



NPAS Customer Memo

September 2, 2007

It seems that I'm spending a bunch of time lately responding to issues being created by our competition's court problems, the most recent being the software report in the New Jersey proceedings. If you do not have this report, there are plenty of copies circulating, so look around or let me know. You can also go to <http://missouridwiblog.com/?p=28> for a summary.

I have passed the New Jersey report to our engineering staff and asked them to review it with an eye toward any possible implications there might be that would relate to our code. Initially, they have indicated that there are none. I expect that within the next several weeks, this review will be complete.

What ultimately happens in New Jersey may be determined by how relevant the court finds the reported software issues to be. However, I think it is appropriate to keep our customers abreast of our position relative to our software and of our internal procedures followed for software development.

First, the Standard DataMaster code used on the "K" and "cdm" is, by any stretch of the imagination, a very mature code and has been examined by the defense on at least 4 occasions of which I'm aware of. None of the examinations produced any significant issues. Because of this, and because of the fact that these instruments are nearing the end of their production life (support will continue indefinitely) there is little point in doing anything further in the way of code changes. We will continue to release the code under a non disclosure agreement or a court protective order, although lately these requests have been non existent. The absence of these requests, I believe, are due to the fact that the defense community knows it is available and that it has been examined in the past.

Obviously, the DMT code may be subject to these same requests as more instruments continue to be placed in the field. Our position is that it is better to have the code available than to have our customers subjected to the kind of problems that are going on elsewhere. Further, since this kind of code is primarily hardware dependent, there are few issues of trade secrets and therefore copyrite issues are virtually moot. As long as the code itself does not fall into our competitor's hands, I am not concerned. Our policy regarding release of the code will be the same as it is for the Standard Code and we will provide testimony as required to support it in court if necessary.

I am uncertain as to what disclosure problems there might be with the Windows system as we cannot legally furnish this code. However, this is not the operating code for the DMT so it may not be terribly relevant.

National Patent operates under the MIL Std 790 quality assurance system and is not a subscriber to ISO. In most respects the MIL Std system is much more stringent than the ISO system but it does not cover software development. We therefore are updating our formalized software development procedures to our software quality assurance protocol using the most recent "best practices" guidelines. This will be done over the coming few months. Meantime, our development continues using these guidelines as we have in the past, although in a manner that is more procedure conscious than before.

Compared to the original DataMaster code, the new DMT code - and it has been re-written - is structured significantly different, making it much more robust and much simpler to customize for different applications. It is this customization after the basic code is written that has been the source of problems in older codes. By modularizing the code in this fashion it is easier and safer to work with and the changes are much less intrusive on other areas of the code structure.

We are fortunate that we do have two software engineers that can cross check and test this work before it goes to our QA department for testing and then on to customers for user testing before it is placed into service. A third engineer is available on a consulting basis.

Additionally we are employing the use of a commercial software examination tool that will be very helpful in identifying areas of potential issues such as those found in New Jersey.

As we have done in the past, a testing procedure for the software is in place that replicates, as nearly as we can, actual usage conditions. By no means is this a total test because it is not possible to anticipate every condition. However, this procedure will remain flexible and will be continually updated as additional possible issues are identified. We will continue to rely on our customer's acceptance testing as the final authority for code approval.

We are fortunate that over the past 16 years we have had only a very few software issues that were discovered after field deployment. I am not aware of even one of these that were of a nature that would have created a problem during a subject test.

We will be reviewing this policy on our code development again in the coming months and will alter it as necessary to maintain a high degree of confidence and integrity.

John Fusco