

Fanourakis Sofia_Abstract



My main project was to determine and implement updates to be made to MODEAR (Mission Operations Data Enterprise Architecture Repository) process definitions to be used for CST-100 related missions. Emphasis was placed on the scheduling aspect of the processes. In addition, I was to complete other tasks as given. Some of the additional tasks were: to create pass through command look-up tables for the fight controllers, finish one of the MDT (Mission Operations Directorate Display Tool) displays, gather data on what is included in the CST-100 public data, develop a VBA script to create a csv file with specific information from spreadsheets containing command data, create a command script for the November MCC-ASIL testing, and take notes for one of the TCVB meetings.

In order to make progress in my main project I scheduled meetings with the appropriate subject matter experts, prepared material for the meetings, and assisted in the discussions in order to understand the process or processes at hand. After such discussions I made updates to various MODEAR processes and process graphics. These meetings have resulted in significant updates to the processes that were discussed. In addition, the discussions have helped the departments responsible for these processes better understand the work ahead and provided material to help document how their products are created.

I completed my other tasks utilizing resources available to me and, when necessary, consulting with the subject matter experts. Outputs resulting from my other tasks were: two completed and one partially completed pass through command look-up tables for the fight controllers, significant updates to one of the MDT displays, a spreadsheet containing data on what is included in the CST-100 public data, a tool to create a csv file with specific information from spreadsheets containing command data, a command script for the November MCC-ASIL testing which resulted in a successful test day identifying several potential issues, and notes from one of the TCVB meetings that was used to keep the teams up to date on what was discussed and decided.

I have learned a great deal working at NASA these last four months. I was able to meet and work with amazing individuals, further develop my technical knowledge, expand my knowledgebase regarding human spaceflight, and contribute to the CST-100 missions. My work at NASA has strengthened my desire to continue my education in order to make further contributions to the field, and has given me the opportunity to see the advantages of a career at NASA.