



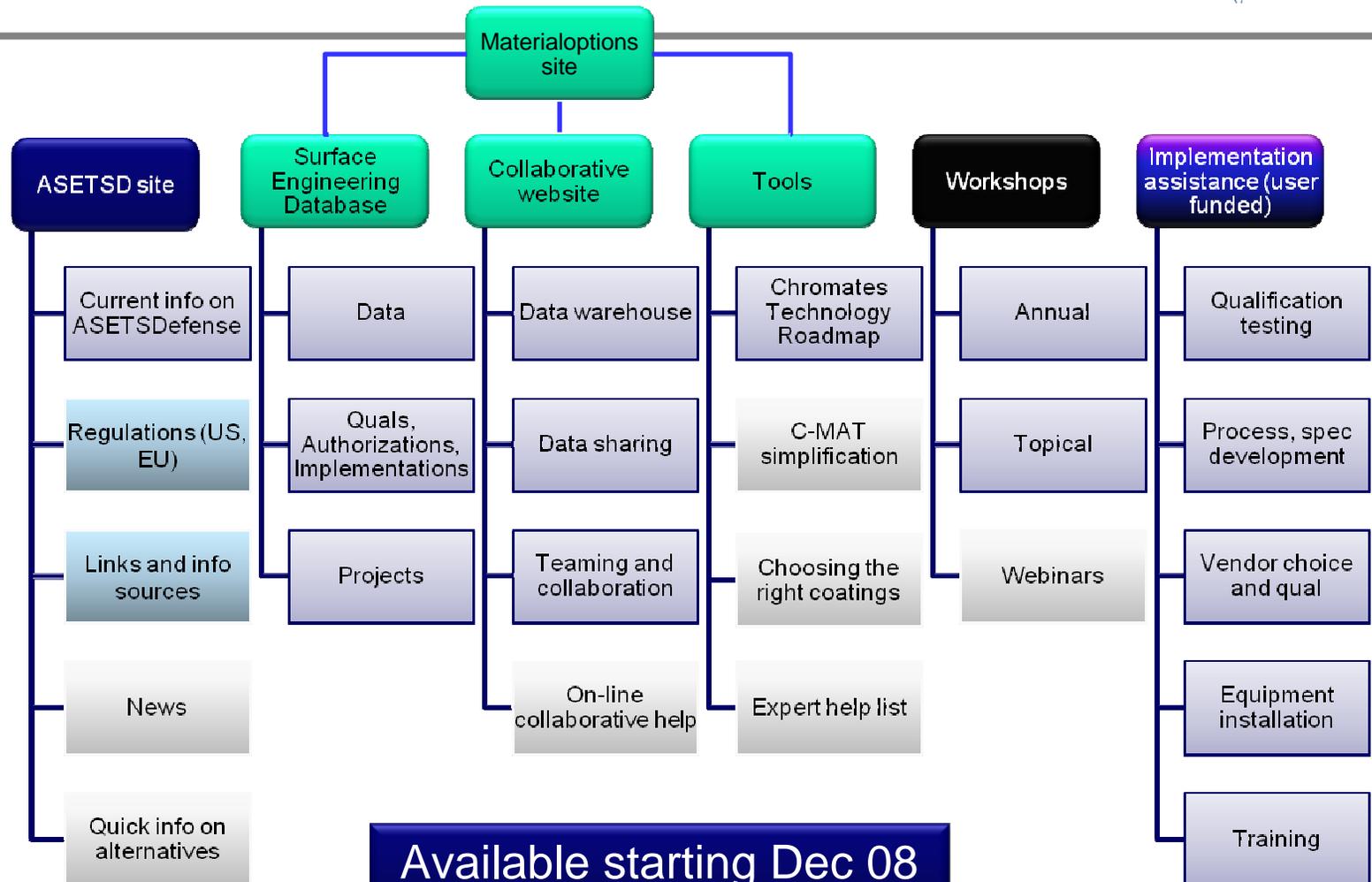
Chromates Technology Roadmap

Keith Legg
Rowan Technology Group



ASETSDEFENSE UPGRADE

ASETSDefense Surface Engineering Database



Available starting Dec 08

ASETSDefense improvements



- ❑ ASETSDefense is public website
- ❑ Putting many of the reports and workshops downloadable here so as to avoid need to sign in to get them
 - All Distribution A
- ❑ Pointers to available info and tools on passworded teaming website

The screenshot shows the ASETSDefense Home Page in a Windows Internet Explorer browser window. The browser's address bar shows the URL <http://www.asetdefense.org/>. The page features the ASETSDefense logo, which includes the text "ASETSDefense" and "ADVANCED SURFACE ENGINEERING TECHNOLOGIES FOR A SUSTAINABLE DEFENSE". To the right of the logo are logos for SERDP and ESTCP. The main content area contains several bullet points:

- **ASETSDefense Member Workspace** - This password protected site contains detailed information on all HCAT projects, data, reports and meetings. Contact lsolnick@rowantechology.com for username and password. Please provide complete contact information.
- **About ASETSDefense** - Team objectives, members, background
- **ASETSDefense Workshops**
- **Teaming Websites**
- **Data Library**
- **Surface Engineering Database**
- **Technology Maps**
- **The Hard Chrome Alternatives Team (HCAT)**
 - **About HCAT**
 - **Joint Test Protocols**
 - **Reports**
 - **Briefings & Presentations**
 - **Aircraft Systems Validated** - Landing gear, gas turbine engines, propeller hubs, hydraulics, helicopter rotor heads
- **Related Web Sites** - Other sources of Clean Surface Engineering information
- **Contact ASETSDefense**

On the right side of the page, there is a text block that reads: "The ASETSDefense Program is sponsored by the Department of Defense environmental SERDP and ESTCP Programs and the website is managed by Rowan Technology Group. The ASETSDefense Member Workspace is an information resource and data repository for research, development, test and evaluation of clean technologies in the surface engineering field. The aim is to improve performance and life-cycle cost while reducing or eliminating environmental safety and occupational health (ESOH) impacts. At present, the web site mainly contains information that had been available under the Hard Chrome Alternatives Team (HCAT) Program. It is expanding to include cadmium and chromate replacements, as well as other ESOH concerns, such as the European REACH regulations." Below this text is another paragraph: "The Member Workspace is used both as a data library and as an interactive workspace for collaborative team projects. It incorporates a Surface Engineering Database, which is being developed to provide all the detailed engineering data and background detail needed to implement new, clean technologies." At the bottom of the page, it says "New sections are being added as needed to meet the needs of the user community for information and tools for adopting cleaner, better technologies." The footer of the page indicates "Updated November 06, 2008".

Materialoptions sign-in



Windows Internet Explorer browser window showing the MaterialOptions.com website. The page title is "Welcome to MaterialOptions.com". The page content includes logos for ASETS DEFENSE, SERDP, ESTCP, and LIGHTNING II F-35. Below the logos, it says "Website maintenance - a service of ROWAN TECHNOLOGY GROUP and Hazmat Alternatives". A pop-up window is overlaid on the page with the following text:

Welcome to the NEW Material Options collaboration website.

If you are an HCAT member, please call Lila at (847) 680-9420 or e-mail lsolnick@rowantechnology.com for the new username and password as the old HCAT password cannot work with this site (the old hcatguest password will still work temporarily).

aerospace and industrial organizations involved in developing and qualifying alternatives for materials that pose environmental and health hazards. The site contains engineering data, workshop briefings, reports and ESOH information on alternatives to materials and finishes such as hard chrome, Cd, chromate conversion coatings and primers. Alternatives include HVOF thermal spray, non-chrome primers, trivalent sealers, Cd alternative coatings and alloys. Teams with collaborative programs on this site include:

Send comments or questions to the [Webmaster](#)

Powered By: FoxSuite Enterprise 7.2 ASP.NET 2.0 Copyright © 2004-2007 DCA Soft

On the right side of the page, there is a sign-in form with the following fields:

Username:
Password:

Individual username
and password sign in



Materialoptions main page – under improvement

The screenshot shows the Materialoptions.com website in a Windows Internet Explorer browser. The page features a left-hand navigation menu, a main content area with sections for Organizations, Tools, and Workshops, and a right-hand sidebar with sections for Collaborative Documents, Data Library, Meetings Workshops, and Projects. Three callout boxes with yellow arrows point to specific areas: 'Everyone has access to these' points to the Organizations section; 'Your specific groups and projects' points to the Collaborative Documents section; and 'Improvements in progress:' points to the right-hand sidebar.

Everyone has access to these

Your specific groups and projects

Improvements in progress:

- ✓ Tidying up
- ✓ Direct links
- ✓ Ease of use
- ✓ Fly-out left menu bar

- Home
- Databases
- Links
- Meetings
- Organizations
- Projects
- Tech Maps
- Calendars
- Directories
- Files
- Forums
- Galleries
- News
- Utilities

Users: 5
 Today: 5
 Yesterday: 0
 Peak: 5
 T Rowan

MaterialOptions.com



Organization and Workshop links

Organizations Files

[ASETSDefense](#)

Tools Files

[Surface Engineering Database](#) Available December 2008

[Technology Map](#)

Workshops

[Chromates Meeting Ogden UT May 2007](#)

[Sustainment Meeting Phoenix AZ Feb 2008](#)

[Metal Finishing Workshop DC May 2006](#)

[Metal Finishing Session and Side Meeting Dec 2006](#)

Collaborative Documents

- Data Library
- JSF ESOH Working Group
- JSF Materials
- Meetings Workshops
- REACH DoD Working Group

Projects

Chromates Meeting Ogden UT May 2007	- Make Selection -	Illinois	T Rowan
Sustainment Meeting Phoenix AZ Feb 2008	- Make Selection -	- Make Selection -	Keith Leg
Metal Finishing Workshop DC May 2006	- Make Selection -	Illinois	Keith Leg
Metal Finishing Session and Side Meeting Dec 2006	- Make Selection -	- Make Selection -	



SURFACE ENGINEERING DATABASE





Why a database?

- ❑ A lot of new technologies to replace the nasties
 - Cd plate, chrome plate, chromate conversion, chromated primers, high-VOC paints, beryllium
- ❑ To make rational decisions engineers need access to detailed engineering data
 - It is easy to get a lot of info on the web, but hard to get reliable, well-defined engineering data
 - Growing body of DoD-funded data available
 - A lot of commercial data, but not easy to get
- ❑ We will save a lot of money if we do not have to keep repeating each other's work



In addition

- ❑ Not enough just to have the engineering data
- ❑ Must also have all the background info
 - Lessons learned
 - information on what has already been qualified and used
 - Assistance available to help identify the best option for a specific applications and put in production
- ❑ We are upgrading the websites at
 - www.asetdefense.org – ASETSDefense
 - www.materialoptions.com – Data sharing

Surface Engineering Database



The screenshot shows a Windows Internet Explorer browser window displaying the Surface Engineering Database website. The address bar shows the URL <http://www.materialoptions.com/FoxSuite/frame3.aspx>. The page features a header with logos for the Department of Defense, ASETS Defense (Advanced Surface Engineering Technologies for a Sustainable Defense), SERDP (Strategic Environmental Research and Development Program), and ESTCP (Environmental Security Technology Certification Program). The main content area is titled "Surface Engineering Database" and includes an "Organization Information" section. On the left, there is a navigation menu with categories like Databases, Links, Meetings, Organizations, Projects, Tech Maps, Calendars, Directories, Files, Forums, Galleries, News, and Utilities. A user status box indicates "Users: 2", "Today: 3", "Yesterday: 0", and "Peak: 3" by Keith Legg.

Surface Engineering Database

This Surface Engineering Database is supported by the US Department of Defense Strategic Environmental Research and Development Program (SERDP) and Environmental Security Technology Certification Program (ESTCP) through ASETSDefense (Advanced Surface Engineering Technologies for a Sustainable Defense).

This database is designed to provide all the background information documents and detailed engineering data needed to make informed decisions on the use of alternatives to materials and technologies that pose environmental or health hazards.

Distribution statement: All documents in the main section of this database are Distribution A - Unlimited distribution.

Documents with any other Distribution Statement are held in different database sections or in other locations, and will be accessible to you only if permitted by your password.

This database will expand in number of items and areas covered as more data become available. Initial concentration is on chromates.

Surface Engineering Database

[Search Database](#)

[Browse Database](#)

- [Chromate Conversion Alternatives](#)
- [Chromated Primer Alternatives](#)
- [Cadmium Alternatives](#)
- [Hard Chrome Alternatives](#)

[Browse Distribution B](#)



Browse Database

http://www.materialoptions.com/FoxSuite/frame3.aspx - Windows Internet Explorer

http://www.materialoptions.com/FoxSuite/frame3.aspx

File Edit View Favorites Tools Help

Norton Cards & Log-ins

Search web... Onfolio

ASETSDefense Workshops http://www.hazmat-alternati... http://www.materialoptio...

Home

Databases Links Meetings Organizations Projects Tech Maps Calendars Directories Files

SURFACE ENGINEERING DATABASE

New Directory Search Multi-Upload Docs My Files Team Files

GROUP\SURFACE ENGINEERING DATABASE... Last Modified: 11/12/2008 Paste

Folder Name	Size Kb	Date Created	Upload	Rename	Delete
..					
Cd Alternatives	101,918	3/27/2008			
Chromate Alternatives - Other	2,027	10/27/2008			
Chromate conversion alternatives	30,498	3/27/2008			
Chromate primer and VOC alternatives	33,076	3/27/2008			
ESOH Information	2,750	9/16/2008			
Hard Chrome Alternatives	78	3/27/2008			
images	558	3/22/2008			
Repair Technologies	11,576	9/16/2008			
Upload information for inclusion	0	9/2/2008			

File Name	Edit	Copy	Email	Del	Date Created	Type	Last Modified	Size (Bytes)
<input type="checkbox"/> Search_Help.htm					9/2/2008	htm	9/2/2008	243

Create New File Name: .htm

Upload File

Initial concentration on chromate conversion and chromated primer alternatives

Search Database



Search Page - Windows Internet Explorer
http://www.materialoptions.com/foxsuite/custom/docsearch.aspx

File Edit View Favorites Tools Help
Norton Search web... Cards & Log-ins Onfolio

Search Page



Surface Engineering Database search engine

Distribution statement:
All documents in the main section of this database are assumed to be Distribution A - Unlimited distribution.

Documents with any other Distribution Statement are held in different database sections, and will be accessible to you only if permitted by you. Documents held in other databases are not searchable with this system. In these cases there will be a link to the organization or person responsible.

To search, click into any number of column headers to enter search terms, or click on the column header arrow to choose from a list. The most commonly-used search criteria are at the left, with more detailed and less used criteria toward the right. View or download documents by clicking the link icon at the left.

For detailed search help [click here](#).

Clear Filters

Document ID	Alternative to	Category	Type	Description	Substrates	Coatings	Systems	Test Names	Title
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	All Alternatives	All Categories	All Types	<input type="text"/>	All SubStrates	All Coatings	All Systems	All Tests	<input type="text"/>
Doc-001	Chromate conversion Chromate primers	Qualified engineering data	Report	Report of initial phase 2000-2003. Substrate and coating materials	2024 Al 7075 Al 5083 Al 2219 Al	Conversion: Hexav... Conversion: Trivale... Conversion: Non-c... PreKote Conversion: Adhesi... Alodine 5200/5700 AC-130/131 (Boegel) Akimate Chemidize 727ND Oxsilan AL-500 Sanchem 7000	Solid rocket booster F-16 LCAC S-3 F/A-18 C/D C-46 AAAV	Atmospheric (beac... Cyclic corrosion (G... Filiform corrosion Salt fog corrosion (... SO2 salt fog corrosion Wet/Dry tape adhe... Electrical contact re...	Non-Chromate Aluminum Pretreatments - Phase 1 Report

Search for docs,
qualified,
authorized,
implemented
solutions
100+ docs
Concentrated on
chromates