

This independent study project covers the development of the International Space Station (ISS) Attitude Determination and Control Officer (ADCO) Planning Exchange "APEX" Tool. The primary goal of the tool is to streamline existing manual and time-intensive planning tools into a more automated, user-friendly application that interfaces with existing products and allows the ADCO to produce accurate products and timelines more effectively. This paper will survey the current ISS attitude planning process and its associated requirements, goals, documentation and software tools and how a software tool could simplify and automate many of the planning actions which occur at the ADCO console. The project will be covered from inception through the initial prototype delivery in November 2011 and will include development of design requirements and software as well as design verification and testing.