

Q&A II
Sandblaster
Q&A from BAA Mailbox
Round 2

1. Q: How large a FOV or FOR does the appropriate sensor have to be?

A: Sandblaster requires a system solution, not just a sensor solution. FOV/FOR are part of the bidder's system design, to enable adequate situational awareness and control for safe brownout landings and take-offs.

2. Q: a. What long wave IR camera was used in the tests Ed Patterson mentioned for determining MEC?
b. What were the camera sensitivity and resolution parameters?
c. Did Ed Patterson do a test using a mid wave IR camera?
d. If so, what were the camera sensitivity and resolution parameters?

A: a. The LWIR experiment was conducted by the US Army Cold Regions Research and Engineering Laboratory (CRREL).
b. Camera specifications are included in their draft final report. As with the draft LADAR report mentioned below. The report has not been released. We will attempt to expedite that release and make it available to Sandblaster potential offerers.
c. There were two MWIR experiments, one conducted by the Navy Research Laboratory, and one conducted by CRREL.
d. We will attempt to expedite the release of the report.

3. Q: How can we get a copy of the AFSOC no/low visibility ICD?

A: The draft No/Low Visibility ICD is in coordination internal to HQ AFSOC, and will not be released to industry at this time.

4. Q: How can we get information on the CSAR-X requirement?

A: CSAR-X requirements documents are available to industry through the ASC Preaward Information Exchange System (PIXS) website, <https://pixs.wpafb.af.mil/> . Contractors should locate the Current Open Business Opportunity: Combat Search and Rescue-X (CSAR-X) (PRV)-- Solicitation Number: FA8629-05-R-2350 (PRV). They will need to register (Central Contractor Registration). Then, go to the Updated Extended Reference Library. Identify document (e.g. SRD, CDD, etc.). Then use hot button to send e-mail request to SOFSG/THK.

5. Q: Is it acceptable to propose a Spiral technology insertion approach? First to provide an appropriate sensor with imagery to be displayed on a display separate from the cuing symbology. Then add a digital terrain data base

Synthetic Vision System (SVS) with enhanced cuing symbology overlaid on the SVS imagery and the sensor imagery overlaid on that?

A: Sandblaster requires a complete system solution including sensor, display and flight control aspects. Successful proposals will need to consider all these aspects.

6. Q: What kind of Airworthiness Certification will be required in this phase? Who will be responsible for it?

A: All Sandblaster flight tests will be conducted with full regard to all aspects of flight safety. Airworthiness certification processes will be coordinated by the appropriate aircraft and test facility authorities (e.g. Yuma Test Center, or US Army Aeroflightdynamics Directorate), with technical support from the Sandblaster contractor.

7. Q: a. What time frame are you thinking for this phase II effort? 18 months, 24 months?
b. When do you expect to be under contract?

A: a. Sandblaster addresses a current operational need and time is of the essence. However, DARPA has not set specific schedule targets for Sandblaster.

b. Early calendar year 2007 contract awards are anticipated.

8. Q: How can we get information on the avionics which are in the older model UH-60M, UH-60A, and UH-60L helicopters so we can assess methods for incorporating into them?

A: The UH-60A/L are configured with two AN/ARC 201D (FM) they both have amplifiers with Frequency hopping, plain and cipher capability. The number one 201D has FM Homing capability. One AN/ARC- 220 (HF). One AN/ARC186V (VHF). One AN/ARC-164V (UHF) with have quick capability. Three TSEC/KY58, with the Remote Control Unit to control the KY58. For spatial Navigation 128B/C/D (GPS). The 128D is an IFR certified GPS. One ARN 89 or AN/ARN 149 (ADF). One AN/ARN 123V (VOR) with Localizer and Glide slope. Those are the standard issue items for an UH-60A/L. You may see some variations like dual VOR, TACAN, etc. The UH-60M will have the same set up with two FM's, one VHF, one UHF, one KY58, one ADF. The only difference is all of those radios will be managed through a multiband radio ARC 231. The navigation system will be a dual Embedded GPS Inertial Nav System (EGI). I don't know the nomenclature for the SATCOM radio but it will be a DAMA SATCOM non line of sight radio. The HF will not go on the new aircraft.

9. Q: Are there standard helicopter "low speed" symbols that the Army has standardized on and that we should or could use for this program as is or a starting point if we choose to enhance them?
- A: Future UH and CH aircraft are using the Common Aviation Architecture System (CAAS) which has the approved symbology sets incorporated. Baseline UH-60M will not incorporate this system until 2009-2010 production models. Rockwell Collins and Sikorsky developed CAAS.
10. Q: Bill Humphrey mentioned that scanning LADAR "return plots" are available upon request. How do we go about requesting them?
- A: The LADAR "return plots" are included in Bill's draft report on the dust tunnel testing. Bill's report will be compiled into a complete report covering dust tunnel setup, each of the sensor phenomenology tests, and summary analyses. The release of this report will be expedited for release to Sandblaster prospective offerers.
11. Q: It was mentioned that cable warning was a requirement. Is that a firm requirement or just an optional objective requirement?
- A: Warning of all dangerous and threatening obstacles in the immediate landing zone is a firm requirement. This includes cables.