



DEPARTMENT OF THE AIR FORCE
WASHINGTON DC

OFFICE OF THE ASSISTANT SECRETARY

18 OCT 2018

MEMORANDUM FOR SAF/AQ PERSONNEL

FROM: SAF/AQ

SUBJECT: Assistant Secretary of the Air Force (Acquisition, Technology & Logistics) Chief Architect

Interconnectivity is paramount in today's world, yet Defense Acquisition has historically struggled with building highly-connected families of systems. Broad use of standards (analogous to the Internet of Things) and the ability to conduct requirements trades across integrated platforms are "horizontal" engineering disciplines we must inject into our currently "vertical" system. Consequently, I am establishing a Chief Architect position within Air Force acquisition.

The first pathfinding duties of the architect will be to lead the Advanced Battle Management System (ABMS) family-of-systems design trades in support our Chief of Staff's Multi-domain Command and Control (MDC2) vision as well as conducting a yearly family-of-systems analysis for Next Generation Air Dominance. Other architecture duties will be assigned in future as they arise.

The Chief Architect will create and manage the family-of-systems trade space lying between traditional requirements and acquisition roles, turning warfighter requirements into potential integrated designs, recommending threshold and objective performance parameters contributing to SAF/AQ programs, managing family-of-systems design margin, and defining interfaces and standards to ensure interoperability. Program Executive Officers (PEOs) and Program Managers (PMs) will retain all authority and responsibility for executing their respective programs, but for designated family-of-systems programs (like ABMS and NGAD), they must gain approval from the Chief Architect before modifying threshold and objective performance parameters. Unresolved issues will be brought forward to SAF/AQ. This will allow the Advanced Battle Management System to execute decentrally in multiple PEOs without reorganizing, creating one bulky mega-program, or eschewing the benefit the "tech push" rapid acquisition strategies are currently providing to many traditional Air Force programs.

Complimentary to operational analysis, the Chief Architect will specialize in technical, engineering-based analysis needed to design, fly, and buy integrated families of systems. He/she will leverage various Federally Funded Research and Development Centers and University Affiliated Research Centers to develop and conduct technical modeling and simulation. Trades will be continually updated based on demonstrated performance from contributing programs. PEOs and PMs will maintain a regular cadence of updates to the Architect to ensure trade space estimates are current and accurate.

An architect support staff will be created to work with staffs at the PEOs, MAJCOMs, and Air Force Warfighting Integration Cell. They will facilitate coordination across portfolios, maintain synchronization of programs, and elevate issues for resolution.

Finally, the architect will recommend five to ten integration initiatives for each budget cycle to increase integration of legacy systems.

A handwritten signature in black ink, appearing to read 'W. B. Roper, Jr.', with a long horizontal flourish extending to the right.

William B. Roper, Jr.
Assistant Secretary of the Air Force
(Acquisition, Technology & Logistics)