

Q&A  
Sandblaster Proposers' Day  
Wednesday, August 23, 2006

1. Q: Will a copy of the presentation be made available?
  - a. Will there be an attendance list for purposes of establishing points of contact for teaming?
  - b. What is the availability of your Yuma/MRI Dust Tunnels in the upcoming months?

A: a. Yes.  
b. For Yuma dust range and helicopter test platform information, please contact Mike Jonez (Yuma Test Director) at [mike.jonez@yuma.army.mil](mailto:mike.jonez@yuma.army.mil), (928) 328-4033; for MRI dust tunnel information, please contact Dr. Chatten Cowherd at [ccowherd@mriresearch.org](mailto:ccowherd@mriresearch.org), (816) 753-7600 ext 1586.

2. Q: Scope for Phase II Proposal question: Is my perception that the challenges are:
  - a. Affordable technology for sensors where sensor capabilities are approximately proven.
  - b. Develop novel/breakthrough approaches to presenting the info (i.e. providing situational awareness).
  - c. Hence, HCI is where the DARPA challenges might more readily exist.

A: The concern should not be to define the DARPA "challenge" per se. The concern should be to provide a complete affordable system solution that meets the criteria defined in the BAA.

3. Q: UH-60 Demonstration: Please give a short overview:
  - a. When will this happen?
  - b. Will more than one solution be tested?
  - c. How long will the demonstration take?

A: The answers to questions a. and c. should be part of your proposal to DARPA. The JUH-60A RASCAL demonstrator is a resource to validate your approach. The timing and duration will be dependent on your particular program plan. The answer to question b. will be decided in the future, based on DARPA's evaluation of the BAA responses.

4. Q: Existing USAF Assets: Can the BAA provide a list of existing USAF rotorcraft assets that will be GFE? For example: if all target aircraft have Doppler, please specify. Other potential GFE assets: 1553B Bus, EGI, Head Down Displays, etc.

A: The potential GFE flight test assets discussed in the BAA are the Yuma UH-1 fleet, and the Army AFDD JUH-60A Rascal. Proposers should contact Mike Jonez at [mike.jonez@yuma.army.mil](mailto:mike.jonez@yuma.army.mil), (928) 328-4033 for Yuma UH-1 details, and Barry Lakinsmith at [blakinsmith@mail.arc.nasa.gov](mailto:blakinsmith@mail.arc.nasa.gov), for Rascal details. Other POCs are:

**VMS**

Assistant Division Chief for Simulator Facilities

Thomas Alderete

(650) 604-3271

[talderete@mail.arc.nasa.gov](mailto:talderete@mail.arc.nasa.gov)

Chief, Aerospace Simulation Operations Branch

Dean Giovanetti

(650) 604-3871

[dgiovaneti@mail.arc.nasa.gov](mailto:dgiovaneti@mail.arc.nasa.gov)

VMS Facility Manager

Duc Tran

(650) 604-5931

[dtran@mail.arc.nasa.gov](mailto:dtran@mail.arc.nasa.gov)

**RASCAL**

Project Manager

Jay Fletcher

U.S. Army Aeroflightdynamics Directorate

Mail Stop 248-3, NASA Ames Research Center

Moffett Field, CA 94035-1000

(650) 604-1846

[jfletcher@mail.arc.nasa.gov](mailto:jfletcher@mail.arc.nasa.gov)

Project Engineer

Ernesto Morales III

Autonomous Flight Vehicles Division

Mail Stop 248-3, NASA Ames Research Center

Moffett Field, CA 94035-1000

(650) 604-6002

[emoralez@mail.arc.nasa.gov](mailto:emoralez@mail.arc.nasa.gov)

5. Q: Evaluation Criteria: When you mention affordability as a key selection criterion, are you referring to the price quoted to DARPA for prototype systems for Phase II, or for production units, or both?

A: The affordability criteria is based on production units at fleet quantities.

6. [QUESTION FOR MAJOR DOTY] Brownout for Army vs. USAF for rotary wing aircraft:

Q: We often hear from the Army that 'Brownout' is primarily a 'training issue'. Air Force seems to be working this as a problem that needs to be addressed by also using relevant technologies to solve the problem. Why the strongly different views between Army and Air Force?

A: I conferred with my army counterparts, and both services have addressed the issue through training in a process that began during Operation DESERT SHIELD in 1990 and continued through Operations DESERT STORM, SOUTHERN WATCH, DESERT FOX, etc. They evaluated training techniques, approaches to training, periods between training and the use of simulations. We feel that the improvements to brownout performance through improved aircrew training have essentially been maximized. They have met the full situational readiness improvement available via training, through an extensive training process. Techniques used to maximize aircrew preparedness for brown out operations include:

1. ground training
2. simulators and weapons systems training
3. aircraft training (on the runway)
4. build to dustout training procedures
5. theater training
6. Periodic refresher training.

It is our belief - and hence our support of SANDBLASTER - that further progress will require materiel improvements.