



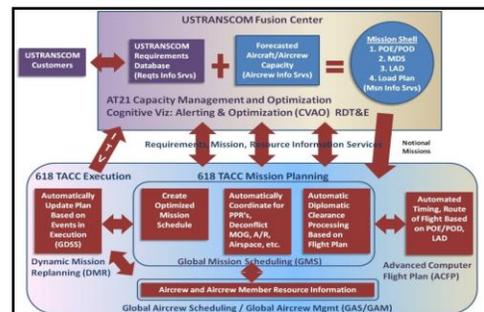
USTRANSCOM Science and Technology

Global Mission Scheduling

Project Summary: The United States Air Force (USAF) Functional and Geographic Air and Space Operations Centers (AOCs) supporting Mobility Air Forces (MAF) operations require the ability to effectively and efficiently schedule missions from all known sources of airlift requirements. The efficient and effective utilization of limited airlift resources requires a new business process model and application of

advanced technology that works in concert with the USTRANSCOM Agile Transportation for the 21st Century (AT21) Operational Concept Description and associated efforts. GMS is envisioned to provide the 618 TACC planners the capability to fine-tune the pairing of air movement requirements and resources to maximize aircraft utilization efficiency. This “enhanced” schedule would be updated when the

operating environment changes (e.g. runways shutdown, ATC issues, DIPS expire, airfield shutdown, crew issues, aircraft issues, etc.) as the plan nears execution. In these cases, GMS will present options to the 618 TACC and AOC AMD planners to evaluate alternative solutions that minimize the impact of those changes on the overall mission flow on both already planned and those currently in execution. By adopting a more agile and adaptive approach, process improvement and change management can be applied more effectively, quicker, and with minimal disruption. GMS will provide the capability to seamlessly pair prioritized and aggregated air movement tasks from USTRANSCOM’s FC processes to available capacity, automate development of optimized airlift mission schedules, and update schedules to reflect changes in the dynamic execution operating environment. The transitioned GMS will improve the user’s ability to visualize and adjust mission schedules in order to optimize delivery.



Return on Investment: An average of 108,576 AMC missions are flown annually and over 90% are not executed as planned. GMS will improve execution by 75% and save crew duty days, reduce extra legs, and save millions in fossil fuel costs.

Participants: Air Mobility Command, Air Force Research Laboratory (AFRL)

Project advocacy (funding or otherwise): USTRANSCOM J5/4 GC, RDT&E, Air Mobility Command, AFRL

Transition: TBD

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