



The Perfect Survey

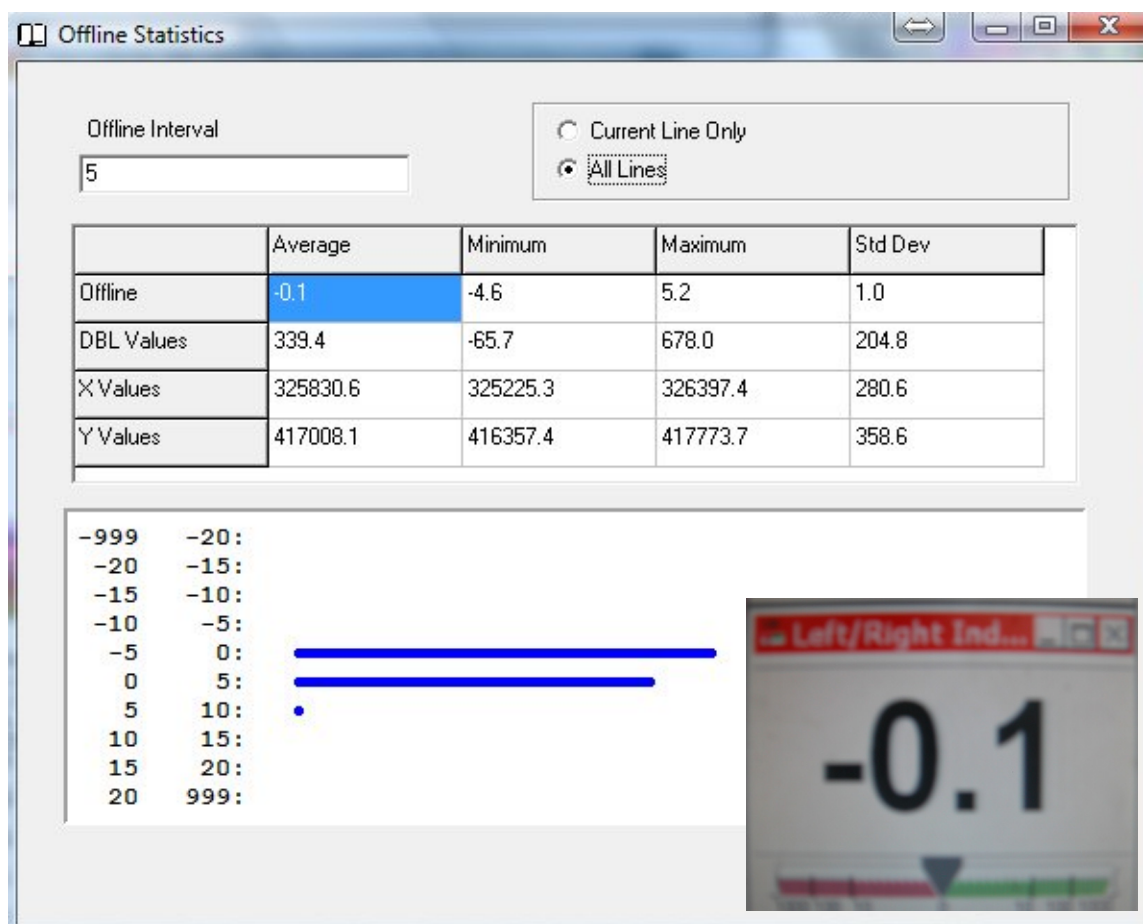
By Harold Orlinsky

A few weeks ago, a client asked, 'What is a perfect survey?'. I had no easy answer. A perfect game in baseball is easy to spot, but what about collecting sonar data? To make a survey complete, we depend on the equipment running without problems, the software providing assistance to make corrections, and personnel for running the boat. Being part of a lot of surveys, I want to think they were all perfect, but certainly one had to be better than another. And one was the best of them all. But was it perfect? I needed to come up with some measuring tool to give one the edge over another.

A survey that is run, with no holidays, would probably top my list. I recall one survey we had missed a 2m x 4m section on a 1:10000 sheet, and had to transit back a half a day to fill the spot. Definitely not a perfect survey! Surveys that have aborted lines, or re-runs cannot be considered. But a survey that shows no errors in processing, and the statistics to prove it. That would be a perfect survey.

So back to my client; I was told they had run a single beam survey with an average offline distance of 0.1 ft, thirty lines in all, 600 feet long, and the largest error was 5.2 feet off line during the entire time.

FIGURE 1. Cross Check Statistics of "The Perfect Survey"



Would this constitute a perfect day – a perfect survey? It takes a lot of work to make this happen. I was given the HYPACK® single beam offline statistics to prove the results, and offered a challenge from them.

Do you have a perfect survey? Winners will receive the prize of a HYPACK Hat and T shirt, a mention in next month's newsletter, and all the bragging rights.