Introduction to the US Army PEO Aviation (PEO AVN) Enterprise Architecture Framework (EAF)

Thomas A. DuBois
Chief Technology Officer
John H. Northrop and Associates
Orlando, FL USA

R. Alan Hammond, Jr.
Technical Fellow
John H. Northrop and Associates
Huntsville, AL USA

Jonathan Hay
Vice President
John H. Northrop and Associates
Huntsville, AL USA

Aaron Cleary
Senior Systems Engineer
John H. Northrop and Associates
Fredericksburg, VA USA

Ethan Scott
Systems Engineer
John H. Northrop and Associates
Huntsville, AL USA

Matthew J. Steiger
Model Based Systems Engineer
Intuitive Research & Technology
Huntsville, AL USA

Keith B. Zook
Principal Model Based Systems Engineer
Intuitive Research & Technology
Huntsville, AL USA

John Stough
Chief Solutions Architect
John H. Northrop and Associates
Huntsville, AL USA

ABSTRACT

The purpose of this paper is to present the technical details of the US Army Program Executive Office - Aviation (PEO AVN) Enterprise Architecture Framework (EAF) while describing its development status as of January 2024. The Future Vertical Lift (FVL) Program developed and continues to improve the FVL Architecture Framework (FAF) (Ref. 1) for use by FVL programs. The EAF is intended to be compatible with the FAF and to provide specific guidance to enduring programs. The EAF contains modeled content from the FAF and employs a technical approach that contains different perspectives for enterprise (i.e., PEO AVN) and program users depending on how the EAF will be used. As an architecture framework, the structure of the EAF follows International Standard ISO/IEC/IEEE 42020 (Ref. 2). The EAF prescribes the conventions, principles, and practices for the development of the Enterprise Architecture (EA). The EA communicates the technical, business, and organizational architecture of the enterprise for the purpose of enabling Modular Open System Approach (MOSA) (Ref. 3) objectives, such as improved affordability, increased readiness, enhanced capabilities, reduced schedule pressure, and reduced supply chain risk.

INTRODUCTION

Under US Army Contract AMTC-20-01-278, John H. Northrop and Associates, Inc. (JHNA) is developing the EAF for PEO AVN to achieve MOSA objectives across the enterprise. Development work has achieved Minimum Viable Product (MVP) maturity for the Program Perspective and is proceeding with alpha testing. This paper provides an overview and status update of the EAF focusing on how a program office in PEO AVN uses the EAF Program Perspective to produce models and artifacts to acquire capabilities designated as having MOSA implications important to PEO AVN. The EAF also contains model content applicable to an enterprise as described in ISO 42020. This is the EAF Enterprise Perspective, which is currently at an earlier stage of development compared to the Program Perspective due to a near-term priority to focus on the Program Perspective. Some technical aspects of the EAF Enterprise Perspective will be presented, but the major focus of this paper is the EAF Program Perspective.

The EAF is a model that has two perspectives depending on how it will be used. One perspective is the Enterprise Perspective which supports MOSA decisions applicable to the relationship between PEO AVN and its subordinate program offices with traces to higher-level organization guidance, directives, regulations, and statutes. Example EAF content for the Enterprise Perspective are criteria to establish enterprise-wide modularity applicable to all program offices in the enterprise. The other perspective is the Program Perspective. When a program office needs to acquire a capability designated as having MOSA implications by the PEO, they will use the EAF Program Perspective to develop model content and requirements needed for the MOSA aspects of the

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acquisition. Development of these models includes the need to use enterprise content applicable to the specific acquisition. This capability and platform integration specific content is contained in the EA and related reuse libraries. As a model, the EA contains project usage to the EAF while the EAF Enterprise Perspective contains the process for how the EA is developed, maintained, and configuration controlled. Figure 1 shows these user and model interactions.

Figure 1 shows the separation between Program and Enterprise Perspectives and model usage of the EA. The EA contains the Enterprise Product Architecture (EPA) (Ref. 4, 5) and leveraged content from the FAF. The enterprise user uses the EAF Enterprise Perspective to develop and maintain the content of the EA. When a program user uses the EAF Program Perspective, they use EA content to create MOSA requirements for the acquisition thereby ensuring alignment to MOSA decisions made at the enterprise level. When a program follows the preparation steps in the EAF Program Perspective, they use the EA to generate an EAF Acquisition Model to be used as Government Furnished Information (GFI) with additional contract or solicitation language and addenda unique to the capability(ies) associated with the acquisition. Program staff use the EAF Program Perspective to generate an Acquisition Model and contractual language making the Acquisition Model required. An Acquisition Model created by using the EAF contains: (1) MOSA requirements, (2) a Component Model Development Process (CMDP), (3) weapon system specific GFI content, (4) descriptions of weapon system specific required Government Furnished Equipment (GFE), and (5) MOSA addenda to standard contractual artifacts. These details will be discussed later in the paper.

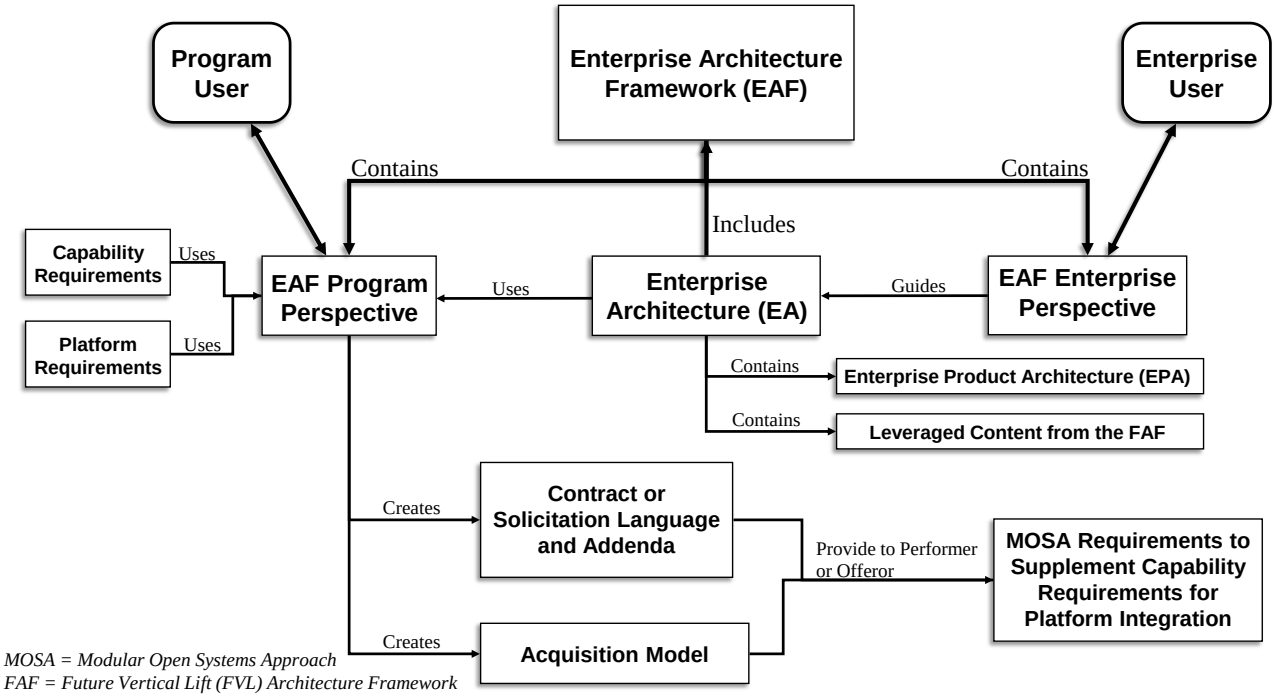

Figure 1. Enterprise Architecture Framework (EAF) User Contexts

An Acquisition Model is specific to the capability and the program to which it applies. It addresses the MOSA requirements and is intended to supplement the other contractual documents a program will create. The contract or solicitation will require a contractor, agreement holder, or offeror to use the Acquisition Model for MOSA requirements specific to the acquiring program. In the context of a new program, using the EAF Program Perspective causes creation of a full model-based Acquisition Model. In the context of an enduring program, using the EAF Program Perspective causes the creation of an Acquisition Model to supplement standard program artifacts in the form of modeled content and artifacts traceable to MOSA requirements not typically addressed in standard enduring program artifacts. The EAF took this approach to address enduring program MOSA capability acquisitions that do not have the benefit of modern MOSA constructs. One example is integration of a capability that has MOSA implications for an enduring program that does not have a digital backbone as defined by FVL. Furthermore, it may be the case that the acquiring program is not structured to use a full model-based acquisition approach thereby causing certain FAF-based System Architecture requirements to not be feasible for enduring program capabilities that have MOSA implications for the enterprise.

This paper will first describe the model structure of the EAF having completed a transition from Unified Profile for DoDAF/MoDAF (UPDM™) (Ref. 6) to the Unified Architecture Framework® (UAF®) (Ref. 7) as content was leveraged from the FAF. The next two sections are dedicated to describing what the EAF Program Perspective contains and how program acquisition staff can use it for their MOSA acquisition. This section follows with a description of EA content as of January 2024, which is used to build an Acquisition Model for the procurement. With these concepts and approaches understood, the next two sections describe how a program creates an Acquisition Model and the organization of requirements in it. The EAF contains all System Architecture requirements (i.e., SYSARCHs) from the FAF, but for enduring programs, not all of these will be applicable to all MOSA acquisitions and therefore not all appearing in an Acquisition Model generated by using the EAF for acquisitions of that type.

EAF MODEL STRUCTURE AND CONTENT

The EAF model structure contains interactions with the EA, which is a separate model. The EAF Program Perspective contains models that an acquiring program uses to insert MOSA requirements into its acquisition artifacts using EA content. This section summarizes this context and usage.

EAF Model Structure

Figure 2 further clarifies model structures and interactions between the EAF, EA, and the EPA as a model within the EA. As a framework, the EAF guides a maturing architecture from conceptual to logical to physical following the approach used by the Future Airborne Capability Environment® (FACE™) Technical Standard (Ref. 8). This approach has shown to work well and is scalable from one capability insertion to large integrations of capabilities (Ref. 9, 10, 11).

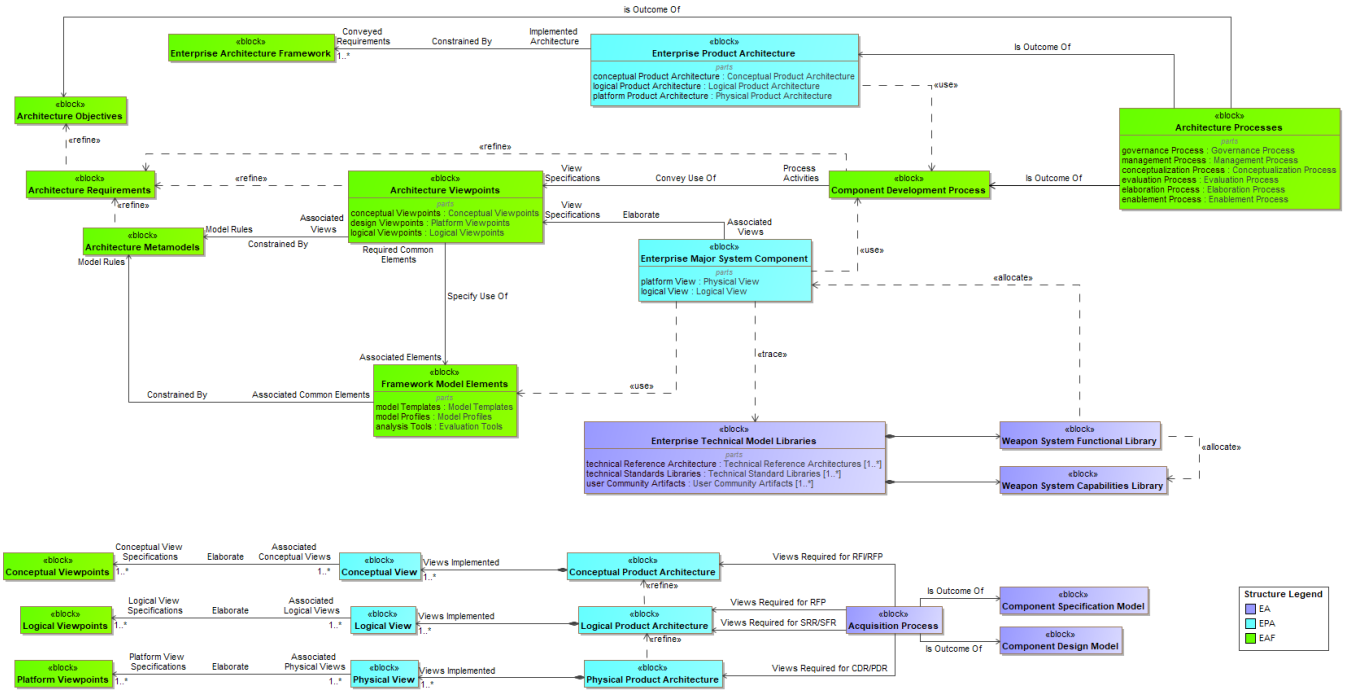

Figure 2. MOSA Architecture Refinement Using the EAF, EA, and EPA

There are two high-level perspectives that the model relation governance is structured to achieve. One is the traditional top-down perspective to understand the enterprise in the context of larger DoD capabilities. This ensures proper and vetted trace down from capability sets to the actual functions within system components that achieve the capability. Development from this perspective results in a robust enterprise component modularity architecture that achieves the PEO AVN MOSA objectives. The other perspective is acquisition. Component acquisition uses a Component Specification Model (CSM) which is an output of the applicable EA requirements, conceptual artifacts, and logical artifacts for a component to be acquired. An offeror, contractor, or agreement holder generates a Component Design Model (CDM) that satisfies the constraints and requirements contained in the CSM. These design artifacts are then integrated into the EA to support engineering analysis over the lifecycle of the enterprise component.

EAF Program Preparation Steps

When acquisition program staff uses the EAF Program View, they follow a set of eight program preparation steps common

to all MOSA acquisitions. These steps, abbreviated PREP, are summarized in the following table.

Table 1. EAF Program View Program Preparation Steps (PREPs) Summary

PREP	Summary
PREP-1	Contract boilerplate (e.g., Statement of Work (SOW), Performance Spec, etc.), relevant MOSA Implementation Guide guidance, Open System Management Plan (OSMP) requirements, Deliverable Markings, Modeling Tool Details, Capability-based GFE/GFI
PREP-2	Identification of required component models with expected interaction with PEO AVN on EPA content. PEO interaction involves ensuring that PEO-defined Major System Components (MSCs) and Major System Interfaces (MSIs) (Ref. 12) are adequately modeled for CSM and CDM development.
PREP-3	Software details including progression towards open software standard conformance (also includes tailoring and best practices associated with those standards)
PREP-4	Hardware details mainly regarding selection of hardware standards and tailoring or best practices associated with those standards
PREP-5	Approach to addressing safety requirements with understanding of platform approach to safety (primary result is a "MOSA safety addendum")
PREP-6	Approach to addressing security requirements with understanding of platform approach to security (primary result is a "MOSA security addendum")
PREP-7	Verification and Validation (V&V) requirements also including tests based on MOSA uses cases for the acquisition (primary result is a "MOSA V&V addendum")
PREP-8	Model structure details to create the Acquisition Model

The Program Preparation Steps do not need to be completed exactly in sequence according to the numbering in Table 1 with the exceptions that PREPs 1 and 2 need to be mature before proceeding with PREPs 3-7, and PREP-8 needs to be done last. The first of two reviews between PEO AVN and the acquiring program occurs after PREP-1 and is mainly used to collaborate on content for PREP-2. The second review occurs after PREPs 1 through 7 are essentially completed so that the enterprise and acquiring program both have a chance to review the content produced by those steps before refining all of the Acquisition Model files on PREP-8. There are situations where results from some PREPs will cause adjustments to interim results from other PREPs. This is expected, not problematic. The goal of these Program Preparation Steps is to produce MOSA-based GFI applicable to the acquisition to supplement additional documentation created by the program for the acquisition. That GFI will be in the form of an Acquisition Model consisting of an organized set of requirements, acquisition-specific GFI and GFE specifications, MOSA-specific supplements to standard capability acquisition artifacts (e.g., safety addendum), and the CMDP.

To illustrate this concept, Figure 3 shows the top-level activity diagram for EAF Program Perspective Program Preparation Step #2 (PREP-2).

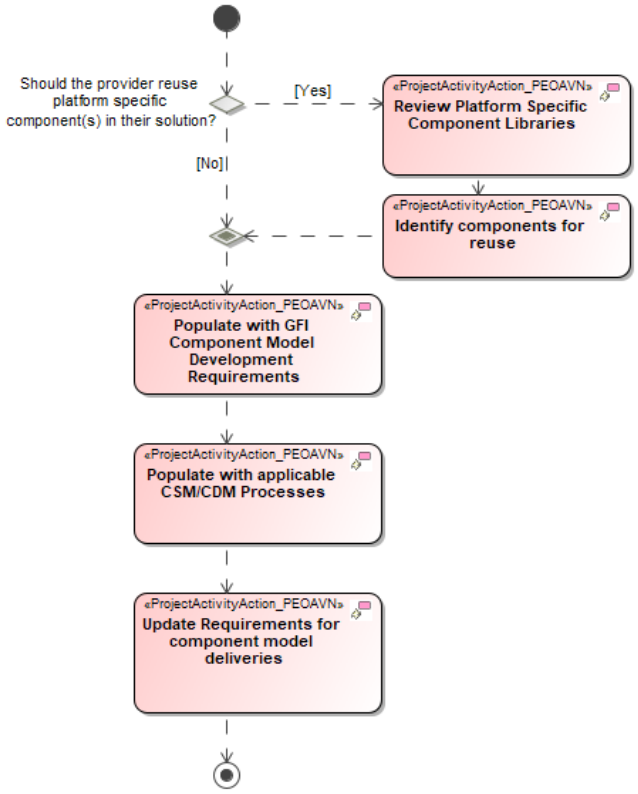

Figure 3. EAF Activity Diagram for PREP-2

After making significant progress on the initial Program Preparation Step #1 (PREP-1) and passing an acquisition review with PEO AVN, the program and PEO AVN assess the feasibility of reusing specific components for the acquisition. Once the decision to reuse components is made, the program integrates the GFI component model view(s) content into the Acquisition Model. This is achieved by generating project usage instances from the instantiated Acquisition Model, linking them to the identified component model project, and mounting the associated package. The final step of PREP-2 involves updating the requirements in the Acquisition Model related to specific component model deliveries and also requiring the use of identified GFE.

The current EAF Program Perspective contains activity diagrams for all Program Preparation Steps. The activities depicted in Figure 3 are described generally for this

illustration. The EAF Program Perspective contains detailed steps for each activity in all Program Preparation Steps.

EAF Component Model Development Process (CMDP)

The EAF also contains a CMDP. All Acquisition Models generated by a program using the EAF Program Perspective will contain the CMDP. These Acquisition Models contain requirements for specific component models and views that a performer needs to create for the acquisition, all of which require use of the CMDP. The CMDP establishes a repeatable process that implements numerous FAF SYSARCHs and processes. The CMDP also contains concepts leveraged from other component model development efforts. When a program follows EAF Program Perspective PREP-2 they identify the specific component models and views that a performer needs to create and deliver while following the required CMDP for development. The government may also supply component model views as GFI to ensure alignment to modularity decisions made by the enterprise as contained in the EPA, enterprise reuse libraries, or leveraged FAF content.

The desired end state of the EA is that the EPA will contain component model conceptual and logical views of all components designated as having MOSA implications across the enterprise. The EA will also contain physical views, but with the understanding that these may need to change based on platform-specific integration requirements. Such changes are not expected to cause changes in the conceptual and logical views to preserve enterprise MOSA requirements. Recognizing that such development will occur incrementally and opportunistically and also be revised over time, the EAF Program Perspective adopted an approach that does not assume that conceptual and logical views exist for all possible components that the enterprise designated as having MOSA enterprise implications. PREP-2 guides program staff to identify which views exist within the EA for the components they intend to acquire and to include existing views as GFI for that specific component model development. PREP-2 produces requirements for specific component models and views, includes related GFI, and requires use of the CMDP for how such deliverables will be created. All of this specification content is developed for the Acquisition Model unique to the platform-specific capability procurement. Alignment to enterprise modularity is guaranteed through the required use of GFI and following the same process for development of component models and views as aligned to the enterprise structure inherent in the EPA for the components a program needs to acquire.

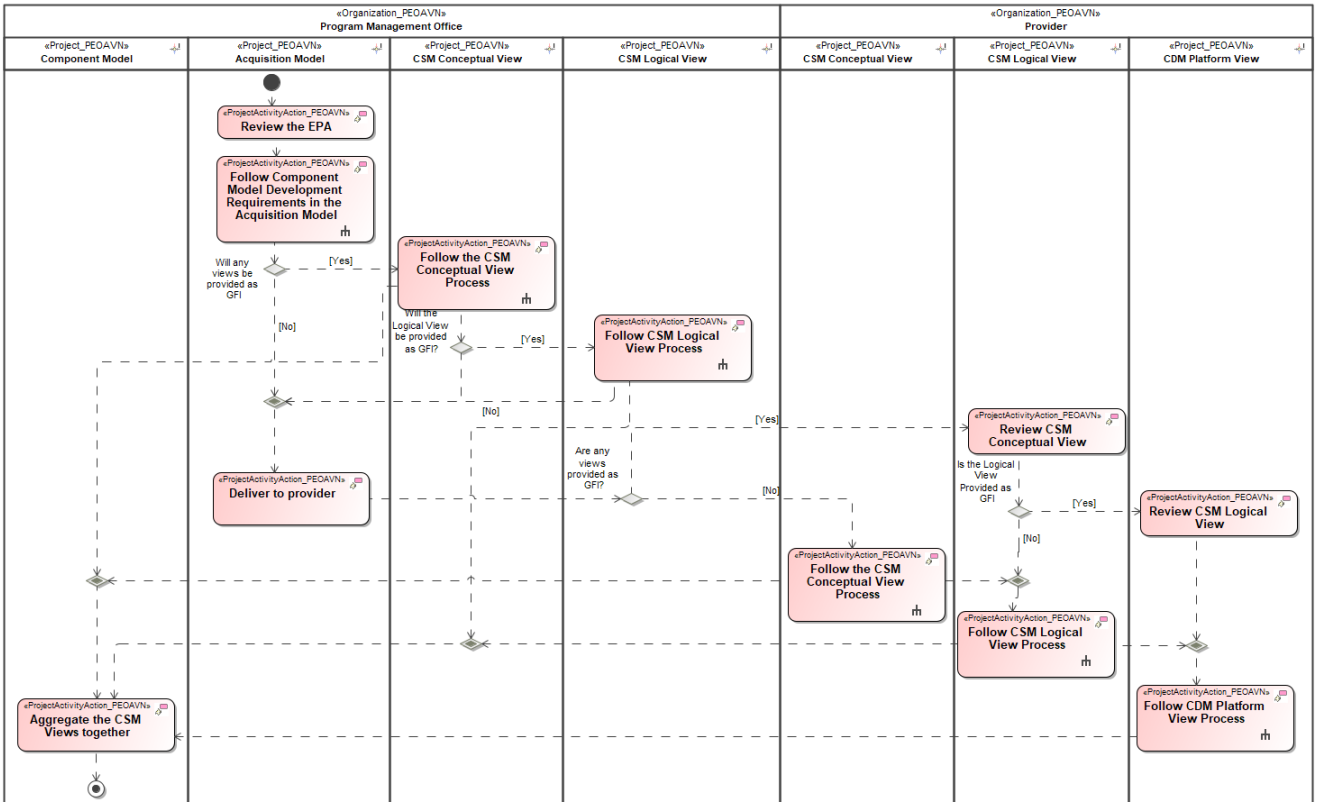

Figure 4. EAF Component Model Development Process (CMDP) Activity Diagram

Figure 4 shows the process to create a component model with the three separate views starting with the applicable EPA structure and concluding with the CDM. This is specific to how models are delivered between the program and the provider responsible for creation of deliverable components that have modeling requirements.

A performer can create the component model with new physical views (i.e., CDMs) created by the original developer

of the component capability. When components are delivered to the acquiring program with physical views and those components become GFE for other acquisitions, the physical view will also be provided with the requirement to use that GFE, but with the understanding that the developer/integrator for that reuse may need to modify the component model physical view associated with that GFE.

Using the FAF for component modeling relates development maturity of those models to checklists associated with CSMs and CDMs. The EAF adopted, modified, and extended these checklists to match conceptual, logical, and physical views created by following the CMDP. Activities to complete these checklists are contained in the current CMDP for continued demonstration of compatibility between the EAF and the FAF, but over time, it may be possible to eliminate this step based on the prescriptive nature of the CMDP that implements the intent of those checklist items.

One current area of application is use of variation points for physical view development to enable more cost-effective reuse. It is possible (and most probably expected) that a component may be reusable on multiple platforms but needs slightly different interfaces for integration. If these differences can be handled by physical view variation points that do not require any changes to the component hardware, and component software interfaces can be auto generated from the physical view component model, then strategic reuse will be more cost-effectively achievable. The FACE™ Technical Standard enables the auto-generation of interface software (called Transport Services) from data models consistent with the level of detail contained in component model physical views.

ENTERPRISE ARCHITECTURE (EA) CONTENT

Figure 1 shows how the EAF and EA interact. This approach was used because EA content is being developed independent from, but coordinated with, EAF development. This optimizes development autonomy without sacrificing needed alignment between the efforts. The core technical contents of the EA are the EPA and leveraged libraries from the FAF. PEO AVN designated a group separate from the EAF team to develop the EPA, and the Future Vertical Lift (FVL) program continues to mature the FAF.

Notably, the EAF Program Perspective constrains MOSA program developments to the structural organization of the EPA for any components determined to be applicable to multiple programs as a method of ensuring alignment to enterprise modularity decisions. This was not possible in the FAF, because earlier versions of the FAF existed before the EPA. It is expected that any gaps between decisions inherent in the EPA and FAF structures related to modularity will be resolved through incremental MOSA acquisitions using the EAF. Basically, if no gaps are addressed, when the EAF Program Perspective is used for a new program, the Program Preparation Steps produce a FAF-equivalent set of requirements and GFI Model as the Acquisition Model. As gaps are addressed, when a program uses the EAF Program Perspective, it will produce MOSA acquisition requirements, specifications, models, GFI and GFE that consider these alignments. In this manner, compatibility between the EAF and FAF can be maintained while allowing for incrementally addressing any differences between the two.

Following ISO 42020, the EAF will establish the process for development and sustainment of the EA itself. This is very different from using the EAF to generate acquisition specific MOSA requirements. The EAF Enterprise Perspective was established for this purpose. Though not as mature as the EAF Program Perspective, the EAF Enterprise Perspective contains additional leveraged content from the FAF related to activities that the enterprise needs to perform to address MOSA goals and objectives, such as strategic reuse and common modularity at the enterprise level. PEO AVN continues to evolve its approach and organization for this purpose. The intent for EAF Enterprise Perspective development is to adapt to these changes as they are approved by PEO AVN.

The EA leverages FAF content through project usage to the EAF. One of the requirements for EAF development was to have no direct dependencies on the FAF. Table 2 is a list of FAF content that has been tailored to the EA for use by the EAF Program Perspective. The EAF Development Team believes that Table 2 contains sufficient content for the EAF Program Perspective to proceed to alpha testing. If additional FAF content is needed for the EAF Program Perspective, it will be identified during alpha testing, and it will also be transitioned to the EA.

Table 2. Content Leveraged from the FAF for Use in the EA as Part of EAF Program Perspective Alpha Testing

Category	Content Leveraged from the FAF	
Requirements	All System Architecture Requirements	
Profiles	Airworthiness Qualification	Enterprise Component Templates
	AMACC	Enterprise Cyber Survivability Security
	Enterprise Safety Assessment	Enterprise IP Rights
	FACE	Enterprise Message Spec
	AADL	Enterprise Property Set

	Distribution Statements	Enterprise Requirements Information
	Document Artifact	Structured Threat Information (STIX)
Libraries	FACE Shared Data Model	Enterprise Supporting Elements
	GFI Domain Specific Data Model	Weapon System Common Capabilities
	AV-MSA Tasks	JCA Data Model Queries
	Key Interface Logical Architecture	Joint Common System Function List
	Key Interfaces – Logical Interfaces	Joint Capability Areas
	Key Interfaces – Requirements	NIST Security
Other	Acronyms	Military Standards
	Design Model Platform View	Policies, Publications, and Regulations
	Key Interfaces – Logical Concept	Reference Documents
	Key Interfaces – Guidance	Spec Model Conceptual View Template
	Glossary	Spec Model Logical View Template
	Industry Standards	

Generating an Acquisition Model Using the EAF Program Perspective

When program staff uses the EAF Program Perspective, they generate an Acquisition Model and contractual language making the Acquisition Model required for the procurement. This Acquisition Model contains: (1) MOSA requirements, (2) the CMDP, (3) weapon system specific GFI content, (4) descriptions of weapon system specific required GFE, and (5) MOSA addenda to standard contractual artifacts. Each will be discussed in this section of the paper.

MOSA requirements are drawn from the FAF SYSARCHs and transitioned to the EA from the FAF, sometimes with modifications and improvements producing tailored MOSA requirements for the Acquisition Model. These tailored MOSA requirements are organized into the following categories for ease of performer use:

(1) General MOSA requirements and tailoring for specific component model development (this includes requirements associated with the contractual SOW and the performance specification among other generally applicable content),
(2) Component modeling conceptual view requirements (if applicable, and if so, identifies the specific component models and requires use of the CMDP and alignment to the EPA),
(3) Component modeling logical view requirements (if applicable, and if so, identifies the specific component models and requires use of the CMDP and alignment to the corresponding conceptual views),
(4) Component modeling physical view requirements (always applicable and identifies the specific component model, requires use of the CMDP, and requires alignment to the corresponding logical views),
(5) Requirements related to development of an Open Systems Management Plan,
(6) Tailored MOSA software requirements principally collected from PREP-3 activities,
(7) Tailored MOSA hardware requirements principally collected from PREP-4 activities,
(8) Tailored MOSA safety requirements principally collected from PREP-5 activities,
(9) Tailored MOSA security requirements principally collected from PREP-6 activities, and
(10) Tailored MOSA V&V requirements principally collected from PREP-7 activities.

It should be noted that the CMDP implements numerous FAF SYSARCHs associated with component model development that do not need to be repeated separately in the groupings of Acquisition Model requirements. However, for near-term compatibility with the FAF, the EAF can generate these same requirements for its Acquisition Model. This will be further assessed during alpha testing.

The CMDP is included in all Acquisition Models and the Acquisition Model requirements specifically state which component models and views need to be created for the acquisition. The CMDP will reference required use of other GFI artifacts placed in the Acquisition Model when a program followed the EAF Program Perspective PREPs. An example of this is a program providing Conceptual and Logical Views of a modular component to be acquired requiring reuse of these views from enterprise libraries with alignment to the EPA. In this case, there will be an Acquisition Model requirement for the performer to use the CMDP and the GFI Logical and Conceptual Views to develop and deliver a Physical View for the same component.

The example in the previous paragraph also highlights weapon system specific model content in the Acquisition Model. All model content that a performer needs to address MOSA requirements for the acquisition are included in the Acquisition Model created when a program follows the EAF Program Perspective PREPs. These Acquisition Model requirements and models are specific to the procurement and tailored accordingly for inclusion in an Acquisition Model.

As PEO AVN continues to develop strategic reuse in the context of MOSA, it is expected that they will require programs to use GFE to meet certain functional requirements. By forcing alignment to the EPA, when a program follows the EAF Program Perspective, they will partition functional requirements, for enterprise components, according to the structure of the EPA. Lowest level functional decompositions of the EPA can identify GFE to address those functional requirements. When a program reviews its MOSA acquisition strategy for the capability, these GFE items will be identified and either included in the acquisition or the program will need to justify why not. Those included in the acquisition will appear as GFE requirements in the Acquisition Model to solidify strategic reuse of these enterprise products. This topic is addressed at both reviews between the PEO and the acquiring program when a program uses the EAF Program Perspective to create its MOSA requirements.

The EAF Program Perspective includes program preparation steps for MOSA-based safety, security, and V&V requirements. PEO AVN programs already develop requirements for these attributes but aligning to enterprise MOSA goals and objectives related to them is relatively new. Knowing that programs will already have mechanisms in place for these types of requirements, the EAF Program Perspective was designed to focus only on the MOSA-related requirements of these attributes. So as to not impact other program work on these attributes, EAF Program Perspective PREPs 5, 6, and 7 produce addenda of MOSA requirements associated with these attributes.

STATUS OF THE EAF

As of January 2024, the EAF Program Perspective, Version 1.14 has achieved MVP maturity suitable for first alpha tests. These tests will exercise program use of the EAF Program Perspective relative to a representative capability acquisition for the purpose of assessing the usefulness of the generated results. The EAF Development Team will work with selected PEO AVN program staff on use of the EAF Program Perspective and document any needed changes to be done for a successive set of beta tests.

Summary of Vertical Lift Consortium (VLC) Assessment of the EAF

The US Army sponsored a VLC (Ref. 13) project to obtain an industry assessment of the EAF. Unfortunately, the VLC industry team only had initial access to EAF Version 1.7 (with an update to Version 1.9.1 for component modeling) because development of the EAF, principally the Program Perspective, was in process during the VLC project timeline. The VLC industry team submitted their final report in November of 2023. Though they used an older version of the EAF, this effort produced useful ideas to further mature the EAF as it enters alpha testing. Several significant VLC EAF assessment results that were not in conflict with or already implemented by continued EAF Program Perspective development that are in the VLC task final report are summarized as follows:

- Rationalize and improve use of functional libraries (includes specific recommendations).
- Re-assess inputs and outputs of functions in the context of using them for CSM development (to a large extent this is being done as part of EPA development, but the VLC industry team recommendations would be applicable to further development of the EAF Enterprise Perspective).
- Improve component model development with specific recommendations to align closer to the FACE™ data modeling approach with related modifications to component model checklists.
- Recommendations to create independence from selected modeling tools.
- Adjust to resolve compound requirements definitions.
- Cyber Annex Requirements should not be used as is for EAF. Instead of prescribing requirements, the EAF should provide refined controls based on the NIST 800-53 (Ref. 14).
- Numerous recommendations of Product Line Engineering (Ref. 15) applicable to the EAF Enterprise View
- Remove inconsistencies associated with example CSMs.

To note, most of these recommendations are associated with EAF content in transition from the FAF, because one overarching aspect of the VLC task was to identify FAF content applicable to the EAF. The EAF Program Perspective approach was to migrate, transition, or tailor as much content as possible from the FAF for greatest chance of compatibility and then see what is actually needed as programs follow the EAF Program Perspective steps to generate their Acquisition Models. The referenced VLC report (Ref. 12) contains more recommendations, details, and supporting documentation which can be reviewed after these reports are available from the Defense Technical Information Center (DTIC).

Next Steps

Alpha testing of the EAF Program Perspective began with preliminary analysis activities starting in December of 2023. Involvement of program staff using the EAF Program Perspective is expected to start in May of 2024 and continue for a few months. Ideally, alpha testing will consist of one new and one enduring PEO AVN program. At the time when this paper was being written, the EAF development team was in discussions with PEO AVN staff to determine exactly how this will be done. Following updates to the EAF Program

Perspective from alpha testing (also including recommendations from the VLC industry team), the plan is to proceed with beta testing for other MOSA acquisitions neded by PEO AVN programs.

In parallel, the EAF development team continues to further develop the EAF Enterprise Perspective to ensure incorporation of the latest PEO AVN enterprise strategies and approaches. Near term objectives of this effort will be how to establish Major System Components (Ref. 12) (both enterprise and program) and rules for establishing enterprise modularity. Updates to the EAF Enterprise Perspective will also include latest PEO AVN strategies related to organization and governance to ensure alignment with statutory requirements and higher organizational directives and guidance related to MOSA.

Beyond these near-term efforts, the EAF development team hopes to expand EAF use to a full model-based acquisition. Instead of generating MOSA language and addenda to supplement a program's acquisition approach, the long-term goal of the EAF is to auto-generate all the contractual models and documentation for the acquisition.

CONCLUSIONS

The most important results presented in this paper are:

1. PEO AVN EAF Program Perspective has achieved MVP maturity and is entering alpha testing.
2. PEO AVN EAF Enterprise Perspective is continuing to mature as PEO AVN itself evolves for MOSA and model-based acquisitions.
3. Updates resulting from EAF Program Perspective alpha testing will include numerous recommendations from a VLC risk reduction task associated with the EAF.
4. Decoupling by independently developing the EA while making the latest version of it available to the EAF as a project usage minimizes needed changes to the EAF Program Perspective for enterprise-wide program use.
5. Maximizing content from the FAF reduced the risk of EAF development not just for new but also enduring programs.

As a framework, the EAF needs to change as the PEO and its higher organizational authorities address the evolving nature of military acquisitions. These types of changes are more evolutionary than revolutionary, and therefore not difficult to implement in model form. By setting a framework for structure, governance, and use of the EA, a successful beta test version of the EAF will not need to change significantly even with an expectation of significant changes to the EA as mandated by the capability complexities of defense strategy and how those capabilities need to be acquired.

Authors contact information:

Dr. Thomas A. DuBois (tom.dubois@jhna.com),
R. Alan Hammond (alan.hammond@jhna.com),
Jonathan Hay (Jonathan.hay@jhna.com),
Aaron Cleary (aaron.cleary@jhna.com),
Ethan Scott (ethan.scott@jhna.com),
Matthew J. Steiger (matthew.j.steiger@irtc-hq.com),
Keith B. Zook (keith.zook@irtc-hq.com), and
John Stough (john.stough@jhna.com).

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