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FROM: Robert G. Leonik

SUBJECT: Trip Report

1. Purpose: AF Modeling and Simulation (M&S) Foundations IPT Working Group
2. Traveler: Robert G. Leonik
3. Itinerary: DPT (FWB) 24 May, ARR Orlando; DPT 26 May, ARR (FWB).
4. Discussion/Issues.

I attended the AF M&S Foundations IPT Working Group held at AFAMS in Orlando FL. This AO-level working group was similar to the CRRB held 10-11 March. Stated agenda and foci included rewrite of the M&S Charter, review of M&S activities to include progress in the four Thrust Areas, the restructuring of M&S Program Elements and standup of three new IPT's, a look at the way ahead for the M&S Strategic Plan, and the revised MSCR review process. The overwhelming majority of participants were from the AFAMS organization. In addition to AFRC, only ASC, ESC and SMC were represented in person. ACC and AMC participated via telecon. One explanation for the low level of support was attributed to the CSAF emphasis on DMO. MAJCOMS elected to attend the DMO IPT working group meeting at the 505 CCW last week vice M&S this week.

a. The following issues were discussed:

- AFAMS personnel emphasized their overall mission is to integrate, coordinate, focus and deliver M&S to support air and space power. This was reiterated throughout the day.
- The M&S Foundation Charter was reviewed line by line. Since I did not receive a read ahead or any guidance from either PES or AFRC, I was unable to opine on some of the specific verbiage presented during the review. I did make several inputs that believe AFRC is covered in this document.
- Way-Ahead was prioritized as:
 - i. Brief to MSAC on 3 June 2004
 - ii. Brief to GOSC on 16 June 2004
 - iii. Decision Brief to CAUCUS in July 2004
 - iv. Update M&S Strategic Plan and AFD 16-10.
- Discussed the results of an integration and interoperability framework preliminary analysis recently performed by AFAMS. Compared SIMplicity, Si3 and OneSAF for suitability to AF M&S requirements. Specific methodology included gathering information from various sources, focusing on flexibility and ability to adapt to changing requirements, and considering viability as long-term solutions as opposed to short term fixes. OneSAF was

best for integration and interoperability framework. Able to leverage pre-existing development efforts within DoD. Another advantage was it utilizes open source developmental models to maximize effectiveness and guarantee joint operability. Calytrix MENTOR was proffered as a product for AARs. Need to maximize lessons learned from JMASS/JSIMS/JSB.

- Other items to consider when evaluating possible solutions to M&S requirements include: information at differing classification levels; integration of contractor proprietary technology; differences in fidelity of legacy systems; bandwidth optimizations; and creating a “survivable” communications protocol.
- The Scenario Generation Server (SGS) successfully passed Phase I acceptance testing at the DMOC 12-14 May. Funded by XIWM at \$300K initially, with a total effort of approximately \$900K. This tool is able to import UOB data, manipulate it, map translations to/from various formats, and output scenario files. Only real issue that surfaced was output in Next Generation Threat Simulator (NGTS) format. Phase II includes JIDPS (JCATS terrain, JTLS UOP, and JTLS playbox), Distributed Information Warfare Constructive Environment (DICE), and Extended Air Defense Simulation (EADSIM). They’re assessing JSAF and Master Environmental Library (MEL) for future implementation, as well as permissions for mission planning (submitted in FY05 T2 LVC funding call, also involved in RD3 effort) and looking at terrain servers. With JSB on the wane, DMOC is assuming responsibility for this program.
- The M&S Foundations IPT is trying to better define its role. Specific responsibilities were postulated as: Vett Command-sponsored Modeling and Simulation Capability Requirements (MSCRs), Rough unresourced prioritization (H-M-L), Develop Thrust-specific MSCRs, Develop MSCR implementation strategies (w/ MAJCOM sponsor), Develop comprehensive Flight (1 year) and Implementation (FYDP) Plans to accomplish approved MSCRs, Monitor MAJCOM developments affecting M&S Foundations, Facilitate cooperation and synergy wherever possible between MAJCOMs and with AF-level programs, and oversee acquisition programs affecting M&S Foundations acquisitions.

MSCRs are still works-in-progress, and AFAMS needs to better integrate all activities. Proposed Thrust-centric MSCRs. Thrust IPT, in the Capability Requirements Generation Role, would use MSCRs to integrate Thrust capabilities, capabilities requiring multi-Thrust coordination, and accelerate fielding. CRRB process gives M&S IPT direction, but several procedural issues remain. How to vote on MSCRs, how to establish priorities on MSCRs, how to develop and decide on implementation strategies for MSCRs, how to develop and decide on the M&S Foundations/Flight Implementation plans, what measures of merit to use and how to report them. Finally, how to specifically help MAJCOM M&S reps to provide better advocacy for their programs.

- Possible projects that advance Foundations as a whole include: SGS Phase II, , Integration Framework and Bandwidth on Demand M&S Network.
- Action Items:
 - i. ESC will provide digital Harbor white paper.
 - ii. AFAMS will: update the integration framework analysis, update/distribute the Foundations IPT Charter for coordination, set up AFCA/IPT/JFCOM M&S networks meeting, and update MSAC on Foundations IPT progress.

5. Conclusions/Recommendations:

- a. Continue to support this process in-person rather than virtually. There were several technical issues with connectivity that delayed the start of the meeting, and interrupted the flow several times.
- b. Ensure AFRC review/critical comments on M&S Strategic Plan and AFD 16-10 when received.
- c. Again, implied, but not stated, was the issue of whether or not the CRRB needed to remain an O-6 level organization or segue to an AO forum. The latter facilitates AO's to better work the issues, and saves duplication of effort from multi-board members (CRRB, MSAC). Believe AF/XI goal is to have a workable process, and the CRRB with an AO focus accomplishes this goal while eliminating duplication of effort. Case was made for "iron colonels" to work the tough issues.
- d. After observing/interacting with the participants at this meeting, my overall impression is that the M&S Foundations participants share a perception that they are not as relevant as the DMO IPT participants and that this is impeding their progress. The AFAMS personnel feel they are represented adequately on all teams, but need to find ways to better integrate and maximize their resources. They need to stay true to their mission of integrating, coordinating and focusing M&S Foundations activities across MAJCOMS to achieve Thrust Objectives.

Respectfully Submitted,

Robert G. Leonik