



Silent Inspector User Group Meeting

By Jerry Knisley

On Tuesday, September 22, 2009, I attended the Silent Inspector User Group Meeting in Daphne, Alabama. The meeting was hosted by the USACE Silent Inspector Team and included representatives from all facets of the dredging industry including the USACE SI TEAM, several dredge company representatives and several hardware installers.

As a software representative I was primarily interested in how DREDGEPACK® can be adapted to ensure that we provide a proven data stream to the SI Database. The meeting was centered mostly around the Hopper and Dump Scow tracking profiles.

At this time, there are several hopper dredges in the US that use DREDGEPACK® as their dredge software. The best part about the SI approach in DREDGEPACK® is its versatility. The SI SENDER driver handles all of the interface to the SI Database, but has no interaction with actual sensors. The sensor interaction is handled by a collector driver so that the SI SENDER driver can be modified with updates requested by the USACE and propagated throughout the hopper fleet regardless of dredge company. As an example, there were two changes recently to the SI SENDER driver to allow the automatic computation of UTC time so that the operator does not have to remember to enter the offset from the local time, and the positions were changed from Easting and Northing to Latitude and Longitude. By simply replacing the SI SENDER driver on the dredge, any system running DREDGEPACK® is now compliant with the SI specification.

At this time, there are 15 hopper dredges that actively work in the US. Of the 15, there are 9 that run DREDGEPACK®, there are 4 that are owned by Great Lakes which provides their own software and 1 USACE dredge, the Essayons, that runs a competitor's software. There is one USACE dredge, the Mcfarland, that I am not sure about so I am not counting that in the DREDGEPACK® column. Using these numbers, DREDGEPACK® is installed on 60% of the hopper dredges in the US currently. There are two dredges that are no longer listed in the system that both were running DREDGEPACK® when they left service.

In the future the SI TEAM is going to have a requirement to monitor both pipeline dredges and mechanical dredges. I have already made a trip in support of both of these specifications and have a driver written that handles the SI output for them. The initial work was done to meet the guidelines with the understanding that the actual specification would change based upon testing.

We are ready at HYPACK® to meet all of the SI specifications except for the SCOW TRACKING. There is no need for DREDGEPACK® to specifically handle scow tracking because, in many cases, there is a black box system that records the scow parameters for processing later without a computer involved in data collection. There are many systems on the market, but most that I have seen involve more than just a system. Most of the companies that provide the scow tracking hardware also provide the service of processing the data and submitting reports. This function is beyond the purpose of DREDGEPACK®.

I was pleased to be invited to the meeting and also glad that we could fit it into my travel schedule. I look forward to working with the SI TEAM in the future as the other specifications come online.