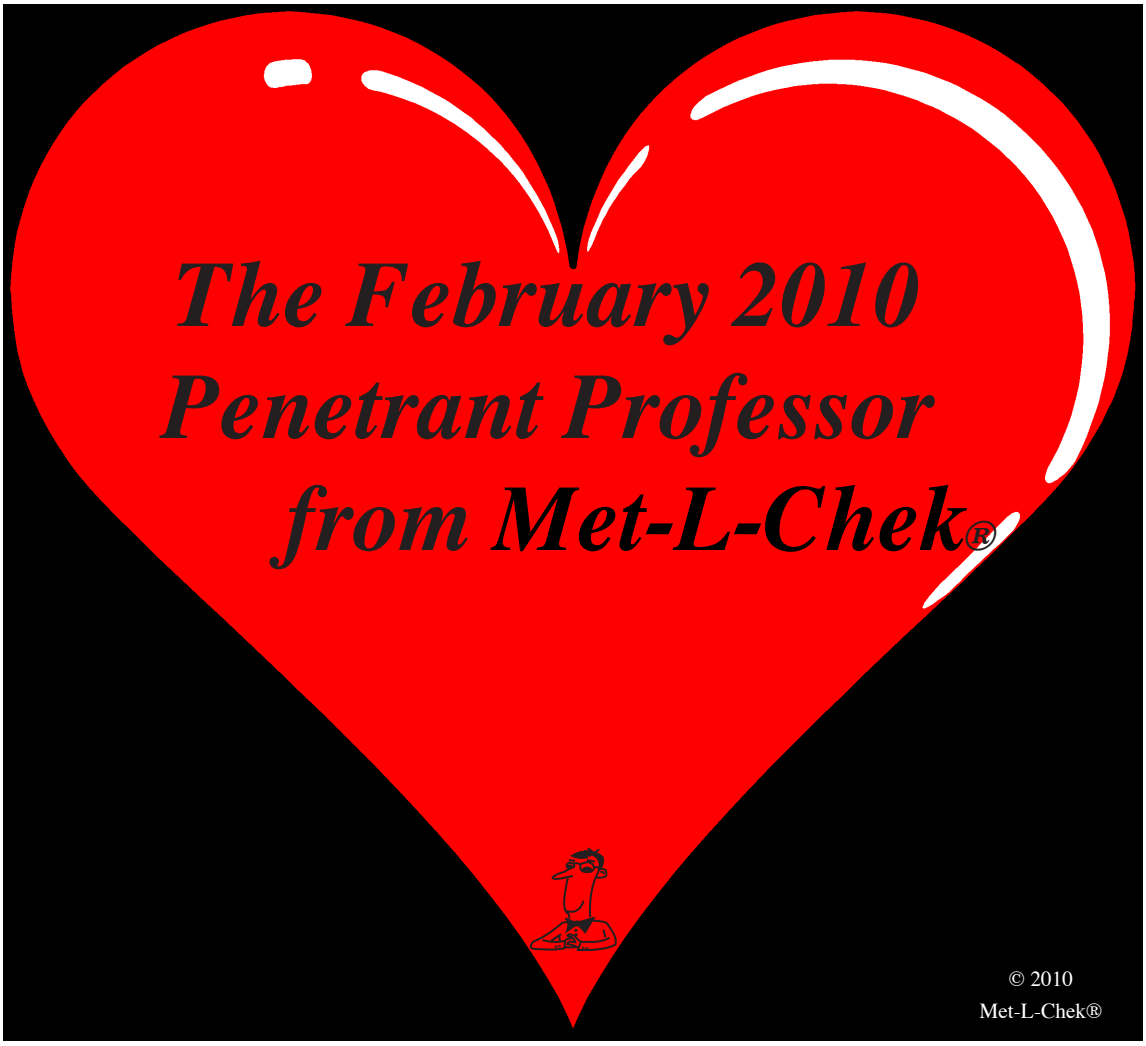
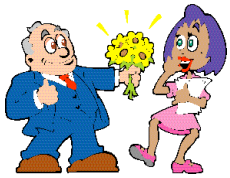


OOPS Department

A month or so ago, we related an instance that was headed "OOPS" Well, we are not perfect and our last issue touted the January meeting of ASTM Committee E-07. However, we misspoke and identified the meeting as being Committee K of AMS. Several of our astute readers called this to our attention and to the best of our knowledge, no one flew off to Florida expecting the Committee K to meet.

This was not our only error in that issue. Guess we were having a bad hair day or we're too close to the trees!

We had advised penetrant users working to Pratt & Whitney requirements that the FPM Master had been updated. Brian MacCracken, Senior NDT Engineer for Pratt, was quick to point out that what we had said was not exactly what had changed. To make sure we gave users the correct information we asked Brian to state what the details are.



!NOW HERE READ THIS!

"The following applies to all Pratt & Whitney (P&W) Manufacturers and Suppliers who are currently inspecting P&W hardware to the requirements of the P&W, Fluorescent Penetrant Method (FPM) Master and the FPM Master Supplement. This includes Manufacturer's or Suppliers who are flowing down these requirements to their sub tier suppliers:

The P&W FPM Master Supplement has been recently revised to include new penetrant materials, deleting some penetrant materials and has changed some of the

processing parameters.

The current revision to the FPM Master Supplement is revision **E**, dated **1/8/10**. This new revised Specification has replaced the previous FPM Master Supplement, revision D that was dated 3/31/97. Based on this new revision, all applicable P&W Manufacturers and Suppliers for P&W will need to contact their appropriate P&W Purchasing or Buyer group and request a copy of this document. In addition, there is a letter that has been issued by P&W that allows a phase out period of up to 18 months or by the date of June 30, 2012. This phase out period will allow facilities a chance to slowly phase out the replaced or deleted penetrant materials that no longer are listed in this latest revision of the Supplement. During this phase out period of 18 months, it is permissible to continue to use the obsolete penetrant materials and the processing parameters as specified in the previous FPM Master Supplement, revision D.

Please be aware that the new penetrant materials specified in the latest revision of the FPM Master Supplement, rev. E cannot be mixed with the older penetrant materials specified in the Supplement, revision D.

If there are any questions, you may contact: **Brian MacCracken** at **(860) 565-2465** or email at <brian.maccracken@pw.utc.com>"

PENETRANT PROFESSOR
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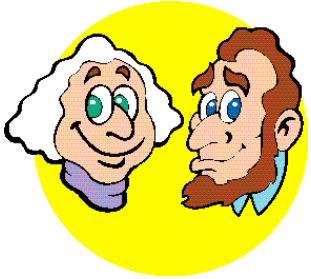
Feb 2010

UV Blocking glasses

We mentioned the article written by Charles Mazel that discussed the importance of wearing UV blocking glasses when performing penetrant inspections. This was pointed out to be especially important for those inspectors who have had eye lens replacement surgery, because the replacement lens allows UV light to reach the eye and can obscure the indications.

A radio news note was heard that plays on this theme. It seems that dying stars (dwarf stars) are so hot that a major portion of their light output is in the UV spectrum. It was said that there is one such star that has UV output so intense that if one could see the UV, the star would be the brightest star in the sky. We wonder if there are any inspectors who have had eye lens replacement and have seen this kind of phenomenon in the night sky. If so, we would like to hear about it.



UV and White Light

There is little or nothing written from a technical point of view concerning the question of how much white light is acceptable during inspection with fluorescent penetrants. We are planning to publish a technical discussion on this subject in the near future which will directly address this subject and also the idea that one is able to compensate for excessive white light by increasing the intensity of the UV-A.

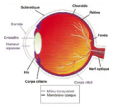
We have enlisted the expertise of our good friends Patrick Dubosc and Pierre Chemin to not only give this subject scientific depth but an international flavor.

We will be publishing excepts from their in-depth paper based on the following outline:

"Is increasing UV-A irradiance the right answer to high luminance in the inspection booth ?"

How the human eye works

Rods & cones adaptation to illuminance changes.
Sensitivity to colors.
Sensitivity to contrasts.
Ability to detect linear indications.



Fluorescent Indications

High Intensity UV-A sources vs visible light

visible light vs white light
UV-A radiation & cataracts
UV-A radiation & blue haze

Ratio illuminanace/irradiance

STAY TUNED!

The Penetrant Professor