proposals that cover a variety of technical approaches, Darpa said on March 31. Darpa issued a request for information to industry for its ideas on "distributed airborne capabilities" involving a host aircraft for small UAS in November 2014. The Gremlins program expands on that project, the agency said.

The program envisions launching groups of UASs from existing large aircraft such as bombers and transports, as well as fighters and other small, fixed-wing platforms. The gremlins "would be deployed with a mixture of mission payloads capable of generating a variety of effects in a distributed and coordinated manner, providing U.S. forces with improved operational flexibility at a lower cost than is possible with conventional, monolithic platforms," Darpa said. Having completed their mission, the UASs would be retrieved in air by a C-130 transport; their expected service life would be 20 uses.

"We've assembled a motivated group of researchers and developers that we believe could make significant progress toward Gremlins' vision of delivering distributed airborne capabilities in a robust, responsive and affordable manner," said Dan Patt, Darpa's program manager. The announcement did not specify a time frame for the flight demonstration.