

**SERDP/ESTCP Workshop –  
Surface Finishing and Repair Issues for Sustaining New Military Aircraft  
Feb 26-28, 2008**

[Fiesta Resort and Conference Center, Tempe, AZ](#)



The Strategic Environmental Research & Development Program (SERDP) and the Environmental Security Technology Certification Program (ESTCP) have previously sponsored and organized a Metal Finishing Workshop in May 2006 and a Chromates Alternatives Workshop in May 2007. In addition, the HCAT Program, principally sponsored by ESTCP, has conducted periodic meetings over a 10-year period to address technology insertion issues associated with hard chrome plating replacement. The workshop to be held in February 2008 represents the evolution of all these technology exchange meetings into one comprehensive meeting to address overall surface finishing and repair issues related to new military aircraft. Although the focus of this workshop is aircraft, individuals involved with other types of weapons systems and platforms should obtain useful information related to technology development and insertion.

With new military aircraft adopting cleaner and better materials and surface treatments, their sustainment presents new challenges. Some of the new materials and coatings require different technologies for flaw detection and repair (e.g. composite structures and HVOF coatings), while others require much greater emphasis on process control and surface cleanliness (e.g. Cr<sup>6+</sup>-free finishes). As DOD moves into the sustainment phase of all these new programs it is imperative that the most effective NDI methods be defined, and repair technologies be developed and approved that are clean, cost-effective and can be done at the depot and operational levels. This means that repair organizations must be able to handle the new materials, and inspect and repair them, without having to resort to the old standbys of chrome and Cd plating, chromate conversion, and other processes that create environmental and health problems. The workshop will address technologies and issues related to new aircraft, including:

Aircraft:	Technology areas	Issues
F-35 F-22 V-22 C-17 VH-71 CH-53 F-18, EA-18G Commercial: A380 B787	<input type="checkbox"/> Hard chrome alternatives (HVOF, other plating) <input type="checkbox"/> Cd alternatives (AlumiPlate, IVD, ZnNi etc) for components <input type="checkbox"/> Cd and Cr <sup>6+</sup> -free fasteners <input type="checkbox"/> Non-Cr <sup>6+</sup> primers, paints, sealers, conversion coatings <input type="checkbox"/> Non-Cr <sup>6+</sup> anodizing <input type="checkbox"/> New alloys <input type="checkbox"/> Bushings – CuBe alternatives <input type="checkbox"/> Composites <input type="checkbox"/> Corrosion preventive compounds (CPCs) <input type="checkbox"/> NDI of coatings and under coatings	<input type="checkbox"/> OEM and depot availability and use of new technologies <input type="checkbox"/> Depot and operational level repair requirements (NDI, strip and recoat, spot repair) <input type="checkbox"/> Known sustainment methods and problems <input type="checkbox"/> New technologies for NDI and repair <input type="checkbox"/> Demil and disposal <input type="checkbox"/> ESOH issues, meeting regulatory requirements <input type="checkbox"/> Technology gaps and RDT&E needs

Attendees will include prime contractors and their suppliers and vendors, depot and commercial MRO engineers, approval authorities, material and process suppliers, ESOH engineers and other sustainment stakeholders.

The workshop will include briefings from engineers in the affected programs, descriptions of the new technologies adopted, repair procedures currently in place, capabilities and new technologies for NDI and repair, and a discussion of environmental and health issues associated with repair and overhaul. It is anticipated that the format of the meeting will be similar to that of previous HCAT meetings, with one main session for the entire workshop and considerable time allowed for questions, discussions and interactions. Topics will be grouped together for the benefit of individuals only interested in specific technical areas.

All suggestions of briefing and discussion topics are welcome.

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All other inquires please contact Hillary Legg, workshop coordinator, 847-680-9420 or [hlegg@rowantechnology.com](mailto:hlegg@rowantechnology.com).

**Hotel:** A room block has been established at the newly renovated [Fiesta Resort and Conference Center](#) in Tempe, AZ.

**Room rate:** \$156 or prevailing government rate.

**Conference information and registration link:** <http://www.events.hazmat-alternatives.com/>

**Registration:** On-line registration, \$200.

**If you are interested in presenting a briefing, please contact Hillary Legg, (847) 680-9420, [hlegg@rowantechnology.com](mailto:hlegg@rowantechnology.com).**