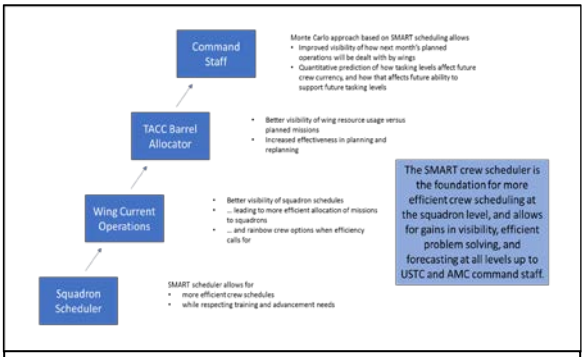
USTRANSCOM Science and Technology

Synchronizing Mobility Allocations and Resources for Transportation (SMART)

Project Summary: The SMART project will conceptualize, design, and develop prototype software capabilities demonstrating advanced squadron crew scheduling and, optionally, a predictive modeling and simulation (M&S) based crew utilization forecasting tool. Project deliverables will include: prototype demonstration software (TRL 6), user/installation manuals and a SMART design document containing the following: a cognitive analysis report, design specifications to include scheduling algorithm(s), data requirements with potential sources, software design and architecture, projected performance and effectiveness measures or Key Performance Parameters (KPPs), and experimental results of the demonstrations. Additional deliverables will include a Technology Transition Plan (TTP) coordinated with all stakeholders.



SMART Process Flow

Benefit: Projected to provide substantial cost avoidance in terms of reduced fuel and efficient asset utilization (aircraft, crews, ports, etc.).

Duration of project: FY18-FY20

Participants: Air Force Research Laboratory (AFRL)

Project advocacy (funding or otherwise): Air Mobility Command