

Naval Network & Space Operations Command (NNSOC)

**Naval Surface Warfare Center Dahlgren Division
Dahlgren, VA**

**Proposal
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Executive Summary

The Depth and Breadth Design Proposal describes the redesign of the Naval Network & Space Operations Command. The electrical and lighting portion of the proposal is the depth topics while two breadth topics are discussed that I tried to relate to my depth topics. The end of the proposal shows a tentative progress schedule laid out for the remainder of the time until the due date.

The electrical depth will be a redesign of the emergency UPS system of the building to see if space can be saved by changing the existing battery bank system with a rotary UPS system. The other topic is to see whether Photovoltaic panels would be a beneficial source of power to the building.

The lighting depth is an integration of a new daylight system into the building while using controls to limit the amount of electric light needed. I am also redesigning the outdoor entrance, lobby, and training theater to try and make it a more interesting space. The design of these spaces will include the recommendations following the concept comments I received at the lighting design proposal along with the IESNA Handbook, ASHRAE 90.1, and the NEC codes.

For my two breadth topics I will be analyzing the affects of adding in the glazing for daylight integration with the HVAC equipment and ASHRAE 90.1. I will also be doing a LEED study on the points that could be achieved or lost with the implementation of the new daylight design.