Jim Doran
EDTECH 505 – Spring 2015
Week 5 Assignment

Leg A: (What is the current situation?)

Because the issue is with troubleshooting, the analysis is more performance based than knowledge based. Currently, we do not troubleshoot well. Troubleshooting at the station is divided into two categories, simple and complex. Too many issues are being addressed with complex troubleshooting, which is a much more arduous process than is simple troubleshooting. More often than not, the troubleshooting teams identify the wrong component as faulty, or merely end up hoping what has been identified is actually the problem. Additionally, there is a general lack of knowledge with regards to proper and improper readings within circuits. The results have been endless rework on unavailable equipment and has also led to a plant shutdown.

Leg C: (Where do we want to be?)

Upon discovery of an issue, a troubleshooting team should be assembled consisting of maintenance and engineering, and they should work together to formulate a concise plan to identify the problem using the Six Step Troubleshooting Approach. The process should be systematic and timely in nature as well as minimizing the risk to the plant. Upon completion, the data should be analyzed and all other possibilities considered and ruled out. Most importantly, the efforts should result in the equipment operating better than it was before.

Leg B: (How do we get from Leg A to Leg C?)

The first issue that must be dealt with is the systematic approach. Often there is a large amount of time pressure present to return the equipment and the learners must be taught to trust the system. That is to say that regardless of the problem, they must follow the system and not skip from step 1 to step 6. This will be addressed in the training by an activity which points out to them their knee jerk reaction to go into problem solving before they've even identified the problem. The second issue the training will address is how to identify data points and establish the "good" result. There is a general lack of solid electrical foundations amongst the Engineering population. Because of this, they often do not understand what a good and a bad result is. Lastly, the learners need a chance to practice their new found skills without the burden of time pressure. The training will address this in two ways. There will be an exercise at the completion of the training to give them a chance to practice and follow on practice problems will be issued online throughout the year.

Millstone Troubleshooting

Figure 3.1