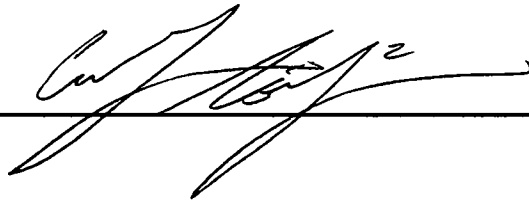


Carlos Sanchez
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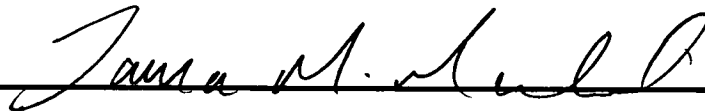
July 26, 2010



Reviewed By:

Laura McDaniel

Safety & Mission Assurance Directorate SAG-20





For this project, I enrolled in numerous SATERN courses that taught the basics of database programming. These include: *Basic Access 2007 Forms*, *Introduction to Database Systems*, *Overview of Database Design*, and others.

My main job was to create an analytical database that can handle many stored forms and make it easy to interpret and organize. Additionally, I helped improve an existing database and populate it with information. These databases were designed to be used with data from Safety Variances and DCR forms.

The research consisted of analyzing the database and comparing the data to find out which entries were repeated the most. If an entry happened to be repeated several times in the database, that would mean that the rule or requirement targeted by that variance has been bypassed many times already and so the requirement may not really be needed, but rather should be changed to allow the variance's conditions permanently. This project did not only restrict itself to the design and development of the database system, but also worked on exporting the data from the database to a different format (e.g. Excel or Word) so it could be analyzed in a simpler fashion. Thanks to the change in format, the data was organized in a spreadsheet that made it possible to sort the data by categories or types and helped speed up searches.

Once my work with the database was done, the records of variances could be arranged so that they were displayed in numerical order, or one could search for a specific document targeted by the variances and restrict the search to only include variances that modified a specific requirement.

A great part that contributed to my learning was SATERN, NASA's resource for education. Thanks to the SATERN online courses I took over the summer, I was able to learn many new things about computers and databases and also go more in depth into topics I already knew about.