The June 2009 Penetrant Professor

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ASTM MEETING NEWS

The June 2009 ASTM Committee week was held in Vancouver, British Columbia, Canada, and George Hopman chaired a couple of lively meetings. On Tuesday, George announced that the revision of **ASTM E-165** was essentially finished. He will send out three copies for final review, one to Brian McCracken at Pratt Whitney, one to Sam Robinson at Sherwin, and one to Bill Mooz at Met-L-Chek.

In the discussion of **ASTM E-1417**, George brought up the topic of **TAM** panels and their use as a system performance monitor. His previous tests, as reported here and in **Materials Evaluation**, cast doubt on the ability of these panels to adequately detect



Visible water washable penetrant on TAM panel showing three of the five indications.

degraded system performance. This conclusion was endorsed by Sam Robinson, speaking for Sherwin, and by Phil Keown, speaking for **NADCAP**. We understand that Iowa State University is performing some research on this subject, and we will be reporting on it in the future.

There was a discussion concerning the relative roles of **ASTM E-1417** and the **NADCAP** audit check list. One point that was brought up was that the **NADCAP** list was devised because **ASTM E-1417** did not contain all of the specification items that the prime contractors felt were necessary. Based on this, it was suggested that a revision of **ASTM E-1417** should incorporate the **NADCAP** check list and be retitled.



Several potential titles were discussed, and one or more of these will be balloted. It was felt by the committee that if this specification was rewritten to meet the objectives of the prime aerospace contractors, it would become the specification used by them, instead of a separate NADCAP check list. There is certain to be a lot of discussion about this entire project.

In Phil Keown's report on **NAD-CAP**, he pointed out that they are beginning to audit their auditors.



They have found large differences in auditors' performances, many of which are due to differences in the auditors' personalities. They are apparently attempting to bring more uniformity to the audit process, since frivolous negative findings are costly to the contractor. It was pointed out that some auditors simply went through the check list systematically and objectively, while other auditors expanded the check list to include items that were not explicitly on the list. Other problems arise because of language differences and the proper translation of the requirements. This effort was appreciated by the committee members.



Happy Fathers Day to all you Dads



INQUIRIES

From time to time we get inquiries or requests for technical advice or assistance that we feel worthwhile to relate. They tend to be vastly different, and we never know what to expect.

A user phoned to advise that he wanted to change from the use of visible solvent removable penetrant to visible water washable penetrant. His question was how to write up the procedure so that it was in conformance with existing specifications, and, in particular, which materials to use. This was a person who was exercising caution so that he was correct, not only in using the proper materials, but also in having the proper documentation. He is "our kind of guy" for getting things in order, and getting them correct.

The answers were simple, of course. He had stated that he wanted to continue to use the solvent removable Method C, so the only change in his procedure was that he could use either a cloth dampened with water for the penetrant removal, or he could use either **E-59** or **E-59A** as the solvent remover. The choice was his.





He then asked how he should handle the post inspection cleanup of the part, wondering if he should use water or the **E-59** or **E-59A** solvent remover. This depends upon the

characteristics of the part that he is working with, and the degree of cleanliness that is required. Again, the choice is one that he can make, either choosing water spray wash or solvent remover wiping, and the results will be different for smooth surfaces and rough surfaces. Some trial and error will help make the choice.

Then we had a request from an auto mechanic. Our **D-70** developer is specified in the **Honda** repair manual for certain specific purposes. This mechanic was apparently trying to use the developer for a different purpose, such as locating the cause of a water leak through a door and window assembly, possibly because of a defective gasket or seal. He appeared frustrated by our web site, which is mainly concerned with the traditional use of penetrants in predominately aerospace applications, and does not address the kind of problem that he was trying to solve. His explanation of what it was that he was attempting was not clear enough that we could understand it fully, and so we could only give him limited advice. We referred him to the Honda repair manual, which possibly addressed his situation.

Speaking of web site information; we have updated our data sheets and information guides on our web site for those who know what they're doing.

If you have questions regarding aerosol can fills or disposal, shelf life vs tank life, batch numbers, TAM panels, waste water treatment methods or what ever, go to

www.met-l-chek.com

June 14, 2009 Flag Day



"...through the dawns early light, our flag was still there..." High Sierra, Mono Lake California

AND IN OTHER NEWS.....

We recently received an inquiry asking about whether we offered non carcinogenic products. The person who inquired was not in California, but had noted that our products conformed to California Proposition 65, which requires any product that has any ingredient, in any percentage, that has been known to be connected to cancer in any way, to place this warning on the label of the product. So our products, along with those of our competitors, gasoline and many household products in grocery stores, carry this warning. In fact you will find this warning in hospitals, on your gas bill and countless other public locations. In the case of our products, it is usually because of the petroleum solvents.

The Penetrant Professor

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To receive it, call or Email Beverly Clarke.

