



News Release

Defense Advanced Research Projects Agency

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IMMEDIATE RELEASE

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DARPA SEEKS TO DEVELOP MILITARY AVIATION BIOFUEL

The Defense Advanced Research Projects Agency (DARPA) has released a solicitation calling for the exploration of energy alternatives and fuel efficiency efforts in a bid to reduce the military's reliance on traditional fuel for aircraft.

DARPA is looking for processes that will efficiently produce alternative non-petroleum based military jet fuel from agriculture or aquaculture crops. Current commercial processes do not produce alternative fuels that meet the higher energy density and wide operating temperature range necessary for military aviation uses.

The program is currently outlined in a recently issued broad agency announcement and is known as The BioFuels program. The goal of the BioFuels program is to develop an affordable alternative production process that will achieve a 60 percent or greater conversion efficiency, by energy content, of crop oil to military aviation fuel (JP-8) and elucidate a path to 90 percent conversions.

DARPA seeks processes that use limited sources of external energy, that are adaptable to a range or blend of feedstock crop oils, and that produce process by-products that have ancillary manufacturing or industrial value.

Current biodiesel fuels are 25 percent lower in energy density than JP-8 and exhibit unacceptable cold-flow features at the lower extreme of the required JP-8 operating temperature range (minus 50 degrees F).

It is anticipated that the key technology developments needed to obtain the program goal will result from a cross-disciplinary approach spanning the fields of process chemistry and engineering, materials engineering, biotechnology, and propulsion system engineering.

The program is an exploratory evaluation of processing crop oils into a JP-8 surrogate biofuel, resulting in a laboratory-scale production to be tested at a Department of Defense test facility. Successful proposers are expected to deliver a minimum of 100 liters of JP-8 surrogate biofuel for initial government laboratory testing.

DARPA will be hosting a Proposers Day, July 25, 2006, in Denver Colo., as a venue to provide information about the BioFuels program, promote discussion on the topic, address questions from potential proposers, and provide a forum for potential proposers to present their capabilities for teaming opportunities. Details on the Proposers Day are available through the BioFuels website at <http://www.darpa.mil/ato/solicit/Biofuels/index.htm>.

Organizations interested in proposing approaches for DARPA's BioFuels program should obtain the solicitation and the proposer information pamphlet for further details. Both are available on the BioFuels website listed above.

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