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Logistics Analysis to Improve Deployability (LOG-AID): Concept Development

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FOR THE COMMANDER

Mark M. Hoffman

MARK M. HOFFMAN Deputy Chief Deployment and Sustainment Division Air Force Research Laboratory

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institutionalizes continued proce	ess improvement and technology	application The LOG.	AD program applying the summer
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PREFACE

The research documented in this technical report for the Logistics Analysis to Improve Deployability (LOG-AID) program was sponsored by the Air Force Research Laboratory, Human Effectiveness Directorate, Logistics Readiness Branch (AFRL/HESR), Wright-Patterson AFB, OH. The work was performed under contract F41624-96-C-5000 by Synergy, Inc. Captain Adrian M. Crowley was the Air Force program manager for the effort. Other laboratory personnel who made major contributions during the program were Captains Dwight F. Pavek and Joseph D. Martin.

EXECUTIVE SUMMARY

The eve of the 21st century marks more than a chronological milestone. Changes in technology and fundamental restructuring and downsizing of the military call for fresh thinking about how the military accomplishes its goals and objectives. The challenge is to adapt and use organizations, processes, and rapidly changing technologies to achieve greater effectiveness and quality at reduced cost. Organizations that master change will continue to improve their operational effectiveness, while those failing to reengineer their practices and policies will gradually loose effectiveness.

The Logistics Analysis to Improve Deployability (LOG-AID) program is sponsored by AFRL to enable the Air Force to monitor change in information technology. The objective of the program is to improve the Air Force deployment capability through a process-driven approach that allows for technologies to be applied smoothly and institutionalizes continued process improvement and technology application.

The development of the As-Is models representing the current deployment process was based on the integration and analysis of information collected from regulations and manuals, from users at numerous bases located throughout the CONUS, USAFE, and PACAF, as well as first-hand observation of the deployment process operation at those bases. In addition to describing the current process, users identified process problems and improvement ideas for use in the development of the To-Be process model. The As-Is models were then presented back to the users for their review and verification ensured a solid foundation from which to build towards the To-Be deployment process concept of operation.

Analysis of the As-Is process resulted in eighteen Deployment Process Improvements (DPIs) grouped into the categories of Information Systems, Process, Policies, Training, and Personnel Attitude. Criteria obtained from the users and ranked by the users established the basis for determining the relative importance of these DPIs. Changing the As-Is wing-level deployment process in accordance with these DPIs resulted in the To-Be deployment concept of operation. The accuracy, completeness, and acceptance of these DPIs and the To-Be process description were verified through a series of validation trips involving their presentation to deployment

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experts for review, comments, and suggestions. Figure 1 lists the DPIs, the ranking criteria, and the ranking of the DPIs based on the criteria.

Deployment Process DPIs	DPI Rank
 INFORMATION SYSTEMS Implement highly integrated information systems across levels of command, across and within deployment and reception sites to include a task receipt-to-airlift-manifest information system. PROCESS Optimize production and minimize inspection activities Adjust responsibilities and improve integration of units, Manpower, and Personnel Capitalize on cargo and personnel processing similarities Collect process status and effectiveness information using, passive means Improve in-transit visibility Control tasking receipts into the base Reduce the number of coverage days included for initial deployment Better define the objective and criteria for UTC tailoring TRAINING 	User Defined Deployment Performance Criteria • Deployment Footprint • Resource Utilization 2 • Information Fusion 3 • Deployment Execution Time • Flexibility • Quality of Deploying Resources • Deployment Cost
 Apply real-world training characteristics to exercises Maximize training benefits Include total process training Incorporate training and efficiency evaluation capability into LOG-AID system 	8 4 6 5
 POLICIES Provide the UDM capability to produce more deployment-ready personnel and cargo Develop deployment guides for each deployment position Refine the AFIs as necessary to best guide the deployment process 	10 9 7
PERSONNEL ATTIFUDE	
 Develop a process to encourage augmentees to participate in deployment Develop a process to encourage augmentees to be committed to real world contingencies to the same level as exercises 	14 16

Figure 1. DPI Ranking Using User-Defined Deployment Performance Criteria

The streamlined To-Be deployment process is comprised of a set of well-defined, integrated, and non-duplicating activities. Supporting the activities are a series of process structures which control and integrate these activities among organizations so as to minimize duplication of data and limit number of information systems.

While the basic deployment process requirements will remain relatively constant into the future, the technologies available to implement the process will change dramatically. With the year 2010 selected as the first implementation target, the focus of the Year 2010 Concept of Operation (CONOP) current or anticipated technologies. As time progresses beyond 2010, evolving technologies will replace the Year 2010 technologies as appropriate, further enhancing the effectiveness of the deployment process. These enhancements in deployment capability will

minimize the deployment footprint, reduce the reaction time required to satisfy a deployment tasking, and reduce the number and skill level of personnel performing the deployment.

The intended goal is to have an AF wide process that will allow for variations in technologies for implementation of the process at the wing level. Incremental implementation of the To-Be CONOP is based on the user-defined DPI ranking and will produce near-term and step-wise benefits while reducing implementation and operational risks. This incremental implementation with variations in technologies also allows for the deployment bases with varying levels of existing deployment technologies to upgrade their technologies based on their need rather than requiring the implementation of a large single technology package capability. Thus, organizations will be able to control their change achieving greater effectiveness and quality at reduced cost through the reengineering of their process and policies.

Identifying the DPIs and laying the foundation for the development of the To-Be CONOP required the application of a methodology that effectively integrated the users and the LOG-AID analysis team. As presented in this document, the methodology foundation started with a baseline understanding of the wing-level deployment process. The next step was direct interaction with 132 personnel at 16 Air Force bases, as well as operational observations of the wing level deployment process. This data was documented through a set of As-Is functional models, data models, process flows, and simulation models. In addition, criteria ranking data was collected from each individual to help determine the order of importance of the DPIs.

Ranking the DPIs by the user-defined criteria prioritized the DPIs with respect to their importance and benefit to the users. To verify the DPIs we presented to over 300 users at 17 bases worldwide. The accepted DPIs were then used as the basis for changing the As-Is models so as to produce the corresponding To-Be models. These models were the developing foundation for the LOG-AID CONOP focused on the year 2010. In addition, the To-Be models provided the requirements and specifications for identifying and selecting technologies to implement the future process or to identify the research requirements for designing and developing new technologies.

In parallel with the primary wing level process analysis was the development of the Agile Combat Support Process and Technology Center (ACSPTC). Set up as a testing laboratory

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concept, it provided the opportunity to implement and work with many existing wing level deployment tools, to implement and work with tool concepts developed within the LOG-AID program, and to gradually build a limited version of the To-Be wing-level deployment process.

Everything was now set to effectively and efficiently develop and implement a test plan to demonstrate the operational benefits provided by the To-Be CONOP built upon the DPIs. The ranked DPIs were transformed into a set of testing initiatives. Prior to their site implementation, the To-Be simulation and the ACSPTC provided capabilities necessary to predict the potential operational benefits prior to the site implementation.

Finally, the results of the LOG-AID program produced two critical capabilities for ensuring continued benefits. First, the methodology and models developed as the program foundation form the basis for a continued process improvement capability necessary to ensure the continued optimization of the wing-level deployment process. Second, an approach was developed to encourage and facilitate the transition of the To-Be CONOP and the implementing technologies to the supporting bases. Through this implementation transition is realized in a more uniform wing level deployment process optimizing the bases deployment capabilities while minimizing system development and training requirements. Thus, the Air Force will have made significant steps towards meeting future operational requirements as stated in Air Force Vision 2010.

As the Air Force evolves to an Air Expeditionary Force (AEF), the need to reduce force deployment time and reduce the deployment footprint are critical. While not the total solution, the results of the LOG-AID analysis make tremendous strides in achieving the AEF capability. When implemented, LOG-AID alone will result in a 14 hour (60%) reduction in the forcet deployment timeline. More importantly, LOG-AID sets the stage for continuous process analysis and technology application that will facilitate structured improvements well into the next century.

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1. INTRODUCTION

Conducted by the Synergy Team under contract to the Air Force Research Laboratory Logistics Readiness Branch (AFRL/HESR), the Logistics Analysis to Improve Deployability (LOG-AID) program analyzed the current wing-level deployment process and developed a set of Deployment Process Improvements (DPIs) directed at increasing the operational effectiveness of the Air Force's (AF) wing-level deployment process. The DPIs provided the foundation for developing the requirements for a streamlined process providing the capabilities to reduce the deployment footprint, reduce deployment response time, and improve the use of deployment resources.

The scope of the wing-level deployment process considered within the LOG-AID program starts with the receipt of the deployment tasking and finishes with the deploying resources loaded on the transporting conveyance. This scope includes all information processing and activities of the Battle Staff, load planners, Deployment Control Center (DCC), Installation Deployment Officer (IDO), Unit Deployment Manager (UDM), incheck personnel, on-base transportation, Cargo Deployment Function (CDF), Personnel Deployment Function (PDF), marshaling team, load master, and load team.

The LOG-AID program addressed a set of integrated objectives identified as follows:

- Identity and document shortfalls in the current deployment planning and execution process and supporting systems;
- Identify innovative process improvements and technologies that significantly enhance the stakeholder's ability to satisfy the deployment requirements;
- Define and document a Concept of Operation (CONOP) for best-case wing deployment planning and execution at base;
- Implement a demonstration at a facility in which the process improvement concepts and information systems integration can be tested and demonstrated.

Successful performance of the LOG-AID program required the application of a stakeholder-focused methodology based on the development and analysis of As-Is and To-Be models representing the deployment process. The information used to develop the As-Is models came from reviews of literature and previous programs, and from site visits. During the visits, the LOG-AID team observed deployment operations and interviewed personnel, or stakeholders, directly involved with deployment performance, being deployed, and evaluating the deployment.

Organization of the collected information into a set of As-Is models formed the primary analysis tools for identifying processing strengths and weaknesses. DPIs developed to build upon the strengths and address the weaknesses produced the stepping stones to the streamlined, improved process as documented in a set of To-Be models, including potential technologies to implement the improved process. Extracting the processing requirements from the To-Be models produced the LOG-AID CONOP.

The LOG-AID Agile Combat Support Process and Technology Center (ACSPTC) provides a facility to integrate information systems and technologies making up current deployment process. As the process improvements and technologies develop, the ACSPTC provides the capability to verify the improvements, to test new technologies, and to perform trade-off analysis. This report presents this methodology, with the resulting models presented in the Appendices.

1.1 Background

Significant changes in the world situations are forcing the military to transition its operational capabilities to meet a varying set of mission requirements. Specifically, military support requirements are changing from one of supporting major, long-term conflicts in a relatively predictable set of global sites to supporting shorter-term conflicts and humanitarian missions at almost any point in the world. These changes in global mission requirements necessitates a responsive, sustainable, and survivable support force prepared to promote and defend national interest anytime and anyplace.

Thus, the traditional practice of using massive quantities of troops and large stockpiles of supplies available in-theater to engage hostile forces is quickly becoming obsolete. Additionally, extensive build-up time, and lengthy supply and repair pipelines to sustain forces are unrealistic. Because of these changes in world situations, the Air Force logistics of the future faces its greatest challenge of improving itself so as to provide a precise, agile response capability.

To address these changing conditions, the United States Air Force (USAF) is embarking on a new set of initiatives under the banner Global Engagement as documented in Joint Vision 2010. These initiatives are the core competencies of Air and Space Superiority, Global Attack, Rapid Global Mobility, Precision Engagement, Information Superiority, and Agile Combat Support (ACS). The core competencies support the Air Expeditionary Force (AEF) concept by providing the necessary military support for the changing global military requirements. Satisfying these operational goals requires increased flexibility to address changing mission requirements, increased responsiveness, reduced deployment footprint, and reduced personnel and equipment to support the deployment operation.

These operational changes directly impact the requirements placed on the wing level deploying units. Specifically, the units no longer have the luxury of leaning forward in their deployment preparation. Rather, they face a future requiring them to react based on unanticipated taskings, to accomplish the deployment in a limited time frame, and to transition in a seamless manner between their day-to-day training operations and their deploying operations.

As the Air Force moves into the future, units and bases must deploy as an integrated set to provide those resources needed to support the designated mission. This integration requires a combination of communications and coordination supported by a deployment process having significant commonality across units and bases. The communications and coordination allows for the tailoring of deploying resources, thus footprint reduction, based on the sharing of resources among units as well as the increased use of resources located at the reception site. Process commonality minimizes the need to adjust the process due to the deployment size or type. Thus allowing the deployment support

personnel to concentrate on performing the deployment activities rather than determining what the activities prior to performing them.

Operating in this seamless environment requires the wing-level deployment process to be performed more effectively through the application of a streamlined and properly implemented deployment process. To be viewed as streamlined, each action performed in the process produces a unique product that is needed in the performance of subsequent activities. Effective implementation requires an effective allocation of activities between personnel, and the selection of technologies that satisfy both functional and performance capabilities of the process.

This distinction between the process definition and the process implementation allows for their separate event ion and continued process improvement. A streamlined deployment process should delatively stable over long periods of time. The ever-changing capabilities in technologies, however, provide the potential for improving process efficiency by changing process implementation using those technology. This separation between process definition and process implementation also allows for the application of the process definition at all bases regardless of their level of deployment commitment while allowing the technology implementation to vary among bases in accordance with their deployment.

Having established a streamlined processing definition and implementation concepts, the foundation exists to carry the Air Force not only into the year 2010 as designed for the LOG-AID program, but well beyond.

2. METHODOLOGY

The LOG-AID program used Systems Research and Applications Corporation (SRA's) Enterprise Life Integration Technology Engineering (ELITE) methodology as the comprehensive system life-cycle analysis framework to bring all Business Process Reengineering (BPR) related activities together into an integrated approach. As shown in Figure 2, ELITE addresses the full range of strategic planning activities, BPR, information systems development, deployment, and operations and maintenance (O&M).

ELITE ties all activities together with artifacts (requirements, designs, code, and documents) and surrounds all activities with a comprehensive management infrastructure. ELITE allows for entry and exit at points appropriate to the scope of the given program effort and accommodates varied methods, techniques, and tools.



Figure 2. ELITE Methodology

Phase I - ELITE: Planning, the enterprise looks outward to understand the environment in which it operates, looks inward to candidly assess its strengths and weaknesses, sets a course for the future, and plans an approach to get there. While planning is primarily an internal activity, this phase is vital to the success of any future initiative.

Phase II - BPR: identifies better ways of conducting business, avoiding the perpetuation of inadequate or inappropriate business processes. Accomplishing Phase II requires the analysis of current business processes, development and evaluation of alternative means

of meeting the organization's future objectives, and the generation of plans to realize the selected alternative through implementation projects.

Phase III - Construction/Development: converts the plans and models developed during BPR into a real system, along with the detailing of organizational and related infrastructure changes required to implement the improved business processes. ELITE's unique approach to this phase defines three interdependent development paths: selection and integration of the system infrastructure (hardware, system software, and commercial or governmental off-the-shelf applications); creation of new, reengineered, or converted automated information systems software; and implementation of changes to the customer's organizational structures and internal operational procedures. Each of these paths overlaps and complements the others to address all development factors in a comprehensive manner. Within each path, activities defined for requirements analysis, design, and development culminate in the delivery of a system ready for acceptance.

Phase IV - Implementation: the infrastructure, automated information system, and new organizational structures and procedures are installed, acceptance tested, and deployed. System fielding is coordinated with user training and implementation of organization and procedural changes. Our key to continuous process improvement is the application of the full ELITE methodology for all required modifications and upgrades.

The integrated phases of ELITE allow for the traceability of requirements, configuration management of all information collected and products generated, facilitation of customer involvement, and overall management control of the program.

The Air Force accomplished most, if not all, of the planning activities in ELITE Phase I. This planning involved the definition and scoping of the LOG-AID program and the generation of the statement of work leading up to analysis work performed within Phase 2. LOG-AID, therefore, concentrates primarily on completing Phase II, the BPR portion of the ELITE methodology. After development of the LOG-AID CONOP, it provides the foundation for implementation test plan development designated in Phase 3. The results of the implementation tests provide the guidance necessary to define and implement the optimized deployment process at various bases.

Within the scope of ELITE Phase II, the LOG-AID program applied a user focused, three-task approach as represented in Figure 3. Throughout these three tasks, close coordination with the users helped to ensure an accurate, complete, and documented understanding of the work performed within the wing-level deployment process, and provided the basis to present and gain acceptance of the developing improvement concepts.



Figure 3. LOG-AID Approach

The "Define Current Methods" task produced the description of the current wing-level deployment process as documented in a set of As-Is activity, data, and process flow/simulation models as presented in Appendices B, C, and D respectively. These models provided the analysis tools necessary to identify operational problems within the current process and to evaluate whether user-identified problems were core problems for symptoms of other core problems. These analyses identified process strengths and weaknesses which were categorized in terms of information systems, process, policies, training, or personnel attitude. Building upon the process strengths and correcting the process weaknesses, DPIs were developed and ranked (prioritized) with respect to the benefits each DPI provide to users. The DPIs provided the foundation on which to develop the To-Be activity, data, and process/simulation models, as presented in Appendices F, G, and H respectively, describing deployment in the year 2010. Extracting and organizing the information from these To-Be models produced the Deployment 2010 Concept of Operation.

Supporting all aspects of the LOG-AID was the ACSPTC. Starting with the software programs currently used to support the deployment process, this computer-based facility provided the capability to understand the current programs and gain experience with the performance situations being faced during wing-level deployments. As the program progressed, enhancements to the ACSPTC included new support program and program integration concepts providing the capability to test software tool and system integration concepts.

3. ANALYSIS

3.1 Define Current Process

A description of the current wing-level deployment process formed the foundation for developing of the 2010 wing-level deployment process. The current process description established a common understanding of the deployment process, provided a means by which to compare deployment processes across various sites, provided a means of understanding the historical development of the deployment process, and provided a benchmark against which to measure the effectiveness of the proposed improvement recommendations.

The application of a user-focused methodology produced a description of the current deployment process by identifying and collecting process data, and documenting the As-Is process description via the development of the As-Is activity, data, process flow, and simulation models. The following subsections present details for the definition of the current process.

3.1.1 Methods Description

Defining the current methods started with specifying the scope of the problem and identifying the criteria and metrics for measuring the improvement recommendation effectiveness. With the scope and metrics identified, information obtained from functional experts and documentation reviews formed the basis for the development of the initial or strawman functional model.

The initial functional model provided the process understanding necessary to identify the data collection requirements in terms of the types of information needed to accurately describe the deployment process. The information requirements guided the selection of information sources and the development of a data collection kit. The sources included the roles or personnel skills that could provide the needed information and an analysis of the Air Force sites throughout the world identified the best set of sites at which to access the identified sources. The bases and skills (stakeholders) visited and interviewed are listed in Figure 4, along with the number of interviews associated with the five major activities associated with the wing/base-level deployment process.

Deployment process effe <u>SITES</u> Ohio ANG (Springfield) Indiana ANG (Ft. Wayne). Wright Patterson AFB Langley AFB Eglin AFB Tyndall AFB Holloman AFB Mt. Home AFB McGuire AFB Ramstein AFB Spangdahlem AFB Shaw AFB Youngstown ARS Seymour Johnson AFB Randolph AFB Maxwell AFB/Gunter Anney	ectiveness dependent on perspective STAKEHOLDERS INTERVIEWS Wing Commander Planning (65) IDO/DCC Unit Preparation (27) UDM Transportation (8) Load Planner Cargo Processing (23) Manpower & Personnel Processing (9) Porsonnel TOTAL (132) PDF CDF/Incheck On-Base Transportation READY Marshaler/RAMPCO Load Master/TRANSCOM Reception Site Y
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Figure 4. LOG-AID Data Collection Sources

Following each data collection trip, analysis of the collected information supported the gradual refinement and expansion of the strawman model into the As-Is functional model as well as the refinement and enhancement of the data and simulation models. The increased process understanding provided by the improved As-Is models directly affected the information collection requirements for subsequent data collection trips. This data collection and model development cycle continued until the completeness of the As-Is models supported the requirements of the process analysis.

To further facilitate the development of the As-Is functional model, information from previous and on-going programs was reviewed and brought forward into the As-Is functional model. The information gained from the previous and on-going programs was documented in the LOG-AID Background Paper. The background paper

provides an effective reference for future related programs first by identifying related programs, providing insight into focus and results of the programs, and describing how the LOG-AID program used those programs. Throughout the development, model reviews verified the model accuracy and completeness.

Interviews with subject matter experts on the LOG-AID team and document reviews provided the starting point for the strawman model development. The strawman development ensured a common understanding of the boundaries and goals of the LOG-AID program along with a top-level understanding of the wing-level deployment process within the defined boundary.

The literature search expanded and verified information from the LOG-AID team's SME's by bringing forward information, results, and ideas from previous and ongoing programs. Documentation of the literature review in the Background Paper provides an effective reference for future programs focusing on the wing-level deployment process.

Categorizing the related programs in terms of the scope and perspective provided the basis for mapping the programs to the LOG-AID As-Is models and helped identify the appropriate program to be brought forward into the LOG-AID program. This program categorization provides the following three primary insights:

- The relationship between the various related programs and the LOG-AID program;
- A picture of the total analysis coverage directed at the deployment process; and
- The deployment process segments not yet addressed by analysis.

To provide a common understanding for comparison, the following definitions of perspectives were applied.

Functional Analysis Perspective: Focuses on the functions or activities performed within a process and identifies the informational relationships that must exist to optimize the performance and coordination of the processing functions. This

analysis identifies and reduces duplicate and non-value activities, resulting in a streamlined process that maximizes the use of implementation resources. This analysis generates the functional and informational requirements for the process.

- **Information Perspective:** Focuses on the information requirements identified by the functional perspective analysis to support the current process with the objective to reduce the duplication of information elements and to organize the logical structure of the information to maximize the operational efficiency. This analysis specifically helped to identify the commonality of information existing between personnel and equipment which leads to the potential for developing a unified information system for both.
- **Process Flow Perspective:** Focuses on flow efficiency of the process with the objective to reduce process flows, and to develop requirements and specifications to reduce bottlenecks. The process flow perspective, which often times includes simulation, is overlaid onto the functional and information perspectives to represent the performance characteristics of the process. These performance characteristics are documented as the performance requirements and specifications needed to identify and select technologies to support the process and the design of physical data structures needed to effectively support the process performance.
- **Information System Perspective:** Focuses on the development of individual information systems and/or the integration of individual information systems with the objective of optimizing the user interaction with the supporting information system. The functional requirements developed thus far lay the groundwork for the information system perspective which establishes the physical design of the data structures that will most efficiently satisfy the goals of the process performance.
- **Organizational Structure Perspective:** Focuses on the assigned organizational responsibilities for accomplishing the process with the objective of establishing

a chain of command that controls as well as implements the process. The organizational perspective assigns process and communication responsibilities to the appropriate organizations.

Technology Perspective: Focuses on the application of technology to perform the process based on the process functional requirements and performance specifications. Identifying the necessary technologies will begin by searching for existing technologies to satisfy the performance specifications. If no technologies exist to satisfy the specifications, new research efforts may be initiated to developed the needed technologies.

For a process improvement effort such as LOG-AID, applying the perspectives in a logical order is important. The functional or analysis perspective provides the foundation for the entire LOG-AID program, followed closely by the information and process flow perspectives. The information system perspective is then applied and followed by the organizational structure and finally the technology perspectives. This ordering of the perspectives is important because the goal is to establish the requirements and specifications for the technologies so as to support the accurate selection or development of the necessary technology. Stated in another way, the implementation of the process must be process requirements driven rather than technology driven.

The site data collection process consisted of on-site interviews and observations of the deployment process. In addition to collecting process description information, user ideas were also collected regarding what the stakeholders believed was wrong with the process and how the process could be improved.

To optimize the aforementioned data collection effort, a well-defined set of data requirements based on the initial activity model was established. These requirements included activity-oriented data, interface-oriented data, and operations-oriented data. The activity-oriented data included activity definition information, inputs and outputs for the activities, and regulations and guidelines (controls) that defined the process of implementing the activities. Interface-oriented information included manual and automated interfaces among the personnel and organizations within the wing, and

between the wing and supporting information systems. Operations-oriented data included performance definitions, process sequencing, and resource requirements data along. Finally, the problems and improvement related ideas from functional experts and users addressed a wide range of issues.

This included the identification of actual problems, symptoms of problems, personal dislikes about the process, duplication and non-productive aspects within the process, and technology application. Actual problems within the deployment process are steps which cause inefficiencies in the process and if corrected result in improved process effectiveness. Symptoms of problems appear at first glance to be actual problems, but if addressed directly with a correction do not improve process effectiveness. Thus the symptom of a problem is not the actual problem, rather it indicates that a problem somewhere in the process is producing the symptom. Personal dislikes about the process do not necessarily mean the process information system is inefficient, it simply means that a person does not like the manner in which the process is implemented. Thus, corrections to this type of identified problem will not result in operational efficiency, but will improve the willingness of individuals to perform the process. Duplication and nonproductive aspects within the process identify definite inefficiencies in the process. Duplicative process activities mean the same activities are performed more than once, when only one performance is needed. Non-productive activities mean that activities are producing products that are not used by subsequent activities or provided to the process customer. Technology application relates the effectiveness of the technologies used to implement the process to the true requirements and goals of the process. At times process implementation is technology rather than process driven. Technology driven implementation occurs when a technology is selected and then force fitted into the process. Process driven implementation occurs when the process's functional and performance requirements are identified and used to select or develop the most applicable technology.

The on-site data collection was accomplished as a combination of one-on-one interviews and observation. Using a pre-established set of information collection objectives, a maximum of one hour interviews were held with each selected individual. The preestablished set of information collection objectives focused on verifying processing issues not yet totally understood and portions of the process for which information had not yet been collected. The interviews started with the interviewer bringing the interviewee up to speed on the goals of the data collection effort by explaining the LOG-AID program and walking through a top-level discussion of the wing-level deployment process as currently understood by the interviewer. This introductory discussion provided the interviewee with an appreciation for the interviewer's level of deployment understanding, a better understanding for what was expected from them, and a general validation of the information previous collected and included in the current As-Is models.

During each interview, notes were taken, an audiotape was made if approved by the interviewee, and related documents and forms collected. At times, these interviews included demonstrations of tools and materials used by the interviewee in the performance of their deployment operation.

While observations of the deployment process were a lesser portion of the data collection effort, it provided insight to the deployment process environment, thus, increasing the understanding and appreciation of the information collected during interviews.

The identification of information sources (i.e., interviewee's) started with an analysis of the strawman model by identifying which AFSCs (stakeholders) perform which part of the deployment process. Using these AFSCs, an analysis of Air Forces bases identified which bases owned those AFSCs and performed a reasonable quantity of deployments each year. Having identified the most appropriate bases for data collection, a point of contact established at each base provided the coordination necessary to schedule an effective data collection visit.

3.1.2 Results

The methodology to define the current w^2 -level deployment process proved both effective and efficient. Data collection trip 1 paration allowed the interactions with the stakeholders to be direct and focused, resulting in maximum data collection using minimal time spent with each information source. Being prepared in this manner

increased cooperation and acceptance by the stakeholders because the interviewers could discuss the deployment process effectively using the terminology of the stakeholders, could discuss the problems and issues related to the process. Thus, the stakeholders were able to leave the interview feeling they provided valuable input to the LOG-AID program.

3.2 Process Strengths, Weaknesses, and DPIs

The As-Is models document the processes description based on information collected from stakeholders and analysis of these models identified the strengths and weaknesses inherent in the process. Identifying ways of building upon the strengths and correcting process weaknesses produced a set of DPIs. These DPIs established the improvement requirements that formed the foundation for developing the wing-level deployment To-Be CONOP. Ranking those DPIs with respect to the deployment criteria identified by the stakeholders provides guidance needed to establish a DPI implementation prioritization that optimizes the benefits to the stakeholders.

3.2.1 Methodology Description

Figure 5 presents an overview of the stakeholder-focused methodology used to develop and rank the DPIs. The methodology presented in this section generates the Theoretical Implementation Value for the DPIs. As the implementation of the DPIs occurs during future field testing, the benefits actually realized will produce the DPI Implementation Value.



Figure 5. DPI Ranking Process

The DPI ranking process begins with the information collected from stakeholders, functional experts, and previous and on-going programs. Specifically, the information used include the As-Is models, the process problems and improvement ideas identified by the stakeholders. Additionally the information includes the list of sites and stakeholders accessed during data collection, the process criteria used by the stakeholders to judge the effectiveness of a deployment. The information also included the criteria considered when implementing changes into the deployment process. Analysis of the As-Is models produced two major products. These products are the process strengths and weaknesses and the process's critical path through the lowest level model activities.

DPIs must address the deployment processing problems identified by the stakeholders. Thus mapping the sites to the problems (Site vs. Problem), with the sites rated by the level of their deployment effort, places a weighted value on each processing problem identified by the stakeholders.

Mapping the DPIs to the weighted processing problems (DPI vs. Problem) identified which DPIs totally or partially corrected each of the problems. Mapping the DPIs to the process critical path identified which DPIs provided the most impact to the deployment process. Mapping the DPIs to the process criteria identified which DPIs impacted those deployment performance factors considered important by the stakeholders. The Ranked DPI value than came from the integration of values from these DPI vs. Problem, DPI vs. Process Criteria, and DPI vs. Critical Path analysis, with each measurement accounting for one-third (1/3) of the final DPI ranking.

The Theoretical Implementation Value resulted by mapping the DPIs to the implementation criteria specified by the stakeholders and the LOG-AID team. This value represents acceptance to implementation of each DPI. The following subparagraphs present additional details for the individual steps within the DPI ranking process:

Paragraph 3.2.4.1
Paragraph 3.2.4.2
Paragraph 3.2.4.3
Paragraph 3.2.4.4
Paragraph 3.2.4.5
Paragraph 3.2.5
Paragraph 5.1

3.2.2 Identifying Process Strengths and Weaknesses

Process strengths and weaknesses were identified from a number of different sources. These actions, as described below, include various analyses applied to the As-Is models.

3.2.2.1 Activity Model Analysis

<u>Pattern Analysis</u>: Within activity models, the key analysis approach is arrow pattern analysis. Arrow pattern analysis identifies many process conditions to include nonvalue added activities, duplication processing among activities, inefficient partitioning of functionality to organizations, ineffective interfacing of activities, and overlay analysis. Using the same analysis approach identified processing strengths. <u>Non-value added activities</u> are identified as having outputs not significantly changed from its inputs. For example, within the base level deployment process, the CDF activity basically inputs increments from the units, reviews them for correctness, makes adjustments if necessary, and sends the increments for further processing. Thus, the intent of this activity is not to change content or structure of the increment, only to correct. Therefore, if the unit generation of the increment was done correctly, the CDF activity could be eliminated.

<u>Duplication processing among activities</u> is indicated by the inputting of the same information to multiple activities. This potential means that within those activities the same or similar processing is occurring in order to use the information for the intended purpose within the activity. More detailed comparison analysis among those activities determines if the duplicate processing actually exists. If the duplication does exist, that processing is usually separated into a separate function which then feeds the original activities with the information actually required for their processing.

<u>Inefficient partitioning of functionality to organizations</u> becomes apparent through a combination of the assignment of functionality to organizations as indicated by the mechanisms and the arrow patterns among those activities assigned to various organizations. Activities assigned to one organization may have more complex arrow patterns among them, but activities assigned to different organizations should be connected with less complex arrow patterns. Less complex arrow patterns between organizations indicate the organizations can work effectively by themselves with minimal interactions with other organizations. More complex arrow patters among activities assigned to the same organization is potential alright since the intraorganizational groups can work closer together and with more communications. However, a complex arrow pattern among activities assigned to the same organization may not be optimized.

<u>Ineffective interfacing of activities</u> comes apparent through the excessive backward looping of arrows among activities. The looping indicates the functionality being performed within those activities should be reallocated among the activities. The goal

is to present a forward flowing process represented by a limited set of arrow relationships among the activities.

Overlay Analysis: During the data collection effort, problems and improvements ideas were received from the stakeholders. While these ideas provided insight into how the stakeholders viewed their process, their ideas could not be taken as final ideas. Rather, their ideas were analyzed by the LOG-AID team with respect to the overall process rather than from just their operational perspective by overlaying their processing ideas and problems onto the As-Is activity mode. This overlay analysis helped determine whether the identified problem is truly a problem or a symptom of a problem, and whether the improvement idea addresses a problem and will not produce a negative impact on another part of the process. Finally, the overlay analysis provided the capability to identify and understand any secondary problems caused by an identified problem. Secondary problems result when a problem in one part of the process triggers additional problems in subsequent parts of the process. For example, the incorrect preparation of an increment by the unit causes delays in the processing of that increment through the CDF.

3.2.2.2 Data Model Analysis

Analysis of the As-Is data model provided insights into both the types of data contained within the deployment process and the manner in which that data were organized. This understanding provided the foundation for correlating data elements across the process. For example, this correlation help to identify that data elements used for cargo were very similar in intent as those used for personnel, even though different element names existed for the two areas. From the completed data analysis was developed the concept for a more concise, unified deployment process data structure.

3.2.2.3 Process and Simulation Model

Analysis of the deployment process via the process and simulation models provided insight into the operational characteristics of the deployment process. Built from the As-Is activity model, the process model defined the operational sequencing of the process

flow in terms of branching, timing, performance by the personnel and systems, and cyclic processing. The format of the process model facilitated the collection of performance information from the SMEs, provided a structure for taking through and documenting the details of the deployment processing, and provided the information necessary for developing the simulation model.

The simulation model provided the capability to evaluate the operational performance of the wing level deployment process. Through this analysis, performance bottlenecks were identified along with deployment resource utilization, and the sensitivity of the various activities within the deployment process. Based on this performance information, an increased level of value could be placed on those DPIs which improved those sensitive or critical aspects of the process.

In developing the To-Be CONOP, the simulation model provided the capability to adjust the various performance characteristics of the process so as to define the "perfect process." Extracted from the "perfect process" were the performance requirements used to help identify and select potential implementation technologies, or to provide the requirements for developing new technologies for future implementation of the process.

In conjunction with the process analysis based on the models, research into the strengths, weaknesses, and improvement ideas from previous and ongoing projects helped to verify and confirm the ideas generated from the LOG-AID model analysis. The resulting strengths and weaknesses were grouped into categories of information systems, process, policies, training, and personnel attitude as summarized and present in Table 1.

CATEGORY	STRENGTHS	WEAKNESSES
Information Systems	 Relatively consistent information flow among sites "Home Grown" information systems being developed Personnel empowered to act on information Agreement that standard systems are not totally acceptable Commonality among "home grown" information systems Organizational boundaries being addressed through "home grown" system definition 	 Isolated information systems Manual information transfer increased time and decreases accuracy Personnel are more information handlers than information analysts and decision makers Required information is not always available to decision makers Minimal training, documentation, and support available Localized information systems being developed
Process	 Good operations and flight safety Significant consistency across sites Unit Type Code (UTC) concept is effective 	 Non-Uniform tasking delivery Numerous load planning cycles due to inaccurate and incomplete information Minimal coordination between deploying units and Transportation Command (TRANSCOM) Deploying footprint not minimized to meet tailoring requirements of mission QA check make up a significant portion of the deployment process
Training Policy	 Heavy focus on augmentee training Established Base Deployment Plans Development of individual support manuals at one base Flexibility through AFIs encouraged and 	 Exercises are not representative of real-world deployments Difficulty tracking and keeping qualified augmentees Variations in interpretation Multiple views on UTC tailoring Base deployment plan not closely followed Significant time and effort to develop and maintain deployment plans
Personnel Attitude	 accelerated effective standardization Deployment problems realized, but corrective vehicles not readily available Experienced personnel take charge to ensure success 	 Most personnel are not over eager to be augmentees Personnel do not want augmentee training to remain in their personnel folder

Table 1. Wing-level Deployment Process Strengths and Weaknesses

3.2.3 DPI Development

The identified deployment process strengths and weaknesses provided the starting point for developing initial improvement ideas that addressed the process weaknesses and built upon process strengths. Evaluation of the initial DPIs by using the As-Is models provided insight into the potential impact of those DPIs on the total deployment process. Through this analysis, the initial improvement ideas were expanded, and refined into a set of eighteen DPIs. Table 2 presents a summary list of the categorized DPIs. Appendix E presents a more detailed discussion the categorized strengths, weaknesses, and DPIs.

CATEGORIES	DPIs	
Information Systems	plement highly integrated information systems across levels of command, across and within	
	deployment and reception sites to include a task receipt-to-airlift-manifest information system	
	(i.e., Apply an information processing system that links and transfers information throughout the	
	wing-level deployment process and provides decision suggestions to the deployment personnel.)	
Process	Optimize production and minimize inspection activities	
	(i.e., Improve Cargo/Personnel preparation so that pre in-check, in-check, marshaling check,	
	and most PDF stations can be reduced or removed.)	
	Adjust responsibilities and improve integration of units, Manpower, and Personnel	
	(i.e., Improve the information exchange to provide the units with up-to-date, accurate	
	personnel information.)	
	<i>(i.e.</i> Develop a single information system that documents both cargo and personnel	
	(i.e., Develop a single information system that documents both earbo and personnel	
	Collect process status and effectiveness information using passive means	
	(i.e., Reduce the need for deployment personnel to manually report to the DCC and to collect	
	and analyze processing information for continuous processing improvement.)	
	Improve in-transit visibility	
	(i.e., Provide the capability to know where deploying resources are at any point in time during	
	the deployment and to the beginning of employment.)	
	Control tasking receipts into the base	
	(i.e., Have everyone work to the same set of mission requirements.)	
	Reduce the number of coverage days included for initial deployment	
	(i.e., Considering the goals of lean logistics, shorten the number of days for which the number	
	of days before sustainment begins.)	
	Better define the objective and criteria for UTU tailoring	
	(i.e., Establish a common understanding among units that O i C tanoning should be done so as to bast satisfy the mission provingments.)	
Training	A noty real-world training characteristics to exercises	
Tamung	G e Train to both fragged and full UTC requirements)	
	Maximize training benefits	
	(i.e., Tracking of UDM and deployment support personnel training as they transfer among	
•	bases.)	
	Include total process training	
	(i.e., Provide a general total process training in addition to the current focused training.)	
	Incorporate training and efficiency evaluation capability into LOG-AID system	
	(i.e., Embed training sessions into the tools used for deployment and evaluate augmentee	
	cfliciency from these sessions.)	
Policy	Provide the UDM capability to produce more deployment-ready personner and cargo	
	it chould be viewed as a specialized skill)	
	Develop deployment guides for each deployment position	
	(i.e., Document deployment position information such as detailed instructions, phone numbers	
	for points of contacts, reference pictures, etc.)	
	Refine the AFIs as necessary to best guide the deployment process	
	(i.e., The AFIs should be developed to document	
	deployment process.)	
Personnel Attitude	Develop a process to encourage augmentees to par' . in deployments	
	(i.e., Develop a reward system that will benef se working as augmentees.)	
	Develop a process to encourage augmentees to be committed to real world contingencies to the	
	same level as exercises.	
	(i.e., Ensure the Base leadership monitors and measures the effectiveness of real world	
	deployments in a manner encouraging augmentees to work to their true potential.)	

Table 2. Categorized List of DPIs

3.2.4 Developing the DPI Theoretical Value

The importance of the DPIs varies with respect to their impact on the wing-level deployment process. DPIs addressing problems existing at many sites and at sites with larger deployment commitments provide more payback potential than do DPIs addressing
problems existing at one or two bases or those having relatively small deployment commitment. The following subparagraph describes the matrices used to produce the DPI ranking value used in helping develop the DPI implementation sequence.

3.2.4.1 Weighted Problem Value

Deployment problems were identified through inputs from the users/stakeholders, from observation by the data collection teams, and through the development and analysis of the As-Is models. To evaluate the magnitude and importance of these problems, they were mapped to the sites at which they occurred using a three-step process, with the completed mapping presented in Table 3.

Step 1 assigned each site a rating of "1," "2," or "3" based on its deployment responsibilities, with "3" representing the highest deployment responsibility. These rankings are in the column just to the right of the site name. Assigned by the LOG-AID team, the rating assignment considered the sites required level (size, frequency, and response time) of deployments performed. Thus, a higher ranking is assigned to sites with a higher deployment requirement and a shorter deployment timeframe. Step 2 related the problems to the sites at which they were identified. These problem-to-site relationships are indicated by the "X" at their intersections.

Step 3 computed a weighted problem value recorded in the row titled "Problem Value" and computed from information contained in the mapping matrix. The weighted problem value calculation adds the site ratings for those sites at which the problem occurs. For example, the problem "Deployment tasking varies throughout the deployment" was identified as three different sites having ratings of 2, 2, and 3 respectively. Therefore, the weighted problem value is 7(2+2+3).

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Communications, status collection, and satus reporting are time consuming DCC importance varies inversely with the level of deployment crisis Tracking of deploying resources leaving the base is limited Tailoring coordination is not performed caress deploying inits Tailoring objectives vary among UDMs Limited capabilities vary among units Limited capabilities vary among units Limited capabilities vary among units Limited capabilities vary among units Limited capabilities vary among units Training is indequate and an interruption Training is task rather than process locused Information systems not integrated New Yer, Her	Selecting personnel for deployment is cyclic because ManPower restricts some decision making information				×		~											*	9		
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Tailoring objectives vary among UDMs x	Tailoring coordination is not performed across deploying units		x	x	×		×	-	×				-				_		16	L	
Limited capability to define final destination for pallets Unit packing capabilities vary among units Base-level deployment improvement controls do not exist Training coordination across bases does not exist Process perceived as varying significantly among sites Training is inadequate and an interruption Training is task rather than process (ocused Improvements directed primarily at the DCC Improvements directed primarily at the DCC TRANSCOM drives the selection of deploying resources Deployment faskings received from various sources PROBLEM The Deployment taskings received from various sources PROBLEM	Tailoring objectives vary among UDMs				*		-	×	×	*			×					×	18	-	
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Deployment tasking varies throughout the deployment x	Deployment practice differs from actual deployments			×	×		×		-	× ,	-		×		 	ļ		×	-F	; 	
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3.2.4.2 DPI vs. Problem Mapping

Having established the Weighted Problem Value, ranking the importance of the DPIs requires, in part, the evaluation of DPIs to address one or more of those problems. Those DPI addressing more than one problem, and specifically if that problem is rated as important, receive a higher DPI-to-problem ranking.

Using the matrix of DPI vs. Problem as presented in Table 4, an "X" represents the correlation between the DPIs and the problems. The DPI vs. Problem measurement computation produces the percentage of the weighted problem values benefiting from the proposed DPI. For each DPI, the sum of the problem values for which the DPI addresses is divided by the total sum of the problem values and multiplied by 100 to arrive at a percentage score. For example, the DPI "Implement a highly integrated task receipt-to-airlift manifest information system" would provide a positive affect on 19 different identified problems having a total weighted problem values of 275. This number divided by the sum total of all the weighted problem values, which was 350, would be 275/350 = .786. Multiplying by 100 would give a score of 78.6. This result implies this DPI benefits 78.6 percent of the total weighted problems.

Ranking
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Table 4.

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cess to encourage participate in deployments	process to encourage all to be committed to real world ties to the same level as evertises
	process to envournage X X X X X X X X X X X X X X X X X X X

3.2.4.3 DPI vs. Critical Path

The critical path through the wing-level deployment process is defined as being that set of tasks or processing actions whose change in performance time impacts the completion time of the deployment process. Thus, processing times for tasks not on the critical path can be changed, within limitations, without affecting the process completion time. Thus, DPIs that benefit those tasks on the critical path are more important than those DPIs not effecting the critical path tasks with respect to process completion timeliness.

The critical path for deployment varies with respect to the type of resources being deployed. If a unit is deploying strictly personnel, then the critical path will be contained within the personnel deployment processing path. If the deployment is strictly cargo, the critical path is within the cargo processing path. However, most units deploy both personnel and cargo, and in general it was determined during data collection that if a mix of personnel and cargo are deployed by a unit, the cargo processing usually produces the longest processing timeline. Thus, for the purpose of this analysis, the wing-level deployment process for cargo was defined as being the critical path within the LOG-AID program.

As represented in Table 5, the DPIs are mapped against the lowest level deployment process activities as identified in the As-Is activity model. For each listed activity, its activity node number from the activity model precedes the activity name. Those activities identified as being on the critical path are denoted by a "1" within the Critical Path Notation row, resulting in a total of 38 critical path activities. The DPI vs. Critical Path measurement represented in percent is calculated by adding the total number of critical path activities impacted by the DPI, dividing that sum by the total number of critical path activities, and multiplying by 100. For example, the DPI "Apply real-world training characteristics to exercises" would provide a beneficial effect on 15 critical path activities. Therefore, the critical path score for this DPI would be (15/38)*100 = 39.5 percent.

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r	r	UN >	40	v >	ΨÞ	>	2	•		>	ZE	- P	(v) >	7	0.2	4	0 >	E P	~ ~	8		(V)	T>1
	PROCESS	-04 EVALUATE WORLDWIDE	01 DEVELOP OPERATION	02 PERFORM CRISIS ACTION	03 BEDDOWN RESOURCES A NAL DESTINATION	11 IDENTIFY BATTLE STAFF	12 CONVENE BATTLE STAFF	13 ANALYZE TASK	14 DETERMINE BASE	211 IDENTIFY TASKED UNIT	212 IDENTIFY FRAGMENTED &	213 LOCATE/ CORRELATE	214 VERIFY' OBTAIN TANDARD UTC DATA	215 TAILOR UTC	APABILITY	222 ASSIGN A PERSON	223 REVIEW PERSONS EPLOYING STATUS	224 ASSIGN AN ÉQUIPMENT EM	225 REVIEW EQUIPMENTS	226 CHECK ON-BASE SUPPLY	231 DEFINE WORK SITES	232' IDENTIFY DEPLOYMENT	233 DEFINE FACILITY ROMT
Critical Path Notation		0	0	0	0	0	0	1	0	1	0	0	0	1	1	0	0	1	1	0	0	0	0
DPIs																							
Process Maximize production and minimize inspection activities																					×	X	x
Capitalize on similarities between cargo and personnel																×	x	×	x	x			
Control tasking receipts into the base				x				x		x	x			x									
Adjust responsibilities and improve the integration of units, Manpower, and Personnel					•					x						×	x						
Collect deployment process status and effectiveness information using passive methods								x						x			x		x				
Better define the objective and criteria for UTC tailoring								x		x	x	x	x	x									\Box
Reduce the number of coverage days included for initial deployment.								x			x	x		x									
Improve in-transit visibility					x									x	x		×	x	x	x			
Policies Refine the AFIs as necessary to best guide the deployment process.								x						x		x		x			×		
Develop individual deployment guides for each deployment augmentee position														x			x		x	x			
Make the Unit Deployment Manager (UDM) an AFSC position.								x				x	x	x	x	x		x	×			•	
Training Apply real-world training characteristics to exercises								x				x	x	x		x	x	x	x	x		- <u></u> i	
Maximize training benefits								x		x				x		x		x					
Incorporate a training and efficiency evaluation capability into the LOG- AID system								x		x	x	x		×		x	x	x	x		x		
Include total process training								x		×				x		x		x			x		
Information Systems					_																-		
integrated task receipt-to- airlift manifest information system								x		x	x	x	x	x	x	x	x	x	x	x	x	x	×
Personnel Attitude Develop a process to encourage augmentees to participate in deployments							x												<u></u>				
Develop a process to encourage all personnel to be committed to real world contingencies to the same level as exercises							x	x								x		x					

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Table 5. DPI vs. Critical Path Measurement Producing Partial DPI Ranking

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	PROCESS	A234 IDENTIFY STAFFING ROMT	A235 IDENTIFY EQUIP ROMT	A241 OBTAIN UTC DETAIL	A2+2 PRIORITIZE/ASSIGN CHALKS	A243 SEQUENCE INCREMENTS	A244 VALIDATE MOVEMENT	A25 MONITOR/CONTROL	A251 SCHEDULE DEPLOYMENT	A252 COMPUTE UTC DEPLOYMENT DURATION	A253 IDENTIFY KEY PROCESSING EVENTS	A254 COMPUTE CHALK	A255 COORDINATE CHALKS	A31 SELECT AUGMENTEE	A32 PREPARE AUGMENTEE STATUS	A33 SET UP THE WORK CENTER	A34 ACCESS THE WORK	A35 REPORT TO DCC	A41 ESTIMATE TRANSPORTATION LOAD	A42 ARRANGE CONTRACT SUPPORT	A43 COORDINATE TRANSPORT	A44 ASSIGN CONVEYANCE	AS11 PREPARE UNIT
Critical Path Notation		0	0	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	Q	0	0	0
DPIs																							
Process Maximize production and minimize inspection activities		x	x						x	x													x
Capitalize on similarities between cargo and personnel																							x
Control tasking receipts into the base				x								x											
Adjust responsibilities and improve the integration of units, Manpower, and Personnel																							x
Collect deployment process status and effectiveness information using passive methods		x						x					x		x			x					x
Better define the objective and criteria for UTC tailoring																							
Reduce the number of coverage days included for initial deployment.				x															e.				
Improve in-transit visibility						x																	x
Policies Refine the ASIs of						_																•	1.0
necessary to best guide the deployment process.								x					x					x					x
Develop individual deployment guides for each deployment augmentee position.		x					x					x		x	x	x							x
Make the Unit Deployment Manager (UDM) an AFSC position.																							x
Training Apply real world training																							· · ·
characteristics to exercises								x					x	x	x								x
Maximize training benefits		x				x		x		x	x			x	x			x					x
Incorporate a training and efficiency evaluation capability into the LOG- AID system					x	x		x		x			x	x	x				x				x
Include total process training				x	x			x			x	x			x			x					x
Information Systems			-												· ·								
integrated task receipt-to- airlift manifest information system		x	x	x	x	x		x		x	x	x	x	x	x			x	x				
Develop a process to encourage augmentees	;									·			\neg	·		-;					· · ·	• <	
to participate in deployments		x												x	x	x	x	x					
Develop a process to encourage all personnel to be committed to real world contingencies to the same level as exercises		x						x		x	x			x	x	x		x					x

 Table 5. DPI vs. Critical Path Measurement Producing Partial DPI Ranking (Cont)

	PROCESS	AS12 TRANSPORT PERSONNEL	AS13 CONTROL MOBILITY BAGS	AS141 CHECK ELIGIBILITY	AS142 ISSUE ORDERS	AS143 CHECK ID CARD	AS144 UPDATE MEDICAL	AS1451 UPDATE EMERGENCY DATA	AS1452 PROVIDE LEGAL ASSISTANCE	AS1453 PROVIDE RELIGIOUS	AS1454 PROVIDE FINANCIAL SUPPORT	AS1455 PROVIDE TRAVEL SUPPORT	A5146 BRIEF SITE SITUATIONS	ASIS HOLD FOR TRANSPORT	AS2111 PREPARE FOR TRANSPORT	AS2112 PLACE ON SCALE	AS2113 DETERMINE ITEM SIZE	A52114 DOCUMENT INCREMENT	AS212 PREPARE SHIPPERS DOC	AS213 BUILD INCREMENT	ASZ141 PLACE ON SCALE	AS2142 DETERMINE INCREMENT	AS2143 COMPUTE CARRYING POSITION
Critical Path Notation		0	0	0	0	0	0	0	0	0	۰	0	0	•	1	1	•	1	1	1	1	1	1
DPIs																							
Process Maximize production and minimize inspection activities				×	×	x	×.	x	x	x	×	×	×			X .	x	×	x	x	x	×	3
Capitalize on similarities between cargo and personnel		x		x	x	x	x	x						x	×		x	x	x	×		x	×
Control lasking receipts into the base																							
Adjust responsibilities and improve the integration of units, Manpower, and Personnet				x	x	x	x	x	X	x	x	×											
Collect deployment process status and effectiveness information using passive methods					x		x		x					x	x								
Better define the objective and criteria for UTC lailoring								 															
Reduce the number of coverage days included for initial deployment.																		[
Improve m-mansh visionity		×	┞					 		 		<u> </u>		ŀ									
Refine the AFIs as necessary to best guide the deployment process.															x			x	×	x			
Develop individual deployment guides for each deployment augmentee position.			x	x	x	x	x								×			x	x	x			x
Make the Unit Deployment Manager (UDM) an AFSC position.															×	×	×	x	x	x	x	x	×
reining - ply real-world training - placteristics to - 4 relises		$\left \right $		×	x	×	x	×	×		x	x	×					x	×	x			
≫ aximize training benefits															×			x	×	×			
Incorporate a training and efficiency evaluation capability into the LOG- AID system							x					x				x		x	x	x			×
Include lotal process training		Γ		×			x	x				x	x					x	x	x			
Information Systems		1	-	F	F							-	F	—	·	-	F		-				
integrated task receipt-to- airlift manifest information system		x		×	x							×			×	×	×	×	×	×		×	X
Personnel Attitude Develop a process to oncourage augmentees ito participate in deployments			×	x		×						· · ·		×						×			* E * - 3
Develop a process to encourage all personnel to be committed to real world contingencies to the same level as exercises															×				×	×			

Table 5. DPI vs. Critical Path Measurement Producing Partial DPI Ranking (Cont)

	PROCESS	A5215 PRODUCE AND ATTACH THE PLACARD	A5216 NOTIFY THE DCC	A522 TRANSPORT CARGO	AS2311 VERIFY CHALK ASSIGNMENT	A52312 VISUALLY INSPECT	A52313 VERIFY HAZMAT PLACEMENT	A52314 VERIFY HAZMAT	A52321 DETERMINE WEIGHT	A52322 DETERMINE DIMENSIONS	A52323 DETERMINE CENTER OF BALANCE	AS233 COMPARE ACTUALS TO	A5234 ATTACH INCREMENT INFO	A5235 RELAY INCREMENT STATUS	A5241 PLACE CARGO INTO CHALK OR HAZMAT AREA	A5242 INSPECT CARGO	A5243 REPORT STATUS	A5244 ANNOTATE LOAD PLAN	AS25 COMPUTE LOAD LAYOUT	A531 REVIEW LOAD PLAN	A532 POSITION & RECORD	A533 POSITION & RECORD PERSONNEL	A534 PREPARE & PRESENT DOCUMENTS	DPI vs Critical Path Percentage
Critical Path Notation		1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	38
DPIs																								
Process Maximize production and minimize inspection activities		x			x	x	×	x	x	x	x	x	x			x		x	x	x			x	
Capitalize on similarities between cargo and personnet	· · · ·	x		x														x	x	x			x	57.9
Control tasking receipts into the base																			x					36,4
Adjust responsibilities and improve the integration of units, Manpower, and Personnel																								15,8
Collect deployment process status and effectiveness information using passive methods			x				x	x	x	x		x		x			x		x				x	31.6
Beller define the objective and criteria for UTC failoring																								7.9
Reduce the number of coverage days included for initial deployment.																								7.9
Policies			_	×					<u> </u>	<u> </u>						-					x	×		23.7
Ratine the AFIs as necessary to best guide the deployment process.			×				x	x					x						x					31.6
Develop individual deployment guides for each deployment augmentee position.		x	x			x	x	x	x	x	x				x				x				x	47.4
Make the Unit Deployment Manager (UDM) an AFSC position.		x				x	x	x			x													47.4
Training Apply real-world training characteristics to exercises		x	x			x	x	x											x		x		×	19.5
Maximize training benefits		x				x	x												x				x	36.8
Incorporate a training and efficiency evaluation capability into the LOG- AID system			x			x	x	x									x	x	x		x		x	52.6
Include total process training		x					x	x											x				x	39.5
Information Systems	199 J.4												-				-				·			
integrated task receipt-to- airlift manifest information system		x	x											x			x		x				x	55.3
Personnel Attitude Develop a process to encourage augmentees to participate in deployments							· · · · · · · · · · · · · · · · · · ·			* 25	,													4 14
Develop a process to encourage all personnel to be committed to real world contingencies to the same level as exercises			x		x	x	x	x									x							2.6

Table 5. DPI vs. Critical Path Measurement Producing Partial DPI Ranking (Cont)

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3.2.4.4 DPI vs. Process Criteria

The DPI vs. Process Criteria mapping produces a value based on the DPI's ability to impact criteria identified and rated by the stakeholders. The seven Process Criteria were developed from a number of sources, including Global Engagement, Joint Vision 2010, and Air Force Logistics Strategic Plan, as well as from the process stakeholders. Once identified, the Process Criteria were ranked by the stakeholders, producing the criteria weighting factor.

Each stakeholder was asked for a list of criteria they use to determine the effectiveness of a deployment. These criteria arranged by stakeholder are presented in Table 6.

USER	CRITERIA FOR SUCCESS
Wing Commander	Meeting the designated take-off time.
	Number and types of deployment problems encountered.
	Number of frustrated cargo and personnel counted.
	Level of effort required to accomplish the deployment.
	Ability of deployed resources to meet mission requirements.
	Rating provided by the inspection team.
	Cost of the deployment
	Effective interaction with non-base organizations.
IDO/DCC	Comparison between Planned actual deployment completion.
	Number of frustrated deploying resources.
	Accuracy of the load plan.
	Meeting the designated take-off time.
	Availability of necessary augmentees.
	Number and types of deployment problems encountered.
	 Timely receipt of information from units, TRANSCOM, work centers, and Battle Staff.
	Overall safety of personnel and equipment.
UDM	Receipt of a stable tasking within a timeframe adequate to support preparation.
	Effective preparation of deploying resources.
	Efficient use of unit personnel performing the preparation
	Accurate and timely list from Personnel and Manpower
	Number of frustrated cargo increments
	Number or personnel processing problems.
	 Availability of the necessary transport capabilities.
	 Time required to prepare the necessary deploying resources.
	Overall safety of personnel and equipment.
Load Planner	Timely receipt of cargo information.
	 Receipt of accurate information as indicated by limited recomputations.
	Ease of load plan development
	Acceptance of load plan by the Load Master
	 Timely information on aircraft configuration.
	Overall safety of personnel and equipment.
PDF	Timely arrival of personnel
	Time of processing
	Number of processing exceptions
	Total number of personnel processed
	Amount of waiting time
	Number of personnel rejected
	Timely departure of personnel.

USER	CRITERIA FOR SUCCESS
CDF/In-check	Timely arrival of cargo.
	Number of increment documentation requiring corrections.
	 Number of cargo increments requiring some type of correction.
	Average time required to process an increment.
	Time required to correct frustrated increments.
	Time required to process the necessary paper work.
	 Time required to interface with other deployment functions.
	Number of units repeat frustrations.
	Overall safety of personnel and equipment.
Manpower & Personnel	Receipt of UTC personnel requirement
	 Time to generate the availability list and providing it to the UDM.
	 Time required to generate travel orders.
	Timely response from the UDM.
On-Base Transportation	Receipt of the Deployment Schedule of Events (DSOE).
	 Number of changes received during the deployment.
	Capability to satisfy transport requirements.
	 Efficient prioritization of cargo and personnel movement.
Resource Augmentation	 Maintaining an updated list of augmentees.
Duty (READY)	 Maintaining an augmentee training file.
	 Having the augmentees ready and available when needed.
	 Having the augmentees perform effectively.
Marshaler/Ramp	Timely arrival of cargo increments.
Coordinator (RAMPCO)	Number & percent of rejected increments.
	 Timely input from Loadmaster on aircraft loading requirements.
	Overall safety of personnel and equipment.
Load Master/TRANSCOM	Preparedness and readiness of deployed resources for loading.
	Effectiveness of the loading.
	 Meeting of the designated take-off time.
	Overall safety of personnel and equipment.
Reception Site	Ability to accommodate deployed resources.
	 Ability of resources to meet mission requirements.

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Table 6. Stakeholder Success Criteria

Aggregating the criteria across the deployment responsibilities (stakeholders), grouping them, and removing duplications resulted in a combined set of seven criteria used by stakeholders to judge the success of a deployment. These seven criteria, along with metrics used by stakeholders to place a value on the criteria, are presented in Table 7.

DEPLOYMENT PROCESS CRITERIA	DEPLOYMENT PROCESS CRITERIA METRICS
Deployment Footprint	TIME FOR TAILORING AVIATION UTC
Minimizing the amount of cargo and	Indicate the amount of time (in minutes) that is spent tailoring the average aviation UTC
personnel deployed, and therefore the	SQUADRON/UNIT TYPICALLY TASKED FOR DEPLOYMENT
transportation required, to satisfy the	Identify the type of squadron or unit generally tasked for a deployment. For example: A base
mission objective. This includes	may have an Operational C-130 squadron, a Weather flight, a Force Protection squadron, and a
maximizing the use of resources at the	Civil Engineering squadron, but the Weather flight is most often tasked for deployments. If a
reception site and sharing common	typical deployment includes multiple units, please identify all of them. Within the context of the
resources among units.	squadron/unit(s) identified above, please respond to the following questions categorized into
	Deployment Size, Cargo, Personnel, and Deploying Resources.
	# OF PASSENGERS (PAX) PER DEPLOYMENT
	Indicate the total number of Passengers deployed on the average deployment or exercise
	# OF SHORT TONS (STONS) PER DEPLOYMENT
	Indicate the total number of STONS deployed on the average deployment or exercise
	# OF CONVEYANCES BY TYPE PER DEPLOYMENT
	Identify separately the number of conveyances (aircraft by type, trucks, CRAF, rail, etc.) used in a typical deployment
	% DEPLOYED RESOURCES USED AT RECEPTION/BEDDOWN SITE
	Indicate the percent of total resources deployed to the reception site by a unit that are actually used to support the missions.

DEPLOYMENT PROCESS CRITERIA	DEPLOYMENT PROCESS CRITERIA METRICS
Resource Utilization	# OF ON BASE VEHICLES USED
Minimize deploying site resources used	Indicate the average number of on base vehicles used in a typical deployment
to accomplish the deployment. These	# OF MATERIEL-HANDLING EQUIPMENT (MHE) BY TYPE
resources include the site facilities,	Identify separately the number of MHE (K-loaders, forklifts, etc.) used in a typical deployment
personnel, and on-base transportation	# OF DEPLOYMENT WORK FORCE
capabilities.	Indicate the total number of personnel involved in the deployment.
	7% DEPLOY MENT WORK FORCE THAT ARE AUGMENTEES
	total number of non-deploying personnel assigned to the base
	% AUGMENTEE IDLE TIME PER 12 HR SHIFT
	For those individuals assigned as augmentees, indicate the percentage of time they are waiting for
	deployment related work to arrive at their station.
	AVG TIME TO CORRECT
	For all of the frustrated cargo increments identified, what is the average time required to correct
	each cargo increment.
Information Fusion	% TIME THAT DATA NEEDS TO BE CHANGED
Maximize the use of information for	Indicate the percentage of time that data is changed from the time it is initially generated until the
decision making while minimizing the	final data value is documented. For example, units prepare cargo increments and document each
resources required to prepare the	with weight, measurement, and HazMat certifications. As an increment processes through the in-
Information for use.	check, this information is checked and changed as necessary to ensure accuracy and
Destaurant Exception Time	COMPLETANCESS.
Minimize the deployment preparation	Indicate an actimated amount of time required from the time a testing is maximal until the func-
time between the receipt of the tasking	aircraft truck or railcar departs the base
and the deployment of the specified	% DEPARTURE TIMES MET
mission capabilities.	Indicate the percentage of times an aircraft or conveyance departure is delayed due to deployment
	problems during a typical deployment
Flexibility	DEPLOYMENT LEVEL OF EFFORT
Establishing the To-Be concept of	Indicate the total number of exercises and actual deployments performed in the previous fiscal
operation to effectively meet the	ydar.
individual deployment requirements.	
existing at various deployment sites.	9/ DEDCAMMEL EXCENTIONS
Minimize the problems excentions and	Of all the personnel being deployed indicate the percentage of personnel who visit at least
frustrations that occur during the	PDF station other than eligibility/roll call.
deployment by improving the quality of	AVG # OF STATIONS VISITED PER PERSON
the deployment preparation activities.	Indicate the average number of PDF stations (other than eligibility/roll call) visited by deal state
	personnel.
	# CARGO FRUSTRATIONS
	Indicate the total percentage of cargo increments identified as frustrated during a deployment
	# REJECTIONS
	on its designated chalk
	% REPAIRED AT CDF/MARSHALING YARD
	Of the total percent of frustrated cargo increments, what percentage is repaired within the CDF
	or marshaling yard.
	% RETURNED TO UNIT FOR CORRECTION
	Of the total percent of frustrated cargo increments, what percentage is returned to the unit for
1	repair.
	AVG # OF PEOPLE TO CORRECT
1	For all of the trustrated cargo increments identified, what is the average number of people
Deployment Cost	HNOIVED IN CONCERNING CACH CARGO INCREMENT.
Reduce the amount of resources	Indicate the total cost of a typical deployment from the tasking receipt until the departure
required to implement the deployment	completion of the deployed resources. (If possible, break down into factors such as mannower
process.	aircraft/conveyance, MHE, vehicle rentals, etc.)
• • •	# MANPOWER
	Indicate the total number of man-hours invested in a typical deployment.

 Table 7. Deployment Performance Criteria and Metrics

During the To-Be verification trips, stakeholders were briefed on all the DPIs and the seven process criteria. The personnel were then asked to rank the process criteria from their perspective, using a ranking of "1" through "7," with "1" indicating the most important and "7" the least. The results of the criteria rankings by site are presented in Table 8.

The number of personnel responding at each site is shown in parenthesis below the site's name. A score for each criteria per site was computed by averaging out the response from the personnel. Within each intersecting cell is the average rating for each criteria by site as shown in parenthesis and the ranking of the criteria by site as shown by the integer.

In computing the rank of the field average required the inclusion of the site deployment ranking in the calculation. Table 9 shows the percentage applied to each site's criteria ranking. For example, Charleston AFB would multiply its criteria ranking by .074 in calculating the field average. The equation used was: ([sum of a particular site's rank]/[sum of the range of all the site's rank])/(number of occurrence of this site's number). For example, Charleston had a "2" as a deployment ranking, while the sum of all sites was "27," and the number of "2's" was five. Plugging these into the equation produces ((5*2)/27/5) = .074. Using this calculation gives the sites with a higher deployment ranking a larger impact on the overall field average.

The next step was to give a overall weight to each Process Criteria. The weighting was divided into two parts. This first part applied a direct 40 percent to the weight rated by the LOG-AID team and the other 60 percent for the second part came from a combination of the site evaluations. While the entire weighting factor is based on information collected from the user, the 40/60 percent split allows for the LOG-AID team's view of the information based on analysis, and the users view based on their understanding of the process. Table 8 shows the 60 percent multiplication factor on the criteria rank. This was the same logic used in calculating the rank of the field average previously mentioned. The only difference is that the equation was multiplied by ".6" for the resulting 60 percent. For example, the LOG-AID team rated the process criteria "Reduce

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the cost of deployment" as a "6" while the stakeholders ranking was "6.26." Therefore, the weight applied to "Reduce the cost" criteria was $0.40^{*}(6) + .6^{*}(6.26) = 2.4 + 3.75 = 6.15$, as noted in Table 8.

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To facilitate the use of the ratings in the DPI vs. Process mapping. the stakeholders ratings were reversed such that within the calculations, "7" represented the most important criteria. This reverse ordering on all three measurements placed all three measurements (DPI vs. Problem, DPI vs. Process Criteria, and DPI vs. Critical Path) on a scale where a score of 100 percent represents the greatest impact.

PROCESS EVALUATION CRITERIA	Fort Wayne	Charles AFB	wwdpc	McOure AFB	Elmindorf AFB	Mt Home AFB	Holloman AFB	Hickam AFB	Osan AB	Kadena AB	Aviano AB	Ramstein AB	Rank of Field Average	LOG-AID-AID	Combined Rank
Number of people providing criteria rankings at site	11	14	8	25	19	16	20	22	7	21	10	16	10	秋: 634 (1)	
Criteria Ranking (Computed Ranking Value)															
Reduce deployment footprint	6 (4.64)	5 (4)	4 (3.5)	6 (4.24)	4 (3.84)	3 (3.62)	5 (3.87)	5 (4)	1 (1.86)	4 (3.57)	4 (3.57)	2 (3 4)	4	5	5 (4.26)
Effective use of deployment resources	5 (4.55)	6 (4.79)	2 (3.12)	5 (4.04)	5 (3.84)	5 (3.87)	2 (3.44)	3 (3.54)	5 (4.14)	5 (3.67)	6 (4.5)	4 (39)	6 (3.95)	300 A	(3.57)
Effective use of information fusion	2 (3)	1 (2.39)	1 (3.12)	 (3.24)	2 (3.37)	1 (3.19)	1 (2.56)	l (3.09)	3 (3.57)	1 (3.33)	3 (3.31)	1 (26)	1) (3.10)	科学	33 <u>-</u> (3.46)
Reduced deployment execution time	4 (3.55)	3 (3.29)	3 (3.25)	3 (3.52)	3 (3.63)	4 (3.81)	6 (4.31)	4 (3.95)	2 (2.86)	6 (4)	2 (3.25)	6 (4 4)	3 (3.69)	2	. 2 (3.02)
Flexibility to satisfy various site deployment requirements	3 (18)	4 (3.5)	5 (4.62)	4 (3.56)	• 6 (4.47)	6 (3.94)	3 (3.44)	6 (4.27)	6 (5.14)	3 (3.57)	5 (4.31)	5 (4.3)	5 (3.93)	被認識	76 % (5.16)
Improve quality of deploying resources	1 (2.09)	2 (3.29)	6 (4.62)	2 (3.36)	І (3.16)	2 (3.06)	4 (3.75)	2 (3.14)	4 (3.57)	2 (3.48)	1 (2.69)	3 (3.6)	2 (3.31)	2.1 2.1	(2.38)
Reduce cost of the deployment	7 (7)	7 (6.21)	7 (5.75)	7 (6.04)	7 (5.68)	7 (6.5)	7 (6.62)	7 (6)	7 (6.86)	7 (6.38)	7 (6.19)	7 (5.8)	7 (6.26)	6	7. ⁴ (6.15)

Table 8. Process Evaluation Criteria Final Results

Installation Name	Rank	Percentage Applied (60% used for Combined Rank)	Percentage Applied (100% used for Field Ave)
Indiana ANG (Fort Wayne)	2	0.044	0.074
Charleston AFB	2	0.044	0.074
Major Command (MAJCOM)	2	0.044	0.074
McGuire AFB	3	0.067	0.111
Elmendorf AFB	2	0.044	0.074
Mt Home AFB	3	0.067	0.111
Holloman AFB	3	0.067	0.111
Osan AFB	1	0.022	0.037
Kadena AFB	3	0.067	0.111
Hickam AFB	1 1	0.022	0.037
Aviano AB	3	0.067	0.111
Ramstein AFB	2	0.044	0.074
· · · · · · · · · · · · · · · · · · ·	Total	0.600	1.000

Table 9. Percentage of Process Criteria Site Assigned by Site

Establishment of the criteria rankings sets the basis for developing the DPI vs. Process Criteria Measurement as presented in Table 10. A correlation mapping between DPIs and criteria identified which DPIs provide the benefit to the stakeholder. The DPI vs. Process Criteria percentage score resulted from summing the criteria rankings for each correlation, dividing that sum by the sum of the weighted values, and multiplying by 100. For example, the DPI "Capitalize on similarities between cargo and personnel" benefits criteria with weights of 4.54, 4.98, 2.84, and 1.85. Therefore, the Process Criteria percentage score for this DPI is

(4.54 + 4.98 + 2.84 + 1.85)/sum of the 7 criteria weights, which is 28) =

(14.21/28)*100 = 50.8

		8.20	2 5	2 m	z m	@ 70	0	υ Π	70
	CRITERIA	eduction in deployment ofprint	nprove quality of deptoying sources	flective use of deployment sources	flective use of information sion	eduction in deployment recution time	ost of the deployment	exibility to satisfy various te deployment requirements	Pi vs Process Criteria ercentage
	Criteria Rank	3.74	4.43	4.54	4.98	2.84	5.62	1.85	
DPI									
Process									
Maximize production and minimize inspection activities			x	x		x	x	x	68.9
Capitalize on similarities		·····							
between cargo and personnel				x	x	x		x	50.8
Control tasking receipts into				~		v		v	22.0
the base				×		<u> </u>		<u>^</u>	33.0
Adjust responsibilities and improve the integration of units, manpower, and personnel			x	x	x	x		×	66.6
Collect deployment process	·								
status and effectiveness information using passive methods				x	x	x		x	50.8
Better define the objective		••							
		X		<u>×</u>					29.0
Reduce the number of coverage days included for initial deployment.		x		x		x			39.7
Improve in-transit visibility		x			x	x			41.3
Policies									· ·
Refine the AFIs as necessary to best guide the deployment process.				x			x	x	42.9
Develop individual deployment guides for each deployment augmentee position.			×	x		x		x	48.8
Provide the Unit Deployment Manager (UDM) capability to produce more deployment ready personnel and cargo				x		x		x	33.0
Training									
Apply real-world training									
Maximize training banefic		X			×	X			41.3
Incomorate a training and		X		X	<u>×</u>	×		×	64.1
efficiency evaluation									
system					x	x		x	34.6
Include total process training		x	<u> </u>	x	x	x		x	64.1
Information Systems					<u> </u>		<u> </u>		
Implement a highly integrated			1	1				Γ	
Itask receipt-to-airlift manifest				.	L .			.	70.0
Desegrat Alling		X	⊢^	_		^		↓ ^	(3.9
Develop a process to			<u> </u>	<u> </u>	 	ŀ	<u> </u>	<u> </u>	
encourage augmentees to									1
participate in deployments			X	X				X	38.6

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Table 10. DPI vs. Process Criteria Measurement

3.2.4.5 Combined DPI Ranking

Having ranked the DPIs from the three perspectives of DPI vs. Problem, DPI vs. Process Criteria, and DPI vs. Critical Path, the combined DPI ranking results from their integration. Table 11 presents the integrated value for each DPI by averaging the three perspective percentage and ranking those averages to produce the final DPI ranking order.

DPIs	DPI vs.	DP1 vs.	DPI vs.	Avg of 3	Overall Rank
	Problem	Process	Critical	Scores	
	Percentage	Criteria	Path		
Process		rercentage	rercentage		
Optimize production and minimize	417	68.0	570	567	
inspection activities	41.7	00.7	51.9	30.2	2
Capitalize on similarities between cargo and	40.3	50.8	36.8	42.6	11
personnel					
Control tasking receipts into the base	31.7	33.0	15.8	26.8	15
Adjust responsibilities and improve the	82.3	66.6	2.6	50.5	. 3
integration of units, Manpower, and					
Personnel					
Collect deployment process status and	38.0	50.8	31.6	40.1	12
methods					
Better define the objective and criteria for	20.1	20.6	7.0	22.2	
UTC tailoring	27.1	29.0	1.9	22.2	18
Reduce the number of coverage days	19.1	397	79	22.3	17
included for initial deployment.			1.5		17
Improve in-transit visibility	30.6	41.3	23.7	31.9	13
Policies					
Refine the AFIs as necessary to best puide	62.9	42.9	31.6	45.8	
the deployment process.		12.7	51.0	45.0	,
Develop individual deployment guides for	36.6	48.8	47.4	44.2	9
each deployment augmentee position.					
Provide the UDM capability to produce	51.4	33.0	47.4	43.9	10
more deployment ready personnel and	•				
cargo					
Training			a ser	±. €	
Apply real-world training characteristics to	54.0	41.3	39.5	44.9	8
exercises					
Maximize training benefits	49.1	64.1	36.8	50.0	4
Incorporate a training and efficiency	58.0	34.6	52.6	48.4	5
evaluation capability into the LOG-AID					
System	20.7				
Information Sustained	39.1	04.1	39.5	47.8	6
Information Systems					and the second
implement a highly integrated task receipt-	78.6	79.9	55.3	71.3	1
Darconnel Attitude					
I CI SUMICI AUIUUC					
Develop a process to encourage augmentees	46.3	38.6	2.6	29.2	14
to participate in deployments	······				
Develop a process to encourage all	25.7	22.4	23.7	23.9	16
contingencies to the same level as everying					
Consider to the same torel as excluses				1	

Table 11. Combined DPI Rankings

While Table 11 presents the final combined ranking, Table 12 compares the final rankings by site and to those generated by the LOG-AID team. The importance of this comparison lies in the fact that while some minor ranking variations exists, there is a strong consistent trend across sites as well as with the LOG-AID team. This correlation indicates two major conclusion. One, the various sites view and measure the success of their deployment process in much the same manner, thus, benefits from improvements identified for one site will also be reflected in other sites. Two, correlation with the LOG-AID team indicates the in-depth understanding and appreciation of the deployment process gained by the LOG-AID team. As a result, the analysis and conclusions generated by the LOG-AID team truly address the user requirements for the deployment process.

DPIS	Fort	Charles	WWDPC	McGuire	Elmen	Mt	Hollo	Hickam	Osan 1	Vadena AR	Aviano	Rams	Rank I	OCAID TEAM	Combined Rank
	(1)	(+1)	È	(25)	(61)	AFB (16)	(20)	(33)	Ê	(21)	(91)	(10)	Field		
Process															
Maximize production and minimize inspection activities	2	2	61	~1	a	5	~	5	2	ч	5	5	7	2	ч
Capitalize on sinilarities between cargo and personnel	=	11	=	Ξ	П	H	=	=	10	=	=	=	II	11	11
Control tasking receipts into the base	14	+	15	Ť	15	15	15	ŝ	13	2	15	5	15	16	15
Improve integration of units, Manpower, and Personnel	4	+	۳.	+	+	+	e	3	3	+	4	+	4	£	£
Collect deploynent process data using passive methods	12	12	12	12	12		12	12	=	12	12		13	12	. 12
Better define the objective and criteria for UTC tailoring	17	17	18	18	81	17	17	18	38	- 	17	17	18	17	8
Reduce the number of coverage days included for initial deployment.	16	16	17	16	17	16	16	17	17	16	91	16	16	18	17
Improve in-transit visibility	13	13	13	13	13	13	сı Г	13	15	13	13	13	13	13	13
Policies															
Refine the Affs as necessary to best guide the deployment precess.	6	01	10	10	8	10	01	6	6	10		6	10	<u>.</u> و	-
Develop indivitual deployment guides for each position.	10	6	7	6	10	6	7	7	7	æ	10		6	6	6
Provide UDM apability to produce more deployment ready personne/cargo	8	8	6	8	6	8	8	8	9	6	6	7	20	9 ji	01
Training															
Apply real-word training characteristics to exercises	7	7	~	1	1	7	6	10	12	7	7	10	. 7 . ا		%
Maximize trainng benefits	e	ñ	+	.	۳.	m	+	+	·r.	£	3	ۍ ا		7	4
Incorporate a training/efficiency evaluation capability into I.OG-AID system	ŝ	6	6	ş	Ś	ę	9	9	भ	ç	9	 9	ę	ŝ	vo
Include total process training	6	5	Ś	6	Ģ	v.	vr.	Ś	×	<i>•</i> ۲.	v.		<u>،</u> ي		•
Information Systems															
Implement a highly integrated task receipt-to-airtift manifest info sys	-	-				-	-	-	-	-		-	-	-	-
Personnel Attitude															
Develop a process to encourage augmentees to participate in deploy	15	15	Ŧ	ŝ	ŧ	=	1	4	=	1	7	4	14.	. 14 ((14)	14
Develop a process to encourage personnel to be committed to real world contingencies to the same level as exercises	18	18	16	17	16	18	18	16	16	12	18	18	7	IS ST	16 e

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Table 12. DPI Rankings by Site

3.2.5 Implementation

With the DPIs now ranked, an analysis of options (technologies/policies/etc.) to implement the DPIs was addressed. This required an in-depth understanding of the DPIs, and existing and planned technologies. Available options for DPI implementation will be evaluated for best overall benefit. The selection of best options will following the completion of the field test when more detailed improvement information will be available and will continue into that point in time when the improvement implementation occurs.

The implementation criteria considered are cost, risk, ease of implementation, time to implement, scalability, and applicability to redeployment. These criteria evolved from the same process as the previously described Process Criteria and the stakeholders were prompted to provide criteria they considered important if changes were made to their deployment process. The resulting list of implementation criteria and their associated metrics are presented in Table 13.

DPI IMPLEMENTATION CRITERIA	DPI IMPLEMENTATION CRITERIA METRICS
Ease of Implementation Minimize the resources required to implement a DPI and the necessary technology.	 # Manpower Indicate the number of labor hours required to implement the DPI and the necessary technology. # Dollars Indicate the cost for the required labor hours.
Risk Maximizing the probability that the To-Be concept of operation can be successfully implemented. This will be judged by the availability of the technologies identified, and the successful previous implementations of the process concept and technologies.	# Dollars Acceptance Indicate the level of acceptance the user has for the implementation of a DPI and the necessary technology.
Time to Implement The length of time required to implement a DPI or technology and the time frame in which that implementation can be initiated.	# Years or months Indicate the number of months required to implement a DPI and the necessary technology.
Cost The estimated amount of resources required to implement a DPI or technology. Scalability Providing for the capability to implement the improved process using various levels of technology	 # Dollars (Technology) Indicate the cost associated with accessing a desired technology. Implementation level of effort Indicate the level of capability that exists to insert other technologies once a DPI has been implemented with the initial technology.
implementation and to incorporate new technologies without requiring significant changes to the process. Applicability to Redeployment Provide for the capability to apply some of the improved processes and technologies to the redeployment process.	Similarities with redeployment Indicate the level of applicability that a DPI and its implementing technology, as implemented in the deployment process, has to the redeployment process.

Table 13. Stakeholder-Defined Implementation Criteria and Metrics

3.2.6 Agile Combat Support Process and Technology Center (ACSPTC)

The ACSPTC provides the capabilities to learn the current tools used in the deployment process and test the effectiveness of tools developed for future implementation into the deployment process. Tradeoff analysis of these tools based on empirical data can be performed along with a variety of analysis to include technology costs (interfaces, reprogramming, etc.), transitions and transfer (Research and Development [R&D] to acquisition), magnitude of payback benefits (impact of Air Mobility Express [AMX] to Commander-in-Chief [CINC] Time-Phased Force Deployment Data [TPFDD], impact of Lean Log to theater depot timelines or smaller Readiness Spares Packages [RSPs]), and modeling and simulation using an end-to-end approach (factory to foxhole, strategy to task).

The room set up includes "story boards" to demonstrate the As-Is and To-Be process relation and interaction for employment driven requirements, reachback, deployment, pipeline analysis for performance, and time definite delivery. Associated with the "story boards" are the software/ hardware applications (existing and R&D) that support each process and facilitate analysis by subject matter experts in isolation or as part of exercise/wargame play. These tools contained within ACSPTC include those listed in Table 14.

ACRONYM NAME	NAME	PURPOSE
BCAT	Beddown Capability Assessment Tool	Performs a time-phased assessment of base capabilities and employment requirements
DeMS	Deployment Management System	Assigns manpower and equipment resources against UTC requirements
JLP	JPT Logistics Planner	Conducts a high level assessment of logistics capabilities and requirements to support the air campaign
JPT	JFACC Planning Tool	Supports the development of the CINC's air campaign strategy to achieve military objectives
LOGMOD(B) LOGMOD(M)	Logistics Module (Base Level) Logistics Module (MAJCOM Level)	Support logistics planning and UTC reporting during OPLAN development and execution
MANPER(B) MANPER(M)	Manpower/Personnel Module (Base Level) Manpower/Personnel Module (MAJCOM Level)	Supports manpower planning and UTC reporting during OPLAN development and execution
OT&P	Operational Tasking and Priorities	"Feeder" system for reviewing, refining, and updating Air Force tasking in the Joint Operations Planning and Execution System (JOPES)
UTC-DT	Unit Type Code - Development and Tailoring	Supports the development and tailoring of UTCs to meet deployment requirements

Table 14. ACSPTC Deployment Support Tools

3.3 CONOP Development

The CONOP development signifies the transition from defining the requirements for the To-Be wing-level deployment process to designing the process that satisfies those requirements. The basic CONOP description was derived from the To-Be models, specifically the To-Be activity and data models. The To-Be models provided the basis for describing what the had to be accomplished within the deployment CONOP, while the simulation provided the performance conditions (such as performance timing and process flow).

A combination of the To-Be models and the simulation focused the analysis and selection of implementation technologies by identifying the technology requirements and their performance specifications. Also, a simulation comparison between the current deployment process and the To-Be deployment CONOP provided an estimation of benefits anticipated from the implementation of the deployment CONOP. This section discusses the various aspects to the deployment CONOP development.

3.3.1 As-Is and To-Be Process Definition Overview

Figures 6 and 7 present top-level descriptions of the current wing-level deployment process and the deployment CONOP respectively. The major differences between the As-Is and To-Be process concepts are the removal of non-value added activities, the reduced use or quality check activities, reduced processing time through the application of equipment handling capabilities, and elimination or reduction on information processing activities through the use of automation.



Figure 6. Top-Level Description of the Current Wing-level Deployment Process

The flow of current deployment process starts with a tasking identifying the force requirements necessary to satisfy mission objectives which arrive independently at both the wing and TRANSCOM. Using standard UTC information, TRANSCOM computes transport and airflow requirements, which they then provide to the deploying units. In parallel, the assigned force requirements trigger the wing to initiate their deployment activities by producing a DSOE. The DSOE development includes a two-stage process. First, the schedule represents a set of integrated task durations that reflect the deployment process timeline needed to deploy the wing. Second, using the assigned airflow's defined by TRANSCOM action times are computed to replace the time duration representations. Because the two levels of planning are performed in parallel, adjustments are made to the deployment timeline to accommodate the airflow times and to adjust to the assignment of aircraft type different from initially anticipated.

Once developed, the DSOE provides the official guidance and timeline for performing the deployment effort to satisfy the delivery of the required forces. In accordance with airlift availability and mission requirements the units select and tailor equipment and AFSCs, the units then develop a DSOE schedule to prepare their cargo and personnel for deployment. Upon

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preparation completion, the cargo moves by forklifts and flatbed trucks through a series of handling and inspection activities. As various steps are completed in the deployment process, phone calls to the DCC provide status updates. While the number and type of inspections vary somewhat from site-to-site, the general inspections for cargo include a pre in-check, a CDF in-check, a marshaling check, and a Load Master check prior to actual loading. For personnel, the general inspection includes a unit check, a PDF check and a loading check prior to actual loading. In addition to the checks, personnel often wait in the PDF for long periods of time prior to loading.

From the marshaling area the cargo increments are moved to and loaded into the aircraft. This process occurs in a number of ways depending on the type of increment and the availability of material handling equipment. Rolling stock may move to the aircraft under its own power, moved via a k-loader, or placed on a pallet. Rolling stock, such as a C-10 Air Conditioner will likely be towed to the aircraft then either pushed, pulled, or wrenched aboard. The majority of pallets are loaded onto a k-loader in the marshaling area using forklifts, and the k-loader then transports the increment to the aircraft and supports the increment transfer into the aircraft.

LOG-AID's 2010 Concept of Operation, as illustrated in Figure 7, streamlines this process from the perspectives of both information processing, and resource (personnel and cargo) preparation and loading.



Figure 7. Top-Level Description of the To-Be Wing-level Deployment Process

As is currently accomplished, the force requirements are received in parallel by both the wing and TRANSCOM. However, through the application of an integrated, efficient LOG-AID Integrated Deployment System 2010 (IDS2010) capability, the deploying units define, coordinate, and communicate their deployment requirements to TRANSCOM in a timely manner so as to impact TRANSCOM's assignment of transports.

The intent behind IDS2010 is to apply a functional approach to accessing and organizing the information necessary to suggest the appropriate decisions, then present those suggested decisions to the appropriate users for review, adjustments, and acceptance. IDS2010 allows the personnel to be decision-makers and minimizes their information handling requirements.

This improved information processing addresses all aspects of deployment planning. These aspects of deployment planning include the tailoring of resources through the integration of site survey information, the coordination of deploying resources across units from various bases going to the same reception site, and the tailoring of UTC resources based on previous

experience and on assets currently in the deployed Area of Responsibility (AOR). IDS2010 also supports the selection of personnel and equipment to fill the deployment requirements, and the development of an integrated DSOE. Furthermore, during the deployment, IDS2010 supports the status tracking and problem identification during the deployment effort.

Effectively implemented, IDS2010 provides support to the current concept of the DCC. Currently the operations within the DCC focus on coordination and correction, IDS2010 will minimize the need for manual coordination, reduce the need for corrective actions based on erroneous information, and identify opportunities for adjusting the deployment processing timeline based on the continuously updated status information. Thus, many of the physical aspects of the DCC will be adjusted so as to place less significance on the DCC and more on the deployment process.

The design of the DCC will also change to provide more direct awareness of the deployment operations. This requires that the DCC be capable of directly observing the holding and loading area, and preferably to allow the DCC personnel to video tape what is happening with the deployment process. This allows personnel to review the deployment to find out what went wrong, and how it can be handled better in the future.

We now move from the process planning that is highlighted by information processing and decision making, to the actual preparation and handling of the material and personnel processing as dictated by the planning information. The preparation begins with a greater emphasis on keeping the deploying resources (both personnel and equipment) in a deployment ready state. In accordance with the deployment tasking, units make the limited number of preparation adjustments required.

Using the improved technology capabilities provided to them, units prepare their resources to such a quality state that they can move a majority of the deploying resources directly from the unit to the aircraft. To ensure flight safety, a limited number of resources receive a Quality Assurance (QA) check prior to loading. For personnel, this check will correct any deployment default already identified. For equipment, this check will continue for increments with Hazardous Materials (HAZMAT), increments prepared by units with history of bad preparation,

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increments containing items from multiple units and increments selected at random to maintain continued flight safety.

The actual movement of increments will be completed by effectively utilizing existing and new technologies. Through the increased movement speed, the goal will be to move increments from the units to the aircraft, while leaving open the possible need for a short term holding area. Moving increments more effectively requires that k-loaders and forklifts be used primarily for short distance moves while other technologies, such as pallet dollies, would provide a faster long-distance movement capability.

3.3.2 Performance Analysis

The results of the data collection and modeling efforts were tested using a dynamic simulation technique called WITNESS[®]. As shown in Figure 8, the models provided the framework for the simulations. The simulations used performance data, collected from the Air Force sites throughout various MAJCOMs. The collected data included activity timing, branching conditions among activities, and resources responsible for performing activities within the deployment process, Characteristics of the individual processes were defined with a number of probability distributions appropriate to the wing-level deployment environment. The conditional behavior of the system was studied to assess flow rates, bottlenecks, idle time, throughput, cycle times, workload, and other dynamic properties.

As part of the field testing of the DPIs, these dynamic simulations will be used to conduct "whatif" analyses to determine the effects the DPIs are likely to have on the wing-level deployment process. Used in this manner, the dynamic simulations provide a means of exploring alternative implementation approaches without requiring expensive and extensive on-site experiments.



Figure 8. Simulation Support of LOG-AID

3.3.2.1 Performance Data

The dynamic characteristics of the wing-level deployment process were collected at each Air Force base visit. The simulations used performance data collected from the AF bases visits, previous conducted AF studies such as Action Workout

(AWO) efforts on the deployment process at Robins AFB, GA in November 1996 and February 1997 and wing-IDEF, and maximum acceptable response times defined by another AFRL research effort (ITI-ALC).

The performance data collected and analyzed encompassed three types:

- Duration time to complete a process;
- Frequency of occurrence of a process or product; and
- Delay or response time for specific exceptions

• (e.g., the time between the request from the wing to MAJCOM for clarification and more detail on a fragmented or non-standard UTC and the time the MAJCOM responds with the details).

3.3.2.2 Assumptions

The following operational assumptions apply to the LOG-AID simulations.

- All personnel necessary to perform the jobs are available.
- If an increment is rejected in the CDF and sent back to the unit, it is repaired or replaced correctly and does not get frustrated again in the CDF.
- There is only one increment of mobility bags per chalk.
- One transport accepts all the passengers and mobility bags from one unit, thus the personnel and cargo from one unit is not split across transports.
- In the As-Is simulation, all personnel process through the PDF, and at least stop at the eligibility check, ID/Dog tags, and medical work stations. In the To-Be simulation only those personnel requiring processing through a work station stop at the PDF.
- There is a 20-minute delay between the time the last passenger is loaded on the aircraft and the aircraft takes off and departs the base.

In addition to the operational assumptions, Table 15 presents the variations in process flow between the As-Is an To-Be simulations. The As-Is percentages came from the stakeholders during the data collection process and incorporated into the simulation as a triangular distribution around those numbers. Using the same triangular distribution approach, the To-Be percentages were based to a great extent on goals placed on the To-Be processing concept but judged realistic and attainable by users.

Deployment Processing Action	As-Is Percent	To-Be Percent
Unit Pre In-check finds a problem with cargo and fixes it	12	6
Unit Pre In-check finds a problem with cargo and sends it back to the unit	3	1.5
buildup		
CDF finds a problem with cargo and fixes it	7	2
CDF finds a problem with cargo and sends it back to the unit	3	i
Personnel Processing through PDF	100	2
RAMPCO finds a problem with cargo and must fix it	2	0

Table 15. Assumptions Used in the As-Is and To-Be Simulations

The baseline scenario for comparing the As-Is and To-Be simulations consisted of the same number of chalks, squadrons or units, increments, and passengers per chalk as shown in Table 16. While not representing any one specific type of squadron or unit, the scenario numbers were selected as a general representation of a deployment size.

CHALK I	Total Increments: 15	Total Passengers: 38
Unit: #1	Increments: 3	Passengers: 3
Unit: #2	Increments: 10	Passengers: 4
Unit: #3	Increments: 4	Passengers: 31
CHALK 2	Total Increments: 11	Total Passengers: 51
Unit: #1	Increments: 4	Passengers: 23
Unit: #2	Increments: 6	Passengers: 21
Unit: #3	Increments: 1	Passengers: 7
CHALK 3	Total Increments: 18	Total Passengers: 47
Unit: #1	Increments: 6	Passengers: 27
Unit: #2	Increments: 4	Passengers: 2
Unit: #3	Increments: 8	Passengers: 18
CHALK 4	Total Increments: 2	Total Passengers: 18
Unit: #1	Increments: 2	Passengers: 18
CHALK 5	Total Increments: 7	Total Passengers: 7
Unit: #1	Increments: 4	Passengers: 4
Unit: #2	Increments: 1	Passengers: 1
Unit: #3	Increments: 2	Passengers: 2
CHALK 6	Total Increments: 7	Total Passengers: 12
Unit: #1	Increments: 1	Passengers: 11
Unit: #2	Increments: 6	Passengers: I

<i>Table</i> 16.	Simulation	Scenario
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A summary of the simulation results and improvements identified by the DPIs is presented in Table 17. The left column identifies some important parameters analyzed in the simulations. The As-Is and To-Be columns depict the results of the simulation in minutes. The improvement column depicts the percentage of the total improvement. The numbers are based on the exercising of a Monte Carlo simulation run consisting of one hundred runs.

Deployment Processing Action	As-Is	To-Be	Improvement Percent
Unit time to pack cargo	1610	1419	11.2
Unit time to prepare personnel	8869	1103	87.7
CDF processing time	837	245	70.7
Time to transport cargo	2474	1633	34
Time to transport passengers	498	392	21.3
DCC Time	174	N/A	
PDF Processing Time	6702	28	99.6
Total Deployment Time	28:31	12:50	55

7	abl	е.	Ľ	7.	Simu	lation	Results
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3.3.2.3 Network

IDEF₃ process models were constructed depicting the network for simulations. These are based on the IDEF₃ process models depicted in this technical report. They depict the lowest level of detail useful in obtaining performance information from the users. They do not necessarily go down to the level of detail of the lowest level nodes of the IDEF₃ process models. The networks do, however, encompass the same scope as the detailed models. The simulations begin with receipt of a deployment tasking at the wing/base and end when the assigned units, including both personnel and cargo, are loaded onto the transport and depart from the wing/base. Figure 9 depicts the As-Is network, and Figure 10 depicts the To-Be network.



Figure 9. As-Is Network



Figure 10. To-Be Network

3.3.2.4 Sensitivity Analysis

Monte Carlo experiments, each consisting of one hundred runs, were conducted to produce sets of deployment process timelines for the purpose for testing the sensitivity or impact that any one step has on the overall deployment process. The experiments were conducted by systematically changing the time of the selected process step while retaining the same distribution for all other aspects of the process.

The LOG-AID team recognized early on that results of simulation may be sensitive to certain values. As a result, sensitivity analyses were conducted on those simulations which 1) rely on low number of data points, 2) exhibit a wide variation in data points, 3) depend on areas of judgment by the subject matter experts, and 4) rely on activities of the network which are major areas of constraints for users, such as "transporting" and "CDF processing."

Figures 11 and 12 depict the sensitivity analyses results from the Monte Carlo experiments on the network representing the wing level deployment process. The x-axis identifies the percentage change in the parameter tested and the y-axis depicts the percentage change in the deployment execution time. Figure 11 illustrates that changes in processing steps within the deployment process had little impact on the DSOE development and load plan computation times. For this reason, additional data was not required to be collected for these areas. For example, the time to develop the load plan was comprised of a low number of data points. An analysis was conducted to determine how sensitive the simulation was to changes to this period of time. As shown in the second data series (Load Plan Computation Time) in Figure 11, as the time to perform the activity changed by 50 percent, the total deployment execution time changed by only 1.25 percent. The sensitivity analysis concluded that the total time for deployment execution was not sensitive to the variability in this data.



Figure 11. Sensitivity Analysis (Non-Sensitive Parameters)

The sensitivity analysis identified that the network is sensitive to certain pieces of data, as can be seen in Figure 12. The x-axis identifies the percentage change in the parameter tested. The y-axis depicts the percentage change in the deployment execution time. For example, the time to process cargo in the CDF appeared to be one of the bottlenecks in the process. As shown in the second data series in Figure 12, as the time to perform the CDF processing changed by 50 percent, the total deployment execution time changed by 12 percent.



Figure 12. Sensitivity Analysis (Sensitive Parameters)

3.3.3 Technology Analysis

Through the development and analysis of the As-Is and To-Be models, considerations turned to a search of the technologies that could be used to implement the To-Be deployment process. Because the implementation of the To-Be process aims at the year 2010, the technologies considered for use are those already in existence, being developed, or anticipated to be available by that time period. In addition to the technologies available or being developed for other purposes, requirements for new technologies also came from the analysis of the To-Be processing needs.

The guidelines for identifying and selecting the technologies came in the form of functional requirements and performance specifications. The functional and data models defined what the technologies had to perform in terms of the activity definition, data processing, and interfacing. The simulation model defined the performance or operational characteristics required of the technology.

3.3.4 Preliminary Cost Analysis

The LOG-AID program focused on improving the wing-level deployment process through the identification of innovative process improvements and technologies as documented in the LOG-AID CONOP. These improvements enhance the stakeholder's ability to satisfy deployment requirements while increasing deployment efficiency. As previously stated, the process improvements identified through the LOG-AID program for a fighter squadron having 13 increment per chalk went from a processing time of 10 to 23 hours down to a predicted time of 5 to 9 hours.

In addition to performance, improvement should also be reflected in a reduced cost to perform the deployment process. While it is realized that a cost saving benefit analysis does not provide a precise picture of the cost savings, it does provide good insights into potential cost savings percentages. Having stated this limitation, Table 18 summarizes the preliminary cost savings based on personnel cost resulting from the differences between the As-Is deployment process and the To-Be deployment process as defined in the LOG-AID CONOP.

Applying cost values in terms of the salaries of personnel involved in the force generation process from the time of unit notification through aircraft loading results in an average cost savings of approximately 58 percent. Similar cost savings would also occur in other deployment support functions such as the Command Post where personnel are involved from organizations such as Transportation, Security Police, and Communications.

These cost numbers are derived from the As-Is and To-Be deployment processing described in Figures 6 and 7 respectively. The minimum (min), maximum (max), and average (ave) costs correspond to the performance times assigned to deployment processing tasks multiplied by the salaries of individual types performing the deployment tasks using the baseline scenario involving one chalk of 13 increments and 20 personnel. The As-Is Cost row presents the costs for the performance of the deployment process as currently performed. The To-Be Cost row presents the cost savings associated with those tasks removed or reduced from the As-Is process to produce the To-Be CONOP. Thus, subtracting the To-Be Costs savings from the As-Is Costs produces the processing cost for the To-Be CONOP. The Percent Savings row then presents the percent of the cost savings with respect to the As-Is Cost.

	Min	Max	Ave
As-Is Cost	\$2370.69	\$5131.15	\$3750.92
To-Be Cost	\$1241.50	\$3088.91	\$2165.20
% Savings	52%	60%	58%

 Table 18. Computation of Estimated Cost Savings

Table 19 presents the military personnel salaries by rank used in the cost analysis calculation. Computed through 1998, the rates are presented in terms of both hours and minutes, with the per minute rate used for the cost analysis.

	96 Qtrs (w/dcp)	BAS (8.06*30)	Base Pay	Monthly Pay	1997 3% inc	1998 3% inc	Hourly Rate ***	Minute Rate
Amn(E2)	\$345.60	\$241.80	\$980.70	\$1,568.10	\$1,615.14	\$1,663.60	\$10.40	\$0.17
SrAmn (E3)	\$363.60	\$ 241.80	\$1,161.90	\$1,767.30	\$1,820.32	\$1,874.93	\$11.72	\$0.20
Sgt (E4)	\$390.00	\$ 241.80	\$1,354.20	\$1,986.00	\$2,045.58	\$ 2,106.95	\$13.17	\$0.22
SSgt (E5)	\$448.50	\$241.80	\$1,592.10	\$2,282.40	\$2,350.87	\$2,421.40	\$15.13	\$0.25
TSgt(E6)	\$498.90	\$241.80	\$1,890.00	\$2,630.70	\$2,709.62	\$2,790.91	\$17.44	\$0.29
MSgt (E7)	\$539.70	\$241.80	\$2,172.00	\$2,953.50	\$3,042.11	\$ 3,133.37	\$19.58	\$0.33
SMSgt (E8)	. \$581.40	\$ 241.80	\$2,713.50	\$3,536.70	\$3,642.80	\$3,752.09	\$23.45	\$0.39
CMsgt (E9)	\$630.60	\$241.80	\$3,077.40	\$3,949.80	\$4,068.29	\$4,190.34	\$ 26.19	\$0.44
ILT	\$524.70	\$149.67	\$2,532.30	\$3,206.67	\$3,302.87	\$3,401.96	\$ 21.26	\$0.35
Capt	\$614.40	\$149.67	\$3,176.70	\$3,940.77	\$4,058.99	\$4,180.76	\$ 26.13	\$0.44
Maj	\$742.50	\$149.67	\$4,051.80	\$4, 943.97	\$ 5,092.29	\$5,245.06	\$32.78	\$0.55
*** Assumption: 4 weeks * 40 hours/week = 160 hours/month								

Table 19. Labor Costs Used as the Cost Analysis Basis

Table 20 represents the As-Is deployment cost analysis with respect to labor used to produce the As-Is cost numbers presented in Table 18. The table is separated into the major activities preformed within the As-Is process, with a total cost associated with each activity. For each major activity the minimum, maximum, and average times for performing the tasks are listed along with personnel ranks of those usually assigned to the activity. Based on the rank, the pay rate of that rank, and the performance time, the minimum, maximum and average activity cost is computed. The total cost results from the sum of the all the individual activities.
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CDF In-check CDF In-check RAMPCO PERSONNEI Personnel Prov	Time TSgt SSgt Totals Time SSgt Amn (2) Totals Totals Time TSgt Totals Cess Time Cont	65.00 \$18.90 \$16.39 \$35.29 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$18.90 \$38.92 Min 65.00 \$18.90 \$38.92 Min 65.00 \$18.90 \$38.92 Min 65.00 \$38.92 Min 65.00 \$38.92 \$38.92 Min 65.00 \$38.92 \$38.92 Min 65.00 \$38.92 \$38.92 Min 65.00 \$38.92 \$38.92 \$38.92 Min 65.00 \$38.92 \$38.92 Min 65.00 \$38.92 \$38.92 Min 65.00 \$38.92 \$38.92 Min 65.00 \$38.92 \$38.92 Min 65.00 \$38.92 Min 65.00 \$38.92 \$38.92 Min 65.00 \$38.92 \$38.92 Min 65.00 \$38.92 \$38.92 Min 65.00 \$38.92 Min 65.00 \$38.92 Min 65.00 \$38.92	195.00 \$56.69 \$49.18 \$105.88 Max 195.00 \$49.18 \$67.58 \$116.77 Max 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90	Ave 130.00 \$37.79 \$32.79 \$70.58 Ave 130.00 \$32.79 \$45.06 \$77.85 Ave 65.00 \$18.90 \$18.90 \$18.90 \$45.06 \$18.90 \$17.50 \$18.90 \$17.50	L M Load	Time SSgt Amn Totals Time SSgt Totals Totals SSgt Totals	Min 40 \$10.09 \$6.93 \$17.02 Min 30 \$7.57 \$8.72 \$16.29 Min 5 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26	Max 195 \$49.18 \$33.79 \$82.98 Max 90 \$22.70 \$26.16 \$48.87 Max 5 \$1.26 \$1.26 \$1.26 Max 60	Ave 117.50 \$29.64 \$20.36 \$50.00 Ave 60.00 \$15.13 \$17.44 \$32.58 Ave 5.00 \$1.26 \$51.26 \$2.26 \$
CDF In-check RAMPCO PERSONNEI Personnel Pro	Time TSgt SSgt Totals Time SSgt Amn (2) Totals Time TSgt Totals Cess Time Capt	65.00 \$18.90 \$16.39 \$35.29 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.91 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$1	195.00 \$56.69 \$49.18 \$105.88 Max 195.00 \$49.18 \$67.58 \$116.77 Max 65.00 \$18.90 \$18.90 Max \$13.06	Ave 130.00 \$37.79 \$70.58 70.58 70.58 130.00 \$32.79 \$45.06 \$77.85 Ave 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$17.50 \$7.62	L M Load	Time SSgt Amn Totals Time SSgt Totals Totals Time SSgt Totals A Time SSgt	Min 40 \$10.09 \$6.93 \$17.02 Min 30 \$7.57 \$8.72 \$16.29 Min 5 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26	Max 195 \$49.18 \$33.79 \$82.98 Max 90 \$22.70 \$26.16 \$48.87 Max 5 \$1.26 \$1.	Ave 117.50 \$29.64 \$20.36 \$50.00 Ave 60.00 \$15.13 \$17.44 \$32.58 Ave 5.00 \$1.26 \$1
CDF In-check RAMPCO PERSONNEL Personnel Prov	Time TSgt SSgt Totals Time SSgt Ann (2) Totals Time TSgt Totals Cess Time Capt MSgt	65.00 \$18.90 \$16.39 \$35.29 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$1.63 \$1.63	Max 195.00 \$56.69 \$49.18 \$105.88 Max 195.00 \$49.18 \$67.58 \$116.77 Max 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$13.06 \$9.79	Ave 130.00 \$37.79 \$32.79 \$70.58 Ave 130.00 \$32.79 \$45.06 \$77.85 Ave 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$17.50 \$7.62 \$5.71	L M Load	Time SSgt Amn Totals Time SSgt Totals Totals Time SSgt Totals d Time SSgt d Time	Min 40 \$10.09 \$6.93 \$17.02 Min 30 \$7.57 \$8.72 \$16.29 Min 51.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26	Max 195 \$49.18 \$33.79 \$82.98 Max 90 \$22.70 \$26.16 \$48.87 Max 5 \$1.26 \$1.26 Max Max 60 \$15.13 \$10.40	Ave 117.50 \$29.64 \$20.36 \$50.00 Ave 60.00 \$15.13 \$17.44 \$32.58 Ave 5.00 \$1.26 \$1.26 \$2.26 Ave 60.00 \$1.26 \$1.26 \$2.2
CDF In-check RAMPCO PERSONNEI Personnel Pro	Time TSgt SSgt Totals Time SSgt Amn (2) Totals Totals Time TSgt Totals Cass Time Capt MSgt SSgt	65.00 \$18.90 \$16.39 \$35.29 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$16.39 \$22.53 \$38.92 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$18.90 \$38.92 Min 65.00 \$18.90 \$38.92 Min 65.00 \$18.90 \$38.92 Min 65.00 \$18.90 \$38.92 Min 65.00 \$18.90 \$2.18 \$1.63 \$5.04	Max 195.00 \$56.69 \$49.18 \$105.88 Max 195.00 \$49.18 \$67.58 \$116.77 Max 65.00 \$18.90 \$18.90 \$18.90 \$13.06 \$9.79 \$30.27	Ave 130.00 \$37.79 \$32.79 \$70.58 Ave 130.00 \$32.79 \$45.06 \$77.85 Ave 65.00 \$18.90 \$45.06 \$77.85 Ave 17.50 \$18.90 \$45.06 \$77.85 \$77.	L M Load	Time SSgt Amn Totals Time SSgt Totals Totals Totals d Time SSgt Time SSgt AMN Totals	Min 40 \$10.09 \$6.93 \$17.02 Min 30 \$7.57 \$8.72 \$16.29 Min 51.26 \$1.26 Min 60 \$15.13 \$10.40	Max 195 \$49.18 \$33.79 \$82.98 Max 90 \$22.70 \$26.16 \$48.87 Max 5 \$1.26 \$1.26 Max Max 60 \$15.13 \$10.40 \$25.53	Ave 117.50 \$29.64 \$20.36 \$50.00 Ave 60.00 \$15.13 \$17.44 \$32.58 Ave 5.00 \$1.26 \$1
CDF In-check RAMPCO PERSONNEI Personnel Pro	Time TSgt SSgt Totals Time SSgt Amn (2) Totals Totals Time TSgt Totals Cess Time Capt MSgt SSgt (4)	65.00 \$18.90 \$16.39 \$35.29 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$18.90 \$18.90 Min 5.00 \$2.18 \$1.63 \$1.63	Max 195.00 \$56.69 \$49.18 \$105.88 Max 195.00 \$49.18 \$67.58 \$116.77 Max 65.00 \$18.90 Max 30.00 \$13.06 \$9.79 \$30.27	Ave 130.00 \$37.79 \$32.79 \$70.58 Ave 130.00 \$32.79 \$45.06 \$77.85 Ave 65.00 \$18.90 \$45.06 \$77.85 Ave 17.50 \$18.90 \$45.06 \$18.90 \$18.90 \$45.06 \$18.90 \$17.50 \$17.50 \$17.60 \$17.	L M Load	Time SSgt Amn Totals Time SSgt TSgt Totals Totals Totals d Time SSgt d Time SSgt	Min 40 \$10.09 \$6.93 \$17.02 Min 30 \$7.57 \$8.72 \$16.29 Min 5 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.5.13 \$10.40 \$25.53	Max 195 \$49.18 \$33.79 \$82.98 Max 90 \$22.70 \$26.16 \$48.87 Max 5 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.213 \$1.040 \$15.13 \$10.40 \$25.53	Ave 117.50 \$29.64 \$20.36 \$50.00 Ave 60.00 \$15.13 \$17.44 \$32.58 Ave 5.00 \$1.26 \$1
CDF In-check CDF In-check RAMPCO PERSONNEL Personnel Proc	Time TSgt SSgt Totals Time SSgt Annn (2) Totals Totals Time TSgt Totals Cess Time Capt MSgt SSgt (4)	65.00 \$18.90 \$16.39 \$35.29 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$18.90 \$38.92 Min 65.00 \$18.90 \$2.18 \$1.63 \$5.04 \$2.01	Max 195.00 \$56.69 \$49.18 \$105.88 Max 195.00 \$49.18 \$67.58 \$116.77 Max 65.00 \$18.90 \$18.90 Max 30.00 \$13.06 \$9.79 \$30.27 \$17.44	Ave 130.00 \$37.79 \$32.79 \$70.58 Ave 130.00 \$32.79 \$45.06 \$77.85 Ave 65.00 \$18.90 \$18.90 \$45.65 \$18.90 \$18.90 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$17.50 \$17.50 \$17.50 \$17.50 \$17.50 \$17.50 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$18.90 \$17.50 \$17.60 \$17.60 \$17.60 \$10.10	L M Load	Time SSgt Amn Totals Time SSgt Totals Totals Time SSgt Totals d Time SSgt Totals AMN Totals	Min 40 \$10.09 \$6.93 \$17.02 Min 30 \$7.57 \$8.72 \$16.29 Min 5 \$1.26 \$	Max 195 \$49.18 \$33.79 \$82.98 Max 90 \$22.70 \$26.16 \$48.87 Max 5 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.21 \$1.26 \$1.26 \$1.25 \$1.26 \$1.25 \$1.26 \$1.25 \$1.26 \$1.25 \$1.26 \$1.25 \$1.26 \$1.26 \$1.25 \$1.26 \$1.25 \$1.26 \$1.2	Ave 117.50 \$29.64 \$20.36 \$50.00 Ave 60.00 \$15.13 \$17.44 \$32.58 Ave 5.00 \$1.26 \$1
CDF In-check RAMPCO PERSONNEL Personnel Pro	Time TSgt SSgt Totals Time SSgt Amn (2) Totals Time TSgt Totals Cess Time Capt MSgt SSgt (4) TSgt (2)	65.00 \$18.90 \$16.39 \$35.29 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$22.53 \$38.92 \$18.90 \$10.30 \$10.30 \$10.30 \$22.53 \$38.92 \$38.	195.00 \$56.69 \$49.18 \$105.88 Max 195.00 \$49.18 \$67.58 \$116.77 Max 65.00 \$18.90 \$18.90 Max 30.00 \$13.06 \$9.79 \$30.27 \$17.44	Ave 130.00 \$37.79 \$70.58 70.59 70.52 70.57 7	L M Load	Time SSgt Amn Totals Time SSgt Totals Totals Time SSgt Totals d Time SSgt AMN Totals	Min 40 \$10.09 \$6.93 \$17.02 Min 30 \$7.57 \$8.72 \$16.29 Min 5 \$1.26 \$	Max 195 \$49.18 \$33.79 \$82.98 Max 90 \$22.70 \$26.16 \$48.87 Max 5 \$1.26 \$48.87 Max 5 \$1.26 \$45.13 \$10.40 \$25.53	Ave 117.50 \$29.64 \$20.36 \$50.00 Ave 60.00 \$15.13 \$17.44 \$32.58 Ave 5.00 \$1.26 \$2.50 \$1.26 \$2.50 \$1.26 \$2.51 \$1.26 \$2.51 \$1.26 \$2.55 \$1.040 \$2.553
CDF In-check RAMPCO PERSONNEL Personnel Pro	Time TSgt SSgt Totals Time SSgt Amn (2) Totals Time TSgt Totals Cess Time Capt MSgt SSgt (4) TSgt (2)	65.00 \$18.90 \$16.39 \$35.29 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$18.90 \$38.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$1.63 \$5.04 \$2.91 \$2.91	195.00 \$56.69 \$49.18 \$105.88 Max 195.00 \$49.18 \$105.88 Max 195.00 \$49.18 \$105.88 Max \$67.58 \$116.77 Max \$65.00 \$18.90 \$18.90 \$18.90 \$13.06 \$9.79 \$30.27 \$17.44	Ave 130.00 \$37.79 \$32.79 \$70.58 Ave 130.00 \$32.79 \$45.06 \$77.85 Ave 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$17.50 \$17.50 \$7.62 \$5.71 \$17.66 \$10.18	L M Load	Time SSgt Amn Totals Time SSgt Totals Totals Time SSgt Totals d Time SSgt AMN Totals	Min 40 \$10.09 \$6.93 \$17.02 Min 30 \$7.57 \$8.72 \$16.29 Min 5 \$126 \$126 \$126 \$126 \$126 \$126 \$126 \$15.13 \$10.40 \$25.53	Max 195 \$49.18 \$33.79 \$82.98 Max 90 \$22.70 \$26.16 \$48.87 Max 5 \$1.26 \$1.2	Ave 117.50 \$29.64 \$20.36 \$50.00 Ave 60.00 \$15.13 \$17.44 \$32.58 Ave 5.00 \$1.26 \$1
CDF In-check RAMPCO PERSONNEI Personnel Pro	Time TSgt SSgt Totals Time SSgt Annn (2) Totals Time TSgt Totals Cess Time Capt MSgt SSgt (4) TSgt (2) AMN (3)	65.00 \$18.90 \$16.39 \$35.29 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$22.53 \$38.92 \$38.	Max 195.00 \$56.69 \$49.18 \$105.88 Max 195.00 \$49.18 \$67.58 \$116.77 Max 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$13.06 \$9.79 \$30.27 \$17.44 \$15.60	Ave 130.00 \$37.79 \$32.79 \$70.58 Ave 130.00 \$32.79 \$45.06 \$77.85 Ave 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$17.50 \$17.66 \$10.18 \$9.10	L M Load	Time SSgt Amn Totals Time SSgt Totals Totals Time SSgt Totals d Time SSgt AMN Totals	Min 40 \$10.09 \$6.93 \$17.02 Min 30 \$7.57 \$8.72 \$16.29 Min 5 \$1.26 \$1.26 \$1.26 Min 60 \$15.13 \$10.40 \$25.53	Max 195 \$49.18 \$33.79 \$82.98 Max 90 \$22.70 \$26.16 \$48.87 Max 5 \$1.26 \$1.26 Max Max 60 \$15.13 \$10.40 \$25.53	Ave 117.50 \$29.64 \$20.36 \$50.00 Ave 60.00 \$15.13 \$17.44 \$32.58 Ave 5.00 \$1.26 \$5.26 \$1
CDF In-check RAMPCO PERSONNEI Personnel Pro	Time TSgt SSgt Totals Time SSgt Amn (2) Totals Totals Time TSgt Totals Capt MSgt SSgt (4) TSgt (2) AMN (3)	65.00 \$18.90 \$16.39 \$35.29 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$10,000 \$10,000\$10,000\$10,000\$10,000\$10,000\$100	Max 195.00 \$56.69 \$49.18 \$105.88 Max 195.00 \$49.18 \$67.58 \$116.77 Max 65.00 \$18.90 \$18.90 \$18.90 \$13.06 \$9.79 \$30.27 \$17.44 \$15.60	Ave 130.00 \$37.79 \$32.79 \$70.58 Ave 130.00 \$32.79 \$45.06 \$77.85 Ave 65.00 \$18.90 \$45.06 \$77.85 Ave 17.50 \$18.90 \$45.06 \$18.90 \$18.90 \$45.06 \$18.90 \$10.00 \$10.	L M Load	Time SSgt Amn Totals Time SSgt Totals Totals Time SSgt Totals d Time SSgt AMN Totals	Min 40 \$10.09 \$6.93 \$17.02 Min 30 \$7.57 \$8.72 \$16.29 Min 51.26 \$1.26 \$1.26 Min 60 \$15.13 \$10.40 \$25.53	Max 195 \$49.18 \$33.79 \$82.98 Max 90 \$22.70 \$26.16 \$48.87 Max 5 \$1.26 \$1.26 Max Max 60 \$15.13 \$10.40 \$25.53	Ave 117.50 \$29.64 \$20.36 \$50.00 Ave 60.00 \$15.13 \$17.44 \$32.58 Ave 5.00 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.513 \$10.40 \$15.13 \$10.40 \$15.13 \$10.40 \$15.13 \$10.40
CDF In-check RAMPCO PERSONNEI Personnel Proo	Time TSgt SSgt Totals Time SSgt Amn (2) Totals Totals Time TSgt Totals Cess Time Capt MSgt SSgt (4) TSgt (2) AMN (3) Totals	65.00 \$18.90 \$16.39 \$35.29 Min 65.00 \$16.39 \$22.53 \$38.92 Min 65.00 \$18.90 \$38.92 Min 5.00 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$18.90 \$16.39 \$2.50 \$18.90 \$2.50 \$18.90 \$2.50 \$18.90 \$16.39 \$2.50 \$16.39 \$2.50 \$16.39 \$2.50 \$16.39 \$2.50 \$16.39 \$2.50 \$16.39 \$2.50 \$16.39 \$2.50 \$16.39 \$2.50 \$16.39 \$2.50 \$38.92 \$16.39 \$2.50 \$38.92 \$35.04 \$2.91 \$2.60 \$314.36	195.00 \$56.69 \$49.18 \$105.88 Max 195.00 \$49.18 \$105.88 S105.88 Max \$67.58 \$116.77 Max 65.00 \$18.90 Max 30.00 \$13.06 \$97.99 \$30.27 \$17.44 \$15.60 \$886.16	Ave 130.00 \$37.79 \$32.79 \$70.58 Ave 130.00 \$32.79 \$45.06 \$77.85 Ave 65.00 \$18.90 \$18.90 Ave 17.50 \$18.90 \$10.00 \$10.	L M Load	Time SSgt Amn Totals Time SSgt Totals Totals Time SSgt Totals d Time SSgt AMN Totals	Min 40 \$10.09 \$6.93 \$17.02 Min 30 \$7.57 \$8.72 \$16.29 Min 5 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.25 \$1.040 \$25.53	Max 195 \$49.18 \$33.79 \$82.98 Max 90 \$22.70 \$26.16 \$48.87 Max 5 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.26 \$1.5.13 \$10.40 \$25.53	Ave 117.50 \$29.64 \$20.36 \$50.00 Ave 60.00 \$15.13 \$17.44 \$32.58 Ave 5.00 \$1.26 \$1

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Prepare	1	Min	Max	Ave	Load		Min	Max	Ave
Personnel	Time	15.00	90.00	52.50	Aircraft	Time	100.00	125.00	112.50
	TSgt	\$4.36	\$ 26.16	\$15.26		TSgt (2)	\$58.14	\$72.68	65.41
	SSgt	\$3.78	\$22.70	\$13.24		SSgt (2)	\$50.45	\$63.06	56.75
	Totals ·	\$8.14	S-18.87	\$28.50		Amn (4)	\$69.32	\$86.65	77.98
						Totals	\$177.91	\$222.38	200.14
		Min	Max	Ave					
AS-IS Co	st	<u>\$2,370.69</u>	\$5,131.15	\$3,750.92					

Table 20. Performance Cost for the As-Is Deployment Process

Table 21 represents the To-Be CONOP savings. This saving was computing based on the performance cost of those activities removed or adjusted in going from the As-Is to the To-Be processes due to process changes or the application of automation. Thus subtracting the cost totals in Table 21 from the As-Is cost totals produces the predicted cost of the To-Be process definition.

For the cargo processing, six activities were eliminated, namely the pre-in-check, CDF in-check, RAMPCO check, marshalling, Load Master Check, and the Load Master preparation for loading. For each of these eliminated activities, the time, individual cost, and total cost were computed. Similarly for personnel, the personnel processing through the PDF was eliminated along with personnel holding requirement. As-Is processing activities reduced due to automation include the coordination of force requirements, the generation of the DSOE, the preparation of personnel, and the monitoring in the DCC. The time and cost for these reduced efforts were computed.

Within the To-Be process, the CDF in-check will not be totally removed, but rather minimized. In the first part of the table, the As-Is CDF in-check was totally removed. To represent the To-Be CONOP, the last part of Table 21 represents the cost of the reduced CDF in-check to remain a part of the deployment process.

Thus the totals at the bottom of the table represent the costs savings based on changes made to As-Is process so as to produce the To-Be process. These numbers are presented in Table 18 for summary.

CARGO	Ministry Altre			· · ·			APP NUMBER		
(Positions Eli	minated)						調整時代		
rre in-check	TTATE	Min	Max	Ave	Marshal		Min	Max	Ave
	11.SIE	65.00	195.00	130.00	пме		40	195	117.50
·	1.5gt	\$18.90	\$26.69	\$37.79		SSgt	\$10.09	\$49.18	\$29.64
l	Totale	\$10.39	349.18	\$32.79		Amn	\$6.93	\$33.79	\$20.36
	101415		\$105.88	570.58		Lotais	\$17.02	\$82.98	\$50.00
CDF In-chec	 k	Min	Max	Ave	Load Master (heek	Alin	May	1.00
	TIME	65.00	195.00	130.00		TIME	30	90	60.00
	SSgt	\$16.39	\$49.18	\$32.79		SSgt	\$7.57	\$22.70	\$15.13
	Amn	\$22.53	\$67.58	\$45.06		TSgt	\$8.72	\$26.16	\$17.44
	(2)								
	Totals	\$38.92	\$116.77	\$77.85		Totals	\$16.29	\$48.87	\$32.58
RAMPCO		Alin	Mar		Land Martin I	[
KAMI CO	TINE	65.00	Max	Ave (5.00)	Load Master L	Cad	Min	Max	Ave
	TSat	\$18 ON	03.00 \$19.00	0.00		Cent	C 81.20	5	5.00
}	Totals	C18 00	\$18,70	\$10.90		Totale	\$1.20	\$1.20	\$1.20
		310.70	310.70	310.70		TULIIS	31.20	51.20	51.20
PERSONNE	Ling					Margaret.	Reining Park		Mark Markey
(Positions Eli	iminated)								
Personnel Pr	ocess	Min	Max	Ave	Personnel		Min	Max	Ave
	TIME	5.00	30.00	17.50	llold	TIME	60		(0.00)
	Capt	\$2.18	\$13.06	\$7.50		SSat	\$1513	\$1512	\$15.12
	MSgt	\$1.63	\$9,79	\$5.71		AMN	\$10.40	\$10.40	01.012
	SSgt	\$5.04	\$30.27	\$17.66		Totals	\$25.53	\$25.53	\$75.53
	(4)								02.1.10
	TSgt (2)	\$2,91	\$17.44	\$10.18					
	AMN (3)	\$2.60	\$15.60	\$9.10					
	Totals	\$14.36	\$86.16	\$50.26					
		1.285 Sec.					1.		
Positions Imp	plementing Aut	mation for cost savin	ngs his first the	的政策的推测。	与这时纪中的	思想に使	T STAR	构成物体。	的 和1000
Coordinate F	Force	Min	Max	Ave	Generate DSO	E	Min	Max	Ave
Req's	TIME	40.00	55.00	47.50		TIME	15	60	37.50
	TSgt (3)	\$34.89	\$47.97	\$41.43		Capt	\$6.53	\$26.13	\$16.33
	MSgt	\$39.17	\$53.85	\$46.51		Totals	\$6.53	\$26.13	\$16.33
ļ	(3)								
	Totalo	\$17.42	\$23.95	\$20.69					
	Totais	371.4/	3125.78	5108.02					
Prepare		Min	Max	Ave	ļ		<u> </u>		
Personnel	TIME	5.00	40.00	22.50			<u> </u>	<u> </u>	
	TSgt	\$1.45	\$11.63	\$6.54					<u> </u>
	SSgt	\$1.26	\$10.09	\$5.68				1	
	Totals	\$2.71	\$21.72	\$12.22		<u> </u>			
									1
DCC Monito	ir	Min	Max	Ave					
	TIME	340.00	850.00	595.00					
	Capt	\$148.07	\$370.17	\$259.12					
	1st Lt	\$120.49	\$301.21	\$210.85		1	<u> </u>		
	MCgt	\$337.07	\$837 3()	\$582.61	1	<u> </u>	<u> </u>		
	(3) TSat		£10100	#245.0Z		ļ	<u> </u>		
	(2)	\$197.09	\$494.22	\$343.96					

	Amn	\$176.76	\$441.89	\$309.33			
	(3)						
	Totals	\$975.92	\$2,439.80	\$1,707.86			
		Landary C., Martin and J.	CONTRACTOR OF THE REPORT	an a	Marine Constant	 - M Is IN - DWA - COMPANY	
Additional cost	d in 10-Be Mix						
In-check QA		Min	Max	Ave			
	TIME	5.00	20.00	12.50			
	TSgt	\$1.45	\$5.81	\$3.63			
	SSgt	\$1.26	\$5.04	\$3.15			
	Totals	\$2.71	\$10.86	\$6.79			
TOTALS		Min Str	Max .	Ave			
To-Be Cost S	avings 🖄 🔭	\$1,241.50	\$3,088.91	\$2,165,20			

Table 21. Performance Cost Savings for the To-Be Deployment Process

3.3.5 CONOP Verification

The To-Be validations focused on gaining acceptance and additional improvement suggestions from the stakeholders. Selected To-Be validation sites included a representative of various mission types and the bases supporting those types of missions.

At each site, the two-day validation process followed basically the same agenda. On the morning of the first day, the LOG-AID Government Program Manager presented an introductory overview to the Wing Commander, or his representative, and any of his invited staff members. Individual sessions followed over the next two days, with each session lasting approximately three hours. The pre-identified attendees were grouped according to their deployment process responsibilities, allowing for flexibility to attend a different session to accommodate their work schedules. These groupings of similar personnel was intended to encouraged discussions and focus on specific areas of the process while minimizing conflicts that may exists among the various areas of responsibilities. As experience was gained regarding the completeness and acceptance of the DPIs and CONOP, and the anticipated conflicts were not apparent, the separation of personnel by deployment responsibilities was removed and more integrated groups formed. Table 22 summarizes the scope and magnitude of the To-Be verification effort.

Because of the acceptance received at the various bases regarding the wing level deployment process strengths, weaknesses, and the identified DPIs, the validity and completeness of the LOG-AID analysis was believed to be addressing the needs and goals of the users or stakeholders. This does not mean, however, that the session were quiet and without comments.

The stakeholders were very open with their comments but in general all comments were in agreement with the information presented.

SITES/COMMAND	STAKEHOLDERS	ATTENDEES
 Wright Patterson AFB/ AFMC Indiana ANG (Ft. Wayne)/ ANG Charleston AFB/ AMC WWDPC/ HQ USAF McGuire AFB/ AMC Elmendort AFB/ PACAF Mt. Home AFB/ ACC Holloman AFB/ ACC Osan/ PACAF Kadena/ PACAF Hickam AFB/ PACAF Aviano AB/ USAFE Ramstein AB/ USAFE 	 Wing Commander IDO/DCC UDM Load Planner Manpower & Personnel PDF CDF/In-check On-Base Transportation READY Marshaler/RAMPCO Load Master/TRANSCOM Reception Site 	 Command & Control (60) Planning (94) Cargo Handlers/Transportation (37) Manpower & Personnel Functions (23) Unit Functions (111) 325 TOTAL STAKEHOLDERS INVOLVED

Table 22. Sites and Stakeholders involved in the To-Be Verification Process

The verification sessions were set up to maximize the attendee involvement, with the goal of ensuring their understanding of program intent and concepts. While the presentation approach varied slightly over the course of the verifications, the sessions started with a request to the attendees to list for themselves the strengths, weaknesses, and improvement ideas they have about the process.

Each category (information systems, process, training, policy, and personnel attitude) of strengths, weaknesses, and DPIs were presented followed by an open session during which attendees were encouraged to reflect and comment on those items. Following these discussions was the discussion and simulation demonstration for how the To-Be process and its comparison to the As-Is process performance. Again, this discussion and demonstration ended with an open discussion to encourage involvement and ideas. The attendees were then asked to review the process strengths, weaknesses, and improvement ideas to verify if all their issues had been addressed. Each session ended with an explanation of the DPI process criteria and their ranking of those criteria.

In addition to each individual ranking the DPI process criteria, the IDO completed the information for the deployment metrics.

4. RESULTS

4.1 Deployment Timeline Comparison

Figure 13 presents a comparison of the deployment timelines as the process exists today, as the process is planned for AEF, and for the proposed process towards the year 2010. Currently there exists a level of preparedness for both personnel and cargo prior to the receipt of the warning order. During the planned 15 days from the warning order to deployment order, crisis action planning and preparation increases. Following receipt of the deployment order, 6 hours of crisis action planning transfers into 16 hours of personnel and cargo processing, terminating with the deploying resources being loading on the conveyances for movement to the receiption site. Three days after deployment order receipt, the force are in place at the deployed location and ready to begin mission operations with sufficient resource to support a 30-day effort before sustainment resources are required.

The reduction in the AEF timeline results from the increases effort involved in maintaining unit preparation prior to the receipt of the warning order. During this time period, designated units prepare for deployment as part of their everyday work operation. For example, at the end of every work day, aircraft are loaded and pallets built to the point they are ready for deployment processing. This daily preparation allows for the reduced deployment timeline once the orders arrive.

In the year 2010, the time between warning order and deployment order will decrease to one day, with sortie generation beginning 42 hours after warning order receipt. To satisfy this demanding timeline requires that resource preparedness be improved along with a decreased timeline for both planning and processing. In addition, the sustainment resources must vary to satisfy the mission duration requirements that could range anywhere from 3 to 30 days after deployment order receipt.



Figure 13. Deployment 2010 Process will Reduce the Time to Sortie Initiation

To meet these challenges, planners must apply methods that facilitate the tailoring of resources for a specific scenario. In some cases, meeting operational objectives may incur unacceptable levels of risks; therefore, planners must assess the risks of various support strategies and communicate those risks to operational planners in operational terms. Logisticians need to provide the best guidance to operational planners concerning any risks in logistics support of mission requirements.

4.2 Program Risks

Performance of a process improvement effort such as LOG-AID requires a team of people for to accomplish the identification, access, collection, integration, and analysis of large quantities of data and information to ensure the development of realistic and truly beneficial improvement concepts. The level of program success relies heavily on the team's ability to accomplish this information intensive tasks. To help ensure the success of the LOG-AID program, a risk avoidance and mitigation analysis was perform. The goal of this analysis was to identify the critical aspects of the process, that if not addressed correctly, would significantly decrease the benefits received from the program. For each of these risks, one or more steps or approaches were established which would eliminate or reduce the potential that the problem would occur and

minimize program success. Table 23 summarizes the list risks and corresponding avoidance/mitigation steps identified for LOG-AID.

RISK	AVOIDANCE/MITIGATION
Potential for an Ineffective	Develop a common program understanding
Program	⇒ Develop a strawman model
	⇒ Verify with in-house functional experts
	⇒ Use walk-throughs to coordinate the LOG-AID team's understanding
	⇒ Perform preliminary site visits to local bases
	 Support the Department of Defense (DoD)/AF strategic vision
	⇒ Identify data critical to DoD/AF strategic visions
	\Rightarrow Develop interaction with related initiatives
	⇒ Maintain user involvement
	⇒ Collect data focused around deployment metrics
	⇒ Ensure traceability of CONOP to strategic visions
Failure to produce clearly defined	Baseline objectives have been well established by the LOG-AID program.
objectives as to what the improved	 Development of criteria and metrics that address objectives
process is to accomplished	-
Failure to get a solid understanding	 Interviewed user personnel across all aspects of base-level deployment and at different bases
of process that includes the	Correlation of information across interviews
development of good analysis tools	Use of in-house Subject Matter Experts (SMEs)
	Application of a systematic analysis methodology
Risk of "non-truths" from person	
being interviewed.	
A I I was in a summaria mot	
Addressing symptoms, not	
Failure to integrate large quantities	Effectively identify the data to be collected
of information from varied	Annively identify the data to be concered Annively a structured data collection and recording annoach that facilitates access and
locations and sources	analysis
	Used a modeling approach that supports the integration and verification of the collected data
	Maintained traceability between the data and their sources
	Effectively document, access, and trace the data.
Failure to realize that a DPI is	Interviewing other levels than the base
negatively impacting the process	Reviewing documentation than is beyond the base level
beyond base level.	 Developing A-1 diagram to define the functional environment surrounding the functional
	scope defined for the analysis.
Failure to Establish User Buy-In	Establish user involvement early-on
because the DPIs lack practicality	⇒ Identify user benefits for the LOG-AID program
and do not address the real user	⇒ Demonstrate up-front understanding of deployment
problems	\Rightarrow Prepare thoroughly for data collection
	⇒ Make effective use of users' time
	\Rightarrow Address process issues identify by the users
	Maintain user involvement throughout the program
	⇒ Coordinate data collection and validation trips with users
	⇒ Provide users the opportunity to review intermediate materials and ideas
Failure of the modeling and	Direct the analysis towards a sensitivity analysis that identifies problems inherent in the
simulation analysis to replicate	process concept rather than at specific site implementations
exact real-world situations	,
Failure to focus on the DPI	Application of the House of Quality-type analysis based on criteria and metrics developed
providing maximum benefit	through user involvement to ensure a practical and operational solution.

Table 23. Summary List of LOG-AID Risks and Avoidance/Mitigation Approaches

4.3 Resulting DPI List and Their Ranking Order

An analysis of the As-Is deployment process provided the basis for developing the 2010 deployment concept of operation. This analysis established a detailed understanding of the basis process requirements along with a set of strengths and weaknesses inherent in the process.

Grouping these strengths and weaknesses with respect to Information Systems, Process, Policies, Training, and Personal Attitude provided the foundation for developing DPIs that built on the strengths and corrected or minimized the weaknesses.

From an analysis perspective, each DPI provided improvement benefits to the wing-level deployment process. The true importance or value of each DPI, however, relates directly to the benefit realized by the stakeholders, with the stakeholders being those performing the deployment process and those being deployed.

Table 24 summarizes the DPIs developed through the LOG-AID program along with their computed ranking, using "1" as the highest priority. A complete list of strengths, weaknesses, and resulting DPIs is presented in Appendix E. A complete discussion of the ranking process is presented in Section 4.3.

CATEGORY	DPIs	RANK
Information System	 Implement a highly integrated task-receipt-to-manifest information system. 	1
Process	 Maximize production and minimize inspection activities. 	2
	 Capitalize on similarities between cargo and personnel 	11
	 Control tasking receipts into the base 	15
	 Adjust the responsibilities and improve the integration of units, Manpower, and Personnel. 	3
	 Collect deployment process status and effectiveness information using passive methods. 	12
	Better define the objective and criteria for UTC tailoring	18
*	Reduce the number of coverage days included within the initial deployment.	17
	• Improve in-transit visibility.	13
Policies	 Refine the Air Force Instructions (AFIs) as necessary to best guide the deployment process. 	7
	 Develop individual deployment guides for each deployment position. 	9
	 Provide the UDM capability to produce more deployment ready personnel and 	
	cargo.	10
Training	 Apply real-world training characteristics to exercises. 	8
	 Maximize the training benefits. 	4
	 Include total process training. 	6
	Incorporate a training and efficiency evaluation capability into the system provided	5
	to the various personnel associated with the deployment process.	
Personnel Attitude	Develop a process to encourage augmentees to participate in deployments.	14
	 Develop a process to encourage personnel to be committed to real world contingencies to the same level as exercises. 	16

Table 24. A Summarized DPI List and their User-Designated Rankings

5. IMPLEMENTATION

5.1 CONOP Implementation Approach

As describe previously, the ranking of the DPIs represent their projected relative benefit to stakeholders, thus providing a guide as to the implementation order of those DPIs. In addition to the ranking, identifying and analyzing the individual actions necessary to implement the DPIs provides insight into the sequencing necessary to prevent the duplication of actions when implementing multiple DPIs. This process produces the most effective way of implementing the ranked DPIs. Figure 14 illustrates the transition from DPIs into implementation actions, the grouping of actions into phased, and the organization of actions within phased to form initiatives for implementation and testing.



Figure 14. DPI Implementation Approach

The set of As-Is models provided the foundation for documenting, understanding, and analyzing the current wing-level deployment process. This As-Is process analysis produced DPIs grouped into the five categories of information systems, process, training, policies, and personnel attitude. The importance or value of these DPIs was computed by mapping them to the criteria used by the users to determine the effectiveness and success of a deployment operation.

Action items associated to each DPI specified the steps necessary to implement the DPIs. Due to various factors such as time, priority, and sequencing considerations, the Implementation Actions were assigned to phases, thus defining a time frame for completing the Implementation Action. The grouping of Implementation Actions into the Testing phases helped identify implementation actions linked to different DPIs. The grouping of similar or logically related Implementation Actions within phases produced Initiatives, with any one phase producing one or more Initiatives.

Finally, to each Initiative was assigned a Test Approach and Metrics for measuring the impact of the initiative on the deployment process. The implementation test plan results from the organization of the initiatives in a manner that maximizes the use of all resources, especially time and personnel. Various initiatives will require similar setup, interface, and training requirements. Organizing these initiatives into a single or related test reduces the effort required to setup and prepare for the tests, thus generating more results with less effort.

Throughout this process, the linkage of Implementation Action back to its DPI was retained, thus guiding the overall assignment process so as to ensure the higher ranked DPIs receive priority for implementation.

5.2 Continued Deployment Process Improvement

As a wing-level Deployment Process Improvement program with a defined start and stop times, the LOG-AID program established a baseline description of the current process via the As-Is models. From these models was developed the deployment Concept of Operation aimed at the year 2010. As illustrated in Figure 15, the year 2010 CONOP is not a final goal but rather an interim point in time with respect to the long-term deployment process improvements extending for unknown years into the future, with the Target To-Be process being the ultimate goal. Because the Target To-Be process represents an ever changing target comprised of operational goals and objectives for the undefined year of nnnn, that Target To-Be process will not be implemented. Rather, that Target To-Be process provides far reaching direction towards which to strive with improvement ideas.

The goal, therefore, is to establish a continuous process improvement plan that begins with the implementation of the 2010 CONOP for deployment, then continues the improvement development and implementation into the future along the evolutionary improvement path.



Figure 15. LOG-AID Starts an Evolutionary Process Improvement Effort

The completed LOG-AID program provides the foundation for implementing a continuous process improvement capability. The various To-Be models document the functional, data, and performance aspects of the process. Collecting selected deployment processing information and analyzing that information at regular intervals allows for identification of problem areas and those areas at which additional improvements would provide increased benefits. Adding the capability for users to document problems encountered and their ideas for process improvements provides a effective way of obtain user involvement in the improvement process. In parallel with the process analysis, technology analysis would identify new and better ways of implementing the process. At the completion of each review and upgrade, updating the To-Be models and CONOP establishes them as the As-Is process documentation and the foundation upon which the next improvement iteration would occur.

5.3 Site Evaluation Methodology

Current deployment capabilities vary significantly among the sites. Depending primarily on their level of deployment responsibility and funding, the site deployment capabilities range from relatively informal processing using minimal technologies such as Tydall AFB to elaborate processing lines supported by large quantities of technology such as Hurlburt Field. Because of the site variations, the impact of the 2010 CONOP will also vary among the sites.

Selecting a test site for the 2010 CONOP will therefore require an evaluation of potential sites. The goal will be to select a site providing a reasonable tradeoff between the easy of implementing portions of or the entire 2010 CONOP and the anticipated benefits realized from the implementation. Table 25 illustrates the integration and parameters for rating the sites. The complete methodology and analysis resides in the Field Test Plan.

PARAMETERS	Level of Automation	Level of Deployment	Level of a Formalized and Consistently Used Deployment	Willingness to Adjust Their Deployment		Base Rating
SITES	and integration	Commument	Process	Process	Location	1993年199
Ohio ANG	<u> </u>					
(Springfield)						
Indiana ANG (Ft. Wayne)						
Wright Patterson AFB	1				· · ·	Section and the section of the secti
Langley AFB	1					
Eglin AFB					· · · · · · · · · · · · · · · · · · ·	an an an search from The the search of the search
Tydall AFB					······································	Contract States and a
Charleston AFB						
Hurlburt Field					·····	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Holloman AFB					······	1923260 2007% // 193526 20482 2017
Mt. Home AFB					· · · · ·	A THE PARTY AND A DECEMBER OF
McGuire AFB						Carlos and a second
Ramstein AFB					·····	1.1.1940 - 17 Mar 1.1.1.1920 - 18 Mar
Spangdahlem AFB						127975424242.1 148-1634531-946-0-
Shaw AFB					· · · · · · · · · · · · · · · · · · ·	TOP IS THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PRO
Youngstown ARS						A State of the Article State o
Seymour Johnson AFB						
Randolph AFB						CONTRACTOR CONTRACTOR
Maxwell AFB						

Table 25. Site Evaluation Matrix

The parameters are describes as follows:

Level of Automation and Integration

The portion of the deployment process supported by computers and associated databases. If computers are used, the level to which they are linked so that information transfer occurs electronically rather than by manual entry into various systems.

Level of Deployment Commitment

A combination of the number of times deployments are exercised and the size of those deployments.

Level of a Formalized and Consistently Used Deployment Process

The amount of change existing among individual deployments at a specific site. Depending on the size of the deployment, a base may implement different processes. For example, if five or ten individuals along with one increment of non-hazardous materials are being deployed, the base may not establish either the CDF for PDF. If larger quantities are deployed, the deployment process will include CDF and PDF operations.

Willingness to Adjust Their Deployment Process

Deploying sites tend to possess a single personality presented by all levels of personnel at the site. Some site are very open and will to make changes, others feel their process successfully accomplishes their goals thus no benefits would result for significant changes, and other do not possess the resources in personnel and funding to support and changes.

Location

The distance the site is from WPAFB. The shorter the distance and the cost of travel the less expense required to implement and exercise the testing.

Determining and assigning a value to each site versus parameter interaction and summing those up across parameters by site provides a rating for each site. Those ratings thus prioritize the testing potential for the sites.

6. TECHNOLOGIES NEEDS

6.1 Technology Research

Having established the To-Be process in terms the activity requirements and specifications, the analysis focus turns to identifying technologies that effectively satisfy those processing requirements and specifications, and selecting those for implementing the wing-level To-Be deployment process. Striving for a year 2010 CONOP, the investigated technologies may already exist, may be under development or planned for development with anticipation fore their availability the 2010, or identified for research and development by 2010.

The technology research began with an analysis of the technologies being used to implement the current deployment process. A comparison between the To-Be activity requirements and the specifications, and the technologies used to perform the similar activity in the current process provided insight as to whether or not the current technology provided a potential implementation of the process activity. Expanding the search towards similar processes within the government and commercial work environments provided insights into the technologies being used. This portion of the search also brought insights into their technology areas being developed and marketed by the government and commercial operations, visionary ideas published in a variety of technical papers and reports, and suggestions by deployment experts. To help ensure an unbounded identification of potential technologies, a combined analysis of the To-Be models and the CONOP from a technology identification perspective identified the requirements and specifications for technology development research efforts.

The final selection of implementation technologies will not occur for most of the process until implementation begins close to 2010. Nearer term implementations, however, will begin on a test basis during the LOG-AID field test effort. During the field test, the DPIs will be implemented and testes as incremental initiatives. Planning for each initiative requires decisions for the implementation approach, which includes the possible use of technologies. However, since the field test focuses on the benefits provided by the improved process rather than the technologies to implement the process, the application and testing of the technologies will be a secondary effort, and no technology developments are planned just to support the field test. Where potential technologies already exist and are available, those technologies will be unused in the field test as needed to test the process effectiveness. For example, the DPI addressing the tailoring of UTC items to support a tasked mission, the UTC-DT tool will be used to support the tailoring process. In comparison, the DPI directed at collecting deployment process status and effectiveness information using passive methods will not be tested using potential sensor technologies. Rather, the test will use individuals located and collecting the information expected from the sensor. Thus, the affect of the sensor will be realized without the implementation of the sensor technology. Through the field test, it is anticipated that additional requirements for the technologies will be identified beyond those realized from the model and process analysis.

6.2 Technology Transition

The technology transition process represents the major step of going from the identification of a new idea to the implementation and acceptance of that idea by users. Because of criticality of this step, the goal of the technology transition played a key role throughout the LOG-AID program. This technology transition started with data collection, and continued into the verification effort and the field testing phase. Developed during the LOG-AID program, the ASCPT provides the capability to continue deployment process refinement as well as the technology transition.

Significant effort went into understanding the wing-level deployment process, identifying its strengths and weaknesses, developing the DPIs, and generating the LOG-AID CONOP. During this requirements definition effort, many stakeholders played key roles in providing current process information and a sanity check as to the reality and practicality of the To-Be CONOP. Having established the CONOP, the focus of the effort now changes from one of CONOP development to one of demonstration, verification, and technology transition so as to successfully get the improvement concepts implemented and operational at the wing level.

As mentioned in the previous paragraph, this technology transition began as an integral part of the requirements definition phases. During this program phase, site visits and interactions with hundreds of stakeholders gained acceptance of the need for improvement to the wing level deployment process as well as acceptance for the To-Be deployment concept. In addition,

demonstrations of a few computerized tools being developed and identified as technologies for implementing the deployment process were demonstrated to the stakeholders and received acceptance.

The field test provides the next step towards accomplishing the technology transition. The field test will focus on quantifying the benefits received from improving the process and demonstrating those benefits to deployment personnel. Through the field test, users gain first-hand experience with the improved process and provide the opportunity for refinement comments and suggestions. This direct, hands-on involvement by users builds their process ownership, completing the necessary step of transforming users from foes to advocates.

Developed during the LOG-AID program, the ACSPTC provides the capability to continue the technology transition long after the official completion of the LOG-AID program. Developed as a facility to develop and test deployment technologies, the facility provides the capability for users to learn about the technologies prior to implementing them at their bases, to receive technology training, and to continue providing comments and suggestions for improving the wing-level deployment process.

Thus, the LOG-AID program established a solid technology transition structure starting at the very beginning of the process, continued throughout the program performance, and provides the capability to continue the technology far into the future.

7. CONCLUSION

Through the application of a structured, user-focused methodology, this in-depth analysis of the wing-level deployment process resulted in a deployment CONOP aimed at the year 2010. Realizing the year 2010 is but a waypoint into the future -- the LOG-AID analysis did not view the 2010 CONOP as the ultimate and necessarily end product. Rather, through the application of the methodology, LOG-AID established the foundation necessary for continued analysis and improvement of the wing-level deployment process well beyond the year 2010.

Establishing the 2010 CONOP came about through the collection, integration, and analysis of large quantities of data and information, resulting in improvement ideas and operational concepts widely accepted by the users. Information was collected from first-hand discussion with over

300 individuals located at 16 Air Force bases throughout the world. This data were from those directly responsible for the successful performance of the deployment process and from first-hand observations of the process. Additional deployment process information came from documentation that described and directed the process such as AFIs and base deployment plans, and previous studies directed at deployment.

The integration of this information into a set of As-Is models provided the analysis tools necessary to generate a set of DPIs providing the basis for developing the To-Be deployment concept description. The identified DPIs addressed all aspects of the deployment process to include information processing, resource processing, resource movement, augmentee training, policies for guiding and controlling the deployment process, and the attitudes of the augmentees performing the deployment process. Taking these DPIs and the resulting 2010 CONOP back to over 300 users for review, comments, and verification ensured the accuracy and completeness of the analysis.

With the continuing changes in technologies, the implementation perspective addresses a much more dynamic situation by providing the potential for improving deployment process performance through the insertion of new technologies. Thus, while the streamlined deployment process can remain consistent across sites, the implementation of the streamlined process can

vary among sites based to a great extent on their level of deployment responsibility and funding availability.

Because of the separated perspectives, the LOG-AID program not only identifies requirements for selecting technologies, it also identifies the opportunities for technology development. A number of these spin-off efforts have already begun, with more anticipated as new insights gained during the field test and future operations. The results of the LOG-AID program also provide an important baseline against which to evaluate new technology ideas and to determine the value of pursuing those ideas through acquisition or research.

Thus, the results of the LOG-AID program go well beyond the basic goals of defining process requirements. The results provide a solid foundation on which to transition the wing-level deployment process to 2010 and beyond and the effective measurement of those changes.

APPENDIX A

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Acronym List

Acronym List

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ACS	Agile Combat Support
ACSPTC	Agile Combat Support Process and Technology Center
AEF	Air Expeditionary Force
AF	Air Force
AFI	Air Force Instructions
AMX	Air Mobility Express
AOR	Area of Responsibility
AWO	Action Workout
BCAT	Beddown Capability Assessment Tool
BPR	Business Processing Engineering
CDF .	Cargo Deployment Function
CINC	Commander-in-Chief
CONOP	Concept of Operation
DCC	Deployment Control Center
DeMS	Deployment Management System
DoD	Department of Defense
DPI	Deployment Process Improvement
DSOE	Deployment Schedule of Events
ELITE	Enterprise Life Integration Technology Engineering

HAZMAT	Hazardous Material
IDO	Installation Deployment Officer
IDS	Integrated Deployment System
JLP	JPT Logistics Planner
JOPES	Joint Operations Planning and Execution System
JPT	JFACC Planning Tool
LOG-AID	Logistics Analysis to Improve Deployment
LOGMOD	Logistics Module
MAJCOM	Major Command
MANPER	Manpower & Personnel Module
MHE	Materiel-Handling Equipment
O&M	Operations and Maintenance
OT&P	Operational Tasking and Priorities
PAX	Passenger
PDF	Personnel Deployment Function
QA	Quality Assurance
R&D	Research and Development
RAMPCO	Ramp Coordinator
RFANY	Resource Augmentation Duty
RSP	Readiness Spares Package

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SME	Subject Matter Experts
SRA	Systems Research and Applications Corporation
STONS	Short Tons
TPFDD	Time-Phased Force Deployment Data
TRANSCOM	Transportation Command
UDM	Unit Deployment Manager
USAF	United States Air Force
UTC	Unit Type Code
UTC-DT	Unit Type Code - Development and Tailoring

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APPENDIX B

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LOG-AID AS-IS ACTIVITY MODEL NODE LIST DIAGRAMS AN⁽²⁾ TEXT DATA GLOS⁽¹⁾ RY MECHANISM GLOSSARY

LOG-AID AS-IS ACTIVITY MODEL

The LOG-AID As-Is activity model presented in this appendix is a hierarchical, functional representation of the activities performed within the wing-level deployment process. This representation includes the products generated by each activity, the inputs used to produce those outputs, the controls defining how the inputs are transformed into outputs, the mechanism performing the activities, and the product relationships among the activities. The model also includes a node list of all the activities in the model, a textual overview description of each diagram, and a glossary for the interrelationship arrows. Figure B-1 contains a quick reference to the IDEF₀ notation used to present the model.



Figure B-1. IDEF0 Notation Overview

LOG-AID AS-IS ACTIVITY MODEL NODE LIST

A-01 DEVELOP OPERATION PLAN (OPlan) A-0 DEPLOY FOR CONTINGENCY A0 DEPLOY FOR CONTINGENCY (Context) A1 PLAN SITE ADJUSTMENTS A11 IDENTIFY BATTLE STAFF A12 CONVENE BATTLE STAFF A13 ANALYZE TASK A14 DETERMINE BASE ALLOCATION A2 EXECUTE ACTIVATION PROCESS A21 DETERMINE UTC ROMT A211 IDENTIFY TASKED UNIT A212 IDENTIFY FRAGMENTED & NON-STD UTC A213 LOCATE/ CORRELATE TAILORED UTC A214 VERIFY/ OBTAIN STANDARD UTC DATA A215 TAILOR UTC A2151 IDENTIFY MISSION UNIQUE ROMTS A2152 ADJUST DEPLOYING UTC ITEM LIST A2153 TRANSLATE CLIMATE CONDITIONS A2154 RELATE SITE & UTC RESOURCES A2155 ADJUST BY CLIMATE RELATED ITEMS A2156 ADJUST BY SHARED ITEMS A22 ASSIGN NAMES TO UTC ROMTS A221 SELECT A REQUIRED CAPABILITY A222 ASSIGN A PERSON A223 REVIEW PERSONS DEPLOYING STATUS A224 ASSIGN AN EQUIPMENT ITEM A225 REVIEW EQUIPMENT'S AVAILABILITY A226 CHECK ON-BASE SUPPLY A23 ESTABLISH THE DEPLOYMENT CAPABILITY A231 DEFINE WORK SITES A232 IDENTIFY DEPLOYMENT SEQUENCE A233 DEFINE FACILITY ROMT A234 IDENTIFY STAFFING ROMT A235 IDENTIFY EQUIP RQMT A24 COMPUTE CHALK A241 OBTAIN UTC DETAIL A242 PRIORITIZE/ ASSIGN CHALKS A243 SEOUENCE INCREMENTS A244 VALIDATE MOVEMENT FLOW **A25 COMPUTE THE DEPLOYING SCHEDULE** A251 SCHEDULE DEPLOYMENT SITE SET UP A252 COMPUTE UTC DEPLOYMENT DURATION A253 IDENTIFY KEY PROCESSING EVENTS A254 COMPUTE CHALK TIMELINES **A255 COORDINATE CHALKS** A26 MONITOR/ CONTROL DEPLOYMENT A3 SET UP DEPLOYMENT MACHINE A31 SELECT AUGMENTEE **A32 PREPARE AUGMENTEE** A33 SET UP THE WORK CENTER A34 ACCESS THE WORK CENTER INFO A35 REPORT TO DCC

A4 COORDINATE TRANSPORTATION

A41 ESTIMATE TRANSPORTATION LOAD A42 ARRANGE CONTRACT SUPPORT A43 COORDINATE TRANSPORT ROMT A44 ASSIGN CONVEYANCE A5 DEPLOY RESOURCES A51 PREPARE PERSONNEL A511 PREPARE UNIT PERSONNEL A512 TRANSPORT PERSONNEL A513 CONTROL MOBILITY BAGS A514 PROCESS PERSONNEL A5141 CHECK ELIGIBILITY A5142 ISSUE ORDERS A5143 CHECK ID CARD A5144 UPDATE MEDICAL A5145 PROVIDE CONSULTATION A51451 UPDATE EMERGENCY DATA A51452 PROVIDE LEGAL ASSISTANCE A51453 PROVIDE RELIGIOUS SUPPORT A51454 PROVIDE FINANCIAL SUPPORT A51455 PROVIDE TRAVEL SUPPORT A5146 BRIEF SITE SITUATIONS A515 HOLD FOR TRANSPORT A52 PREPARE CARGO A521 PREPARE CARGO INCREMENT A5211 PREPARE INCREMENT ITEM A52111 PREPARE FOR TRANSPORT A52112 PLACE ON SCALE A52113 DETERMINE ITEM SIZE A52114 DOCUMENT INCREMENT INFO A5212 PREPARE SHIPPERS DOC A5213 BUILD INCREMENT A52131 REVIEW A/C RESTRICTIONS A52132 REVIEW HAZMAT RULES A52133 PLACE NON-HAZMAT ITEMS A52134 PLACE HAZMAT ITEMS A52135 POSITION AND FASTEN RESTRAINTS A5214 DETERMINE INCREMENT PROPERTIES A52141 PLACE ON SCALE A52142 DETERMINE INCREMENT SIZE A52143 COMPUTE CARRYING POSITION A5215 PRODUCE AND ATTACH THE PLACARD A5216 NOTIFY THE DCC A522 TRANSPORT CARGO A523 IN-CHECK CARGO A5231 INSPECT INCREMENT A52311 VERIFY CHALK ASSIGNMENT A52312 VISUALLY INSPECT A52313 VERIFY HAZMAT PLACEMENT A52314 VERIFY HAZMAT CERTIFICATION DOCS A5232 DETERMINE INCREMENT PARAMETERS A52321 DETERMINE WEIGHT A52322 DETERMINE DIMENSIONS A52323 DETERMINE CENTER OF BALANCE A5233 COMPARE ACTUALS TO CONVEYANCE LIMITATIONS A5234 ADJUST INCREMENT INFO A5235 RELAY INCREMENT STATUS

A524 ACCEPT INTO MARSHALED AREA A5241 PLACE CARGO INTO CHALK OR HAZMAT AREA A5242 INSPECT CARGO A5243 REPORT STATUS A5244 ANNOTATE LOAD PLAN A525 COMPUTE CHALK LOAD PLAN A525 COMPUTE CHALK LOAD PLAN A53 PREPARE FOR TRANSPORT A531 REVIEW LOAD PLAN A532 POSITION & RECORD INCREMENTS A533 POSITION & RECORD PERSONNEL A534 PREPARE & PRESENT DOCUMENTS A-02 PERFORM CRISIS ACTION PLANNING A-03 BEDDOWN RESOURCES AT FINAL DESTINATION A-04 EVALUATE WORLDWIDESITUATION

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LOG-AID AS-IS ACTIVITY MODEL DIAGRAMS WITH TEXT

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A-1 SCOPING THE CONTINGENCY DEPLOYMENT PROCESS

Ensuring a peaceful world environment requires an effective and efficient force deployment capability to locations anywhere in the world to perform war-fighting, peacekeeping, and humanitarian support operations. Deployment begins with the identification of a potential scenario at anticipated crisis points within the world and the development of operational and deployment plans to address the scenario. As necessary, the military units deploy to the designated sites.

military units deploy to the designated sites. Military leaders from each of the world theaters (PACOM [Pacific], EUCOM [Europe], SOUTHCOM [Southern], USACOM [Atlantic], and CENTCOM [Southwest Asia]) analyze the world environment and identify specific locations having a high probability of non-peaceful activities, and potential scenarios for each location. Using this information, Theater Commanders establish the mission requirements to address the scenarios. These mission requirements the appropriate MAJCOMs drive long-range or deliberate deployment planning.

The deliberate planning, documented in an Operations Plan (OPLAN), identifies the scenarios and operational capabilities needed to address situations at designated locations throughout the world. While the deliberate planning anticipates world hot spots, the Perform Crisis Action Planning activity focuses by the identification of specific locations to which a deployment addresses a given operational scenario. However, because the specific hot spot could be either a real situation or an anticipated hot spot defined by deliberate planning or a potential hot spot selected for training purposes, the deployment functionality involved remains basically the same.

Wings and units are assigned UTC deployment responsibilities, thus designating the capabilities of their mission. A Limiting Factors (LIMFACS)/Shortfalls report documents any mission requirements not be satisfied by existing UTCs or by an assigned unit. This report initiates the modification of an existing UTC, an increased number of units assigned with the specific UTC, or the development and unit preparation of new UTCs. In general, this activity refines, as appropriate, the information provided in deliberate tasking products, the order of arrival for each UTC capability at the reception site, and assigns complete or fragmented UTC requirements to available units. These refined requirements established by the MAJCOM assign deployment responsibilities to the units through the

Time-Phased Force Deployment Data (TPFDD). A unit self-evaluation documents the readiness of the units to satisfy a UTC and is delivered to the MAJCOM through Status of Resources and Training System (SORTS). Any operational factors or resource requirements not satisfied with available resources within a unit are documented as limiting factors or shortfalls (LIMFACS/Shortfalls). These LIMFACS/Shortfalls provide the information necessary to procure the necessary resources to satisfy mission requirements through additional tasking

The focus of this As-Is model is the base level deployment. Based on the information gained through the development of this model, an expanded the breadth of this model integrated with deployment the operations phases of Readiness, Employment, Sustainment, and Redeployment. This C^2 Expanded Process Model documents the interrelationships among these phase provided the baseline process needed by the Air Force to successfully accomplish its mission. As the future missions are changing, this integrated set of phases will remain, but their implementation will vary to accommodate the future operational concepts such and global engagement and agile combat support.



A-0 DEPLOY FOR CONTINGENCY

documents specify the deployment capabilities or UTCs requirements, the Calls from the base to the MAJCOM clarify any uncertainties with the The Base Deployment Plan provides deployment process Unit specific guidelines extend the Base mission duration, and site survey information such as personnel housing capabilities. If a unit realizes its inability to satisfy the UTC deployment the base, LIMFAC/Shortfall notifications inform the MAJCOM of the Receipt of deployment notifications, consisting primarily of the TPFDD and the Letter of Instruction (LOI) or Warning Order, Execute Order, etc. initiate the contingency deployment activity for a unit. These Deployment Plan information. Adjustments or tailoring of the UTC match the UTC resources to a number of deployment conditions such as weather, requirement, and cannot satisfy the requirement using other resources from base responsible for their deployment, and their time frame for deployment problem and they make the adjustment decisions. guidance for each base. taskings.

With the deployment requirements specified, adjustments to the current base operations along with the inter- and intra-base transportation arrangements facilitate the deployment effort. With the deployment infrastructure in place, the collection, processing and loading of the base resources onto the conveyance proceeds. At specified points throughout the process, call-ins to the MAJCOM relay the deployment status. Following the deployment, the resources deployed are recorded by the units and deployment effectiveness information is brought together and reviewed by the personnel ranging from the battle staff to the UDMs.





A0 DEPLOY FOR CONTINGENCY (Context)

Receipt of a tasking initiates the contingency deployment activity and usually consisting of the TFFDD, Letter of Instruction (LOI), Warning Order, and Execution Order . Included in the Execution Order are the Movement Flow specifying the assigned unit's departure and reception site arrival dates; cargo and personnel deployment preparation data; and the specifications for moving cargo and personnel. From the tasking, the installation commander identifies the deploying units, identifies the supporting units impacted by the deployment, and convenes a battle staff analyzes the deployment tasking and adjusts the current operational characteristics of the base to support the deployment operational requirements. The Course of Action (COA) documents these battle staff special instructions.

Tailoring UTC equipment and personnel requirements ensures the deployment resources effectively satisfy the mission requirements. The tailoring effort considers the environmental conditions at the reception site, the needs of the mission, and coordination with the reception site resources. The development of a Deployment Schedule of Events (DSOE) guides the total installation deployment effort. UTC and DSOE requirements drive the allocation of base resources and facilities to support the deployment while the selection of specific personnel Social Security Numbers (SSNs) and equipment Serial Numbers (SNs) identify the personnel and equipment for deployment.

With the base facilities allocated, and the processing activities and sequencing established, layout and implementation of the deployment work centers begin. The sequence or flow of the required deployment process significantly drives the work center layout. Selected through the Resource Augmentation Duty (READY) program, augmentees receive notifications of the planned deployment. Augmentees normally perform operational duties for the installation but perform deployment duties when necessary. Selected augmentees also operate the work centers. Documentation of their arrival at the work center and the verification of their deployment skill levels allow their assignment to appropriate deployment process activities. The overlaying of intra-base transportation requirements onto the deployment process and schedule completes the deployment process activities.

With all of the supporting structure established, the unit preparation begins for the personnel and equipment resources designed for deployment. From the unit, the resources process through the deployment



work centers in accordance with the DSOE. As the deployment progresses, status information collected with respect to the measurement points within DSOE and transmitted to the Deployment Control Center (DCC) provides an overall view of the deployment effort.



A1 PLAN SITE ADJUSTMENTS

The deployment of units from a base requires the base to assign and utilize its facilities to maximize the effectiveness of the deployment while minimizing the impact on the daily operation of the base. A series of deployment notifications initiates setting up the base. A warning notification to the Command Post staffed by a representative of the Wing Commander provides the first information about the deployment. Receipt of the warning order initiates the identification and notification of the battle staff members. Subsequent to the warning order, the receipt of a deployment order initiates the process for getting the base ready to perform the deployment.

Battle Staff notification begins with the receipt of the execution order. Upon arrival in the Command Post, the battle staff evaluates the base deployment requirements as defined in the deployment order in conjunction with any political conditions, such as threat conditions, that may impact the success of the deployment. This analysis produces a set of deployment objectives. These objectives include such issues as size of the deployment effort, locations around the base necessary involved in supporting the deployment. This analysis may also produce a set of tailored UTCs, LIMFACS, and Shortfalls. UTC tailoring identifies personnel and cargo common among UTCs for possible sharing of resources to reduce the deployment footprint while maintaining the operational capability of the UTC.

The deployment objectives control the allocation of deployment site facilities. The starting point of this facility allocation is the Base Deployment Plan. Current site operations and the status of the predefined facilities, and especially on the deployment objectives, influence adjustments to the site facility allocations specified for this deployment.




A2 EXECUTE ACTIVATION PROCESS

With the directive to initiate the deployment received through the Execution Order, the LOI and TPFDD information provide the basis to finalize the deployment requirements. Monitoring and controlling of the deployment process ensures deployment completion in accordance with the airflow schedule (movement flow).

The Installation Deployment Officer (IDO) and the tasked Unit Deployment Managers (UDMs) analyze the tasking to determine each unit's deployment requirements. UTC Level 6 logistics detail data from LOGFOR-B or previously tailored UTCs from the LOGPLAN system provide the starting point for the analysis. The Level 6 data specifies the number of individuals by AFSC and the cargo by national stock number (NSN) and the quantity and measurements (length, width, height, weight, and center of balance) for each cargo element. Further tailoring of the UTC reflects experience gained from previous deployments.

Specific assignments of personnel and equipment resources satisfy the UTC deployment requirements. If equipment shortfalls exist, the unit checks their availability through the Standard Base Supply System (SBSS). If not available, the UDM contacts other deploying units identified in the TPFDD. Recalls made to individuals on leave followed by calls to other units on base help fulfill existing personnel shortfalls. If the other units cannot satisfy the requirement, notification to the MAJCOM provides them with the information necessary to address the LIMFAC/Shortfall situation.

Considering the deployment requirements, the IDO identifies the deployment work centers needed, and the processing flow through the work centers. Examples of the work centers include the Deployment Control Center (DCC), the Cargo Deployment Function (CDF), the Personnel Deployment Function (PDF), and the marshaling area.

The airflow schedule received as part of the tasking contains the type of airlift for transporting the deploying resonances. the arrival and departure times for the deploying base, and the allowable cabin load (ACL) of the aircraft. The TPFDD specifies the priority for deploying UTCs. Using this information, the grouping of cargo increments and personnel defines the aircraft loads or chalks.

The development of the Deployment Schedule of Events (DSOE) coordinates the development of each chalk and coordinates the unified development of all the chalks. This DSOE includes milestones for reporting deployment status to the DCC. Dissemination of the DSOE to UDMs and work centers ensures everyone knows the schedule. Upon



receipt of status call-ins, the IDO maps the actual status to the DSOE for the purpose of identifying and correcting problems before they negatively impact the success of the deployment process.



A21 DETERMINE UTC RQMT

The TPFDD or tasking containing the TPFDD information provides the deployment requirements. Each entry identifies a Unit Line Number (ULN), an associated Unit Type Code (UTC), and the assigned Unit Identification Code (UIC). Additional requirements may be specified through various orders and Letters of Instructions (LOIS). The Unit Deployment Manager (UDM) of the tasked unit becomes the unit's main point of contact to support the IDO in identifying the specific requirements for deploying the unit.

The IDO analyzes the TPFDD for any fragmented UTCs. Reviews of all orders and LOIs identify specific instructions or requirements to tailor the UTC. For example, a directive may state that chemical gear is not necessary, thus allowing for the tailoring out of all chemicals from the UTC. The directive may state the requirement for a specific medication prior to the deployment.

A study of the climatic conditions ensures the UTC capability of meeting the environmental conditions. For example, a desert deployment may allow for the tailoring out of cold weather gear. When built by the MAJCOM, the TPFDD cargo and passenger data usually account for specific needs at the reception site. The IDO identifies a tailored UTC by comparing the summary of the cargo and passenger data, specified in terms of STONS/MTONS and number of passengers, to the standard level 2 data of the UTC. A TPFDD usually does not specify frag details, thus a clarification request, typically by telephone to the MAJCOM clarifies the specific fragged UTC requirements.

For non-fragged UTCs, a search of the LOGPLAN system identifies any UTC tailoring done during deliberate planning applicable to address the current mission requirements.

With the MAJCOM specified or pretailored UTC as the starting point, access to the Logistics Force Packaging - Base Level (LOGFOR-B) system provides all the standard logistics detail (LOGDET) for the equipment and materiel requirements. Similarly, access to the Manpower and Personnel Module - Base Level (MANPER-B) system provides all the Manpower Force Packaging (MANFOR) detail of manpower by quantity, function, grade, and Air Force Specialty Code (AFSC) required for the UTC.

Using all the detailed personnel and equipment obtained, the IDO and UDM tailor the standard UTC for a number of considerations to meet the mission requirements. However, any tailored UTC found in LOGMOD provides a better starting point for the IDO and UDM to review and adjust



in order to satisfy the deployment requirement. An analysis of the site survey information determines the potential for tailoring of certain cargo from the UTC package because it already exists at the receiving base, or if additional cargo requirements exist because of the site's very austere location or the need for some additional requirements. The UDM's experience deploying this UTC to similar locations and mission requirements also plays and import role in tailoring the UTC.



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A215 TAILOR UTC

Upon receipt of deployment directive information supplemental to TPFDD, the process begins for determining the actual UTC resources to be deployed. The supplemental information consists of the LOI, climatic conditions, and site survey information. Review of the LOI identifies resources to be removed from the UTC not needed for the targeted mission. Based on the adjustments identified through the LOI, the standard UTC list of contents is changed accordingly. In a similar manner, analysis of the mission site climatic conditions provide insights into the types of resources needed to operate within that type of environment. Based on these insights decisions are made about additional resources that can be removed from the UTC contents.

Finalizing the list of resources for deployment through the UTC involves an analysis of the resources already in existence at the deployment site. Gaining this site information is accomplished through a number of sources, with the information being somewhat uncertain. Thus, it remains the responsibility to the unit to decide how to tailor the UTC according.





A22 ASSIGN RESOURCES TO UTC RQMTS

A standard or tailored UTC includes a set of capability requirements stated in terms of the personnel skills and the equipment NSNs. The assigned deployment of a specific person or equipment satisfies a requirement within the UTC. For the personnel requirements, the UDM references the unit deployment plan containing a matrix designating primary, secondary, and tertiary assignments of personnel to the required skills. Beginning with the primary assignment, the UDM evaluates that person's deployment history and the training status with respect to the deployment criteria checklist. This evaluation determines the deployment criteria checklist. This evaluation determines the deployment criteria checklist.

If the primary person is not deployable, the UDM evaluates the secondary assignment and then the tertiary assignment if necessary. If one of the three persons is eligible, that person's social security number and name are assigned to the skill requirement within the UTC. If none of the three individuals are eligible, the UDM coordinates with other units on base in an attempt fill the requirement. If these approaches fail, a personnel shortfall message to the DCC initiates the actions to fill the requirement from another base.

Similarly, the assignment of an equipment serial number satisfies an equipment requirement stated in the UTC. If more than one piece of equipment could potentially satisfy the requirement, the UDM makes a selection designated by a serial number and based on the prioritized list in the Unit Deployment Plan. The UDM then reviews the operational status of the specified equipment during the timeframe defined within the DSOE to determine its potential for satisfying the requirement.

If no initially identified equipment satisfies the deployment requirement; the UDM evaluates all those NSNs or any substitutions for the NSN, to determine the unit's ability to satisfy the deployment requirement. If the requirement remains unsatisfied, a notification to Supply provides the next level of filling the requirement. If not available on base, an equipment shortage message relayed to the DCC initiates actions to fill the requirement from another base.

When completed, a matrix identifies the specific people and equipment to satisfy the skill and NSN requirements specified in the UTC.





A23 ESTABLISH THE DEPLOYMENT CAPABILITY

With the base facilities allocated, the layout design and implementation of the deployment work centers begin.

Evaluation of the UTC Level 2 detail scopes the deployment requirements in terms of the quantity of personnel and cargo required for deployment, and possibly any subsequent special requirements. For example, the identification of special handling requirements in the event the deployment includes any hazardous or sensitive cargo. These processing requirements drive the needs for the various deployment work centers. These needs include the work center serving as the focal point for all deployment control Center (DCC), the focal point for monitoring all cargo processing activities, the Cargo Deployment Function (CDF), and the focal point for monitoring all personnel processing activities, the Personnel Deployment Function (PDF).

With the functionality of each work center defined a processing flow establishes the deployment process through the work centers. While this process flow definition addresses the needs of the current deployment, it should also be in accordance with the process specifications in the Base Deployment Plan.

With each work center defined and base facilities allocated for use during the deployment, a sequenced process flow design charts the work sequence through the work centers. Knowing the location of each work center, the telephone numbers established for each center are distribution and presented in the Concept Briefing.

Qualified individuals staff each work center. The work center staffing and training requirements reflect the work center type, the scope and quantity of the deployment requirements, and the available resources within the base. Each work center also requires equipment to function properly. These material and information requirements defined for and associated with each work center adjust to the size of the planned deployment.





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A24 DEFINE CHALK

To effectively accomplish the deployment, the deploying personnel and cargo are assigned to a transport aircraft, referred to as a chalk, and organized in accordance to a loading layout or load plan for the each chalk. LOGMOD-B provides dimension and specification information for each increment. This information includes length, width, height, center of balance, hazardous materiel nomenclature, and shipment priority of the increments. MANPER-B provides passenger information. Standard weights are assumed for the passenger and their mobility and personal carry-on bags.

Prioritization of the chalks meets the current schedule and mission requirements. Since everything may not fit on the same airplane and everything cannot go first, the cargo is sequenced based on the priority flow defined in the DSOE and the UTC. Overlaying UTC increment and passenger listings onto the schedule assigns cargo and passengers to the prioritized chalks.

Development of the load plan sequencing assumes the aircraft is empty on arrival at the deploying location. Numerous rules control the actual placement of passengers and cargo on an aircraft, and placement of hazardous and sensitive materiel. For example, all loading of rolling stock occurs in front of pallets. No passenger seating occurs within 30 inches of the forward edge of a netted pallet, etc. The manifest and load plan identifies the passenger and cargo load placement for each aircraft and indicates the location of all hazardous and sensitive cargo.

An iterative process begins to ensure the minimum requirements for airlift and vehicles. Arrangement of increments makes full use of the available ACL (Allowable Cabin Load -- weight, cube or passenger seats) and vehicle load capacity. When situations occur that require cargo increments be moved from one chalk to another, coordination with the DCC ensures the transporting of the cargo remains at the same priority defined in the deployment requirements. The use of filler cargo improves load use or replaces increments bumped from a load. Filler cargo consists of lower priority increments or small items readily available for loading and securable in, under, on or around other increments.

If the schedule did not identify a specific airflow, this process of developing the chalks helps identify the airlift requirements for the deployment. When optimized for maximum efficiency, the recommended airlift priority and sequencing are transmitted to the DCC and then submitted for higher level approval. This iterative process is also necessary



to validate the existing schedule and transportation requirements, and to identify and recommend changes to the preplanned manifests, cancellations, requests for additional transportation, requests to change an aircraft configuration, or requests to change the schedule.



A25 COMPUTE THE DEPLOYING SCHEDULE

The Deployment Schedule of Events (DSOE) lists the chalks deployment preparation, the major events for measuring the completeness of the preparation, and the sequencing of the chalk preparation to maximize the effectiveness of the deployment resources. A complete DSOE represents the complete integrated deployment effort at a base, and therefore includes the schedule for deploying unit preparation as well as chalk preparation and coordination. The IDO develops the schedule in conjunction with the UDMs and then distributes it to involved organizations, to include the UDMs, transportation, PDF, CDF, and RAMPCO.

To prepare for the deployment effort, the definition and location of the required work centers are reviewed and time duration established for each work center setup. In parallel, the TPFDD evaluations identify the UTCs being deployed and their standard preparation time's accesses for the responsible to establish a generic deployment start and stop time. Also in parallel, a review of the proposed load plan, which contains the increment-to-chalk assignments, identifies the key deployment events to measure the progress and status of the deployment effort.

Knowing the preparation times for each UTC, the increment-to-chalk assignments, and the movement flow for each chalk, the schedules for each chalk are developed. The final step for the DSOE development integrates the preparation for each chalk and work center preparation into a complete schedule that makes effective use of those deployment resources used commonly among the UTC and chalk preparation.

As the deployment progresses, deployment processing delays or decisions to accelerate the deployment schedule may occur. Modifications to the DSOE reflect these chalk adjustment requirements.





A3 SET UP DEPLOYMENT MACHINE

With the completion of the base's assigned resources, which includes the definition of the work centers and their intended locations, teams of augmentees arrive to both set up and operate the work centers in accordance with the schedule defined in the DSOE. Augmentee personnel do not deploy initially to another site but rather train for and perform the duties required at the various work centers to accomplish the deployment of others.

Through the Resource Augmentation Duty (READY) program, a listing identifies the augmentees and their status and training requirements. With respect to this listing, specific augmentee assignments are made based on their availability at the time of the deployment. The notifications to the selected augmentees specify the location, dates, and times for reporting. Upon arrival at the designated location and time, a review of augmentees training records identifies their duty assignment, and updates to their READY program records document the training and experience gained during the deployment effort.

Deployment work center set up includes the physical set up of the center and the gathering of the information needed to perform operations within the work center. For example, the legal work center requires forms and materials needed to prepare Wills and Power of Attorney documents.

PDF and CDF activations begin at the completion of the set-up. For the CDF, activation requires the availability of resources to receive, inspect, marshal, and load equipment to meet support transportation requirements. For the PDF, activation requires the capability to fully control, monitor, and direct all personnel processing. The DCC activation requires the capability to monitor and provide overall control for all deployment activities.





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A4 COORDINATE TRANSPORTATION

The on-base transportation moves all the personnel and materials as necessary during the deployment effort. Depending on the needs of a specific base, these transportation needs may begin as part of setting up the deployment capability at the site and continue through the completion of the deployment.

The DSOE drives the transportation effort by identifying the preliminary number of personnel and cargo increments associated with each UTC listed in the DSOE. From this general information, transportation develops the initial movement plan that estimates the conveyance and driver requirements anticipated during the deployment time frame. Comparing these general requirements with their organic capabilities determines which of their resources may be needed for the deployment and to ensure the availability of the transportation capability as necessary during the deployment.

If this preliminary analysis identifies transportation deficiencies, contracts with appropriate transporting companies may be established, or recall of vehicles and drivers may occur. These arrangements may require the initiation of new contracts or the activation of existing contracts.

While the transportation representative in the DCC anticipates approaching transportation needs by watching the event schedule contained in the DSOE, no transportation actions begin until the receipt of a specific transportation request. When received and then transferred to the Transportation Control Unit (TCU), they compare the request to the planned requirement documented in the initial movement plan. Provided the availability of the transporting capability through either the on-base capability or contract agreements, the TCC assigns the appropriate transporting capability to satisfy the requirement.

At times, however, an unexpected transporting requirement may occur for which no military transportation capability exists. This actual deficiency initiates arrangements for contracting the transportation requirement to a non-military source. The assignment received by the driver specifies what to transport, the source and destination, and the designated start and completion times.

While the unit notifies the DCC that its cargo is ready for transport, neither the unit nor transportation notifies the DCC when the transport actually occurs. The DCC receives the transport completion from the CDF when the cargo arrives at the marshaling area and the PDF when the passengers arrive.





A5 DEPLOY RESOURCES

Once the selected UTCs and assigned units are designated, the deployment process focuses on getting the necessary personnel and cargo ready and loaded on the assigned conveyances. The proposed load plan specifies the assignment of UTC increments to chalks, thereby relating the increments to a specific conveyance for transport to the reception site.

Notified of their responsibility to provide one or more UTCs, units prepare from two perspectives -- preparing the personnel and preparing the cargo. Personnel preparation involves identifying and notifying the selected personnel to report to the unit location at a specified time as dictated in the DSOE. At the unit, personal preparation actions include accessing their mobility folders.

At or before the time designated in the DSOE, the UDM coordinates transportation of the unit personnel to the PDF location for processing. At the PDF, the personnel become deployment ready and their personal bags collected and integrated with the UTC cargo processing.

In a manner similar to the personnel processing, the UDM prepares for deployment the cargo associated with the UTC capability requirement. This includes obtaining, organizing, and preparing the cargo in the time frame designated by the proposed load plan and the DSOE. At or before the time designated in the DSOE, the UDM coordinates transportation of the unit cargo increments to the CDF location for processing. Once approved through in-check, the in:rements move into the marshaling area by chalk. Because of changes in the increments due to tailoring and substitution, adjustments to the proposed load plan produce the final load plan. This final load plan also includes the cargo already on the conveyance at it arrives at the deploying site.

Using the final load plan as the guide, a loading checklist guides the loading of the cargo and then the personnel designated for that chalk. The load manifest results from the loading process and is provided to the Load Master, while a load plan is provided to the conveyance crew. GTN via CMOS documents the information from the manifest to allow tracking for the personnel and cargo flow during transport to the reception site





A51 PREPARE PERSONNEL

Upon receipt of the deployment directive, which documents and communicates the UTC-to-Unit assignment, the UDM assembles the necessary personnel, prepares them for PDF processing, and ensures the personnel are processed through the PDF and loaded into the transporting aircraft. After selecting the personnel for deployment, each impacted unit begins the process of preparing their personnel and getting them processed through the PDF in preparation for loading on the transporting conveyance.

The personnel's processing within each unit begins by addressing personnel deployment issues in accordance with the DSOE's preparation timeline and in accordance with standard and specialized personnel requirements associated with the reception site and mission requirements. This processing includes such actions as loading the personal bags and updating all the personnel records. When ready, notification goes to transportation to transport the personnel from the unit location to the PDF. Within the PDF, each person releases the personal bag and then begins the personnel processing effort. If during the processing effort a rejection of a person's personal bag from the cargo preparation.

Once through the processing, the personnel remain in groups determined by their assigned chalks. At the appropriate load time as specified in the DSOE, transportation moves the personnel from the PDF holding area to the transporting conveyance for final loading.





A514 PROCESS PERSONNEL

The PDF comprises a set of work center processes that together complete the personnel processing for deployment, with the next standarding the loading of the personnel onto the conveyance. This processing begins with the eligibility check of the deploying personnel. This check ensures the deploying individual meets the deployment eligibility criteria defined via a checklist within the base deployment plan and in deployment specific criteria. These criteria determine the preparedness of the individual in terms of personnel readiness information, deployment-related information contained in the readiness folder, and any additional information provided by the individual at the time of the eligibility check.

If the individual is found ineligible, the person returns to the UDM who finds an appropriate replacement to satisfy the shortfall. For eligible personnel, the eligibility work center also reviews the transportation requirements of the deployment plan checklist and special travel conditions within the LOI to determine the transportation requirements for the individual. These requirements are relayed to the transportation work center.

Inspections of the ID cards for eligible person determine the information accuracy and physical condition of the cards. If the information is inaccurate, the card is in bad condition, or the card expires during the dep¹ ment, the individual receives a new ¹O card status checklist specifies the information and conditions requirements, and the individual provides any necessary update information.

Reviews of the medical records taken from the person's Personnel Deployment Readiness Folder are performed in accordance with the requirements of the reception site and any special medical requirements stated in the LOI. The individual receives any missing immunizations or medications, record updates made, and the updated records returned to the individual for placement in the Readiness Folder.

The individual processes through a set of consulting-type workstations using an exceptions processing perspective. The information provided by these workstations address the normal type of information and support required for a deployment but adaptations address the specific needs of the reception sites and mission requirements as stated in the LOI.

Sometime during the processing effort, deploying personnel receive a security and custom's briefing. Normally presented to groups being deployed together, the briefing contains information related to standard



reception site conditions and about any special conditions included in the LOI.



A5145 PROVIDE CONSULTATION

The consultation work centers provide support to the deploying personnel primarily on an exceptions basis and in accordance with the predefined structure for deployment and the specific reception site conditions stated in the LOI. While these work centers normally set up in a single line, their independence provide no restrictions on their sequencing.

The emergency data work center ensures that each deploying person documented the next of kin and the insurance beneficiary as desired on DD Form 93. If the person updated the next of kin and insurance beneficiary information, copies remain in the personnel deployment folder, within the unit folder, provided to the MPF for inclusion in individual records, and with the personnel identified by the deploying individual. If the information needs updating or generation, DD Form 93 provides the means of doing so by the individual.

The legal work center provides the opportunity for each individual to complete a will and a power of attorney along with their distribution instructions. As with the emergency data, copies of the will and power of attorney remain in the personnel deployment folder, within the unit folder, and by the personnel identified by the deploying individual.

The chaplain work station provides the opportunity for each individual to discuss the situation they are facing, receive support materials, and gain specific information related to the religious and social customs existing at the reception area. The financial work center provides the opportunity for the deploying individual to receive any prepayments required for the deployment or to establish or make adjustments to the person's finances. Possible changes may include direct deposit setup or direct payments made for outstanding debts. To accomplish this requires the deploying person provide the necessary account numbers and specify where the designated information be sent. In addition, within the financial work center, the deploying person may also receive advance payment or credit cards (if the individual American Express cards are centrally held) as directed by standard or special conditions.

Finally, as specified during the eligibility review and dictated under the movement flow directive, either the individual or the person assigned as the troop commander receives the necessary orders and travel documents.





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A52 PREPARE CARGO

When a UTC deployment includes cargo, the unit assigned to satisfy the deployment gathers and prepares the cargo for shipment. The UDM, using the assigned UTC requirements, identifies the types of cargo as well as the specific cargo items being deployed. From the DSOE the UDM identifies the aircraft type assigned for cargo shipment, the number for each cargo increment, and the cargo transfer time to the marshaling area. The type dictates restrictions for pallet height, weight and aisle-width, especially with C-130, KC-10, KC-135 or CRAF aircraft.

Referencing the cargo to increment assignments, the UDM guides the building of the pallets with the designated cargo. Once built, pallet increments are weighed and measured while rolling stock increments have they centers of balance computed as well as being weighed and measured. A placard containing the increment number, contents, weight, measurement, and hazardous material information attaches to the increment, completing the preparation for transport to the marshaling area. For individual or "stand alone"/rolling stock equipment items, the same process is followed, however, an additional measurement determines the item balance point needed to safely pick up and move the item.

When the unit completes its cargo preparation, a cargo movement transportation requirement call is made to the transportation representative in the DCC. This call initiates the DSOE status update. The DCC transportation representative then calls the TCU for the assignment of conveyances to move the cargo from the unit location to the designated incheck area.

An inspection performed at the marshaling area determines the acceptance of the cargo increment. If not accepted into the marshalling area, UDM receives notification for its non-acceptance and the reason, which may be a problem with fuel levels, fluid leaks, improper increment building, and improper hazardous material markings. The UDM assigns a team to repair the problem at the marshaling area or replace the defective item. The accepted increments are positioned in the in-check area according to the initial chalk assignment. Upon increment acceptance, a message or phone call updates the DCC. Once all increments designated for a chalk are received into the marshalling, a status update message to the DCC provides formal notification that the chalk is ready for loading and awaiting the transport aircraft.

In preparation for loading, updates to the increment parameters computed during in-check define adjustments to the initial load plan so as to



from the initial load plan. However, even it the intra load plan varies from the initial load plan, the increment positions in the chalk usually remain unchanged.



A521 PREPARE CARGO INCREMENT

As dictated by the preparation checklist, cargo items identified for deployment are prepared for transport and grouped together into increments in accordance with the standard UTC definition. The preparation includes determining the weight and measurements of each item. The unit cargo plan contains a list of the standard or default weight and measurements for each cargo item contained in a standard UTC. To reduce preparation time, the UDM often accepts the standard parameters designated in the UTC definition rather than performing a measurement operation.

For those items designated as hazardous materials, the necessary shipper's documents are generated and attached to the item along with the appropriate labeling. Grouping and packing of the transport-ready items form an increment as designated in the standor UUIC and an increment number is generated and attached to the increment.

Characteristics for each increment are determined and confirmed against the aircraft type restrictions. These characteristics, consisting of weight, measurements, and center of balance for rolling stock, are documented on the placard attached to each increment. Increment rejection occurs if the increment characteristics fall outside the restrictions for the transporting conveyance, thus requiring repacking. With the acceptance of the increment by the UDM, a call to the transportation representative in the DCC provides the notification that the increment is ready for transport to incheck.

Portions of this preparation process are repeated if problems are identified during the in-check process. Depending on the problem identified, the rework involves repacking an index that item to meet standards, correcting the shipper's declaration to accurately document the hazardous materials contained in the increment, or rebuilding the increment to correctly position hazardous material and correct the pallet netting.





A5211 PREPARE ITEM

Responsible for the selection and preparation of each deploying cargo item contained within the assigned UTC for deployment belongs to the unit. Packaging of the item begins in accordance with established preparation guidelines. Depending on the item, these guidelines include the placement of items in boxes as necessary, establishing the correct fluid levels, and placement of the correct markings. The weight and measurements of the packaged items are obtained and documented in accordance with the item documentation procedure.





A5213 BUILD INCREMENT

analysis are the size of the increment and the possible positioning of the increment itself based on hazardous materials placement guidelines as increment, the building of the increment begins in accordance with the restriction of the aircraft and the guidelines for increment building. The ists of items for inclusion in the increment are reviewed with respect to the type of aircraft designated to transport the increment. Included in this hazardous materials to accommodate aircraft facilities. The list is further analyzed with respect to allowable placement of hazardous materials within Completing the identification of items to be included in an well as the aircraft placement restrictions.

With the increment specific guidelines developed, the process of process of placing non-hazardous and hazardous materials in a sequence acilitating the increment building. In general, the process involves placing accordance with the placement decisions. Once packed, the closing of the ncrement ensure its safe transport. The manner is which the closing occurs depends on the type of structure use to build the increment. For pallets, the closing involves the placement of netting over the items and fastened to the vallet in a defined manner. For bins, the closing may be as simple as placing the designated items to form the increment. This is an iterative the heaviest, and often the largest, item in the bottom center. Subsequent tems, both non-hazardous and hazardous materials, are positioned in closing and locking the door.

As increment move through the deployment process, problems may be identified, requiring adjustments to the increment. The adjustments vary from tightening the netting to totally rebuilding the increment.





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A5214 DETERMINE INCREMENT PROPERTIES

A scale determines the increment weight, which may vary from deployment to deployment, especially if the increment is rolling stock. Increment measurements are determined and compared to the size allocated for the transporting conveyance. If the increment size conflicts with the conveyance restrictions, adjustments to the increment ensure it fits within the restrictions. Finally, computation of a center of balance for rolling stock guides the on-base transportation personnel in knowing how to safely lift the increment as well as provide additional information to the aircraft load planner.



(Parent A521)


A523 IN-CHECK CARGO

When an increment arrives at the in-check, a check of the increment identifier ensures the increment belongs on the specific chalk. If no match exists, the preparing unit is possibly using a free flow approach to their increment processing. The free flow approach means that the unit prepares cargo and sends it to in-check before the establishment of a chalk schedule. Since this approach prevents in-check from knowing where to place the increment, the increment is usually considered frustrated and placed in the frustrated cargo area, and the preparing UDM notified of the increment status.

A visual inspection of an increment assigned to a chalk evaluates the physical condition of the increment; the hazardous materials contained within the increment, and the hazardous certification documents. The increment is deemed frustrated if any identified problems cannot be fixed easily and the appropriate UDM notified via a report to the DCC. Comparison of the dimensions for accepted increments to acceptable aircraft load limitations identify increments outside the limitations. Increments with dimensions outside these limitations are frustrated and processed as stated above. When accepted at in-check, updates to the placard represent the accurate increment information is reported to the DCC.





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A5231 INSPECT INCREMENT

Upon arrival at the in-check, a comparison between the increment number and the list of chalks provided to in-check ensures the increment's readiness for processing. A review of the HazMat Certification documents against the hazardous materials on the increment ensures their proper positioning and labeling. Finally, an overall inspection of the increment packing and the HazMat Certification documents verify proper signatures exist. A problem found at any point during this in-check process causes the increment to receive a frustrated cargo status, with the DCC receiving a report of this status.







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Having passed the visual inspection by in-check, the official physical parameters of the increment are determined in accordance with the designated procedures. These parameters include weight, measurements of the length, and height, and center of balance for the increment.





A524 ACCEPT INTO MARSHALED AREA

The increment moves to the marshaling area after acceptance at the in-check. Upon arrival at the marshaling area, a visual inspection of the increment verifies the quality of the increment in accordance with respect to the marshaling checklist, the type of aircraft, and the planned marshaling time again. Aimed at ensuring the safety of the cargo to transport, the inspection includes checking that no cargo shifted on the pallet, no fluid leaks exist, no flat tires exist, etc. If an identified cargo problem cannot be corrected by the marshaling personnel, a frustrated increment assignment is made to the increment along with its notification sent to the responsible UDM via the DCC. Following the successful inspection of all increments for a chalk, an update to the initial load plan indicates the successful receipt of the increment for the chalk. Placement of the increment in the chalk area is done in accordance with the load plan. A message the DCC transmits the updated status to the DCC.





A53 PREPARE FOR TRANSPORT

With all preparation completed, the cargo and personnel are ready for loading onto the designated conveyance. The final load plan specifies the positioning of the cargo within the chalk area, and both the cargo and personnel on the conveyance. The Load Master receives a briefing via the final load plan defining the passengers, cargo, and hazardous cargo ready for loading onto the aircraft. Because the Load Master possesses final responsibility for the safety of flight, he reviews the load plan and makes any adjustments he sees necessary with respect to the ACL or load positioning on the conveyance. The loading of the cargo and personnel involves the movement of cargo from the chalk area to the conveyance. The load plan, as adjusted by the Load Master, designates the loading sequence. The loading of personnel normally follows the cargo loading, but may occur before if required by the physical placement of the personnel.

As each cargo increment moves onto the conveyance, the Load Master confirms the move by designating it on the final load plan. As each person enters the conveyance, the Deploying Troop Commander confirms his or her names against the list provided by the PDF. Assuming no variations to the final load plan during the loading process, the confirmation list provides the cargo and personnel manifests provided to the Load Master.

Selected information from the load plan is documented and presented to the aircrew. This information includes the number of increments, the number of personnel, the total weight, hazardous materials information, and the aircraft center of balance.





LOG-AID AS-IS ACTIVITY MODEL GLOSSARY

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This section of the appendix contains the LOG-AID As-Is Activity model glossary divided into two parts: (1) Input, Control, and Output definitions, and (2) mechanism definitions for both systems and personnel roles.

arrow name appears, with the reference list presented in the hierarchical order of the model. The Mechanism Glossary contains two columns: (1) the mechanism name, and (2) the mechanism description. Both glossaries are sorted using the Name column. The Input, Control, and Output part of the glossary contains three columns identified as Name, Definition, and Reference. The Name identifies an interface arrow contained within the model and the Definition describes what that arrow means. The Reference column identifies the one or more diagrams on which that

LOG-AID AS-IS GLOSSARY

Name	Definition	
		Kelerence
# UI FAX, Cargo Increments, & Iransport Requirement	(Number of Personnel and Cargo Increments, and the Transportation Requirement) For each A ² UTC designated for deployment, the number of personnel and cargo increments contained within those UTCs, and the type and size of the conveyances needed to move the personnel and increments.	A4
A/C Load Limitations	(Aircraft Load Limitations) The characteristics of the transporting aircraft that must be A5 considered during the loading of that aircraft.	A523
A/C Loading Guidelines	(Aircraft Loading Guidelines) The rules and restrictions unique to the aircraft for developing A5 increments that will be transported in the aircraft.	A5213
A/C Type	(Aircraft Type) The designation of the aircraft on which a specific chalk is being designed A5 for transport.	A52 A521 A521
A/C Type & Increment ID to Chalk Assignment	(Aircraft Type and Increment Identifier to Chalk Assignment) The correlation among the A5 increments assigned to a chalk and the type of aircraft into which the chalk is to be loaded.	A52 A52 A523
A/C Type Increment ID	(Aircraft Type and Increment identifier) The designation for the type of aircraft on which the A5 increment will be transported and the unique identifier for the increment.	A521 A5213
A/C Type Ircrement ID & Transport Time	(Aircraft Type, Increment Identification, and Transport Time) The identification for the type A5 of aircraft on which the cargo unit will be transported, the number of the increment assigned A5 to the aircraft, and the time at which the unit must have that increment ready for transportation to the work centers.	A5 A52
A/C Type Ircrement ID Marshal Completion Time	(Aircraft Type, Increment Identification, and Marshaling Completion Time) The A5 identification for the type of aircraft on which the cargo unit will be transported, the number A5 of the increment assigned to the aircraft, and the time at which the increment must be ready for loading.	A52 A524
A/C Type Ircrement ID Unit Prep Time	(Aircraft Type, Increment Identification, and Unit Preparation Time) The identification for A5 the type of aircraft on which the cargo unit will be transported, the number of the increment A5 assigned to the aircraft, and the time at which the unit must have that increment at the increment at the increase.	A52 A521
Accepted Increment	A cargo increment that's physical packing is acceptable for safe loading into the transporting A5 aircraft.	4523 45231 45232
Accepted Increments With Properties Info	(Accepted Increment With Properties Information) An increment the UDM is ready to A5 release to the incheck process.	A521 A5714
Actual Deficiency	A requirement for on-base transportation that cannot be satisfied by on-base conveyances. A4	A4

Name	Definition	Reference
Allocated On-Base Vehicles/ Drivers	The conveyances and drivers assigned to respond to a request to move cargo and personnel within the base as part of a deployment operation.	A4
Annotated Load Plan	The Load Plan that has been marked to indicate the cargo increments that has been placed on the aircraft and is ready to be transported.	A53
Anticipated Deficiency	The inability to move cargo and personnel during a deployment based on correlation between the anticipated movement requirements and the conveyances available on the base.	A4
Anticipated Hot Spot & Mission Requirement	(Anticipated Hot Spot and Mission Requirement) The identification of a location in the world where a problem requiring military intervention is likely to occur and the mission scenario anticipated to provide the intervention.	A-1
Assigned Augmentee	Those individuals selected to support the current deployment effort.	A3
Assigned Commercial Transport	The commercial vehicle and driver assigned to satisfy a transportation requirement.	A0 A4
Assigned Increment	A cargo increment assigned to a specific chalk.	A5231
Assigned Name & SSN	(Assigned Name and Social Security Number) The name and social security number of an assigned qualified individual to satisfy an AFSC position of the UTC specified in the mission.	A22
Assigned On-Base Transportation	The vehicle and driver assigned to satisfy a transportation requirement.	A0
		A4
		A5
		A51 A52
Assigned Serial #	(Assigned Serial Number) The serial number of a piece of equipment assigned to satisfy an NSN requirement of the UTC specified in the mission.	A22
Augmentee Candidates	A list of those individuals who have been trained to support the deployment process.	A3
Augmentee Listing	A list of all deployment processing augmentees for the deploying base.	A0 A3
Augmentee Recall	Notification to the selected augmentees as to when and where they are to report for duty.	A-0
		A-1 A0
		A3
Augmentees & Equipment	(Augmentees and Equipment) A functioning work center with the proper support personnel and equipment.	A0
Available Prepositioned Resources	A list of resources at the designated reception site and which the unit decides will available to them during their deployment.	A215
Bag Parameters	The definition of the contents of the personal bags authorized for use during this deployment.	A51
Base Resources	All the base equipment and supplies available to participate in the deployment by either	A0
	supporting the effort or to be deployed.	A-0
		A-1

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Name	Definition	Reference
Base-Supplied Item	An NSN requirement of the UTC that could not be satisfied at the unit level but can be satisfied at the base level.	A22
Battle Staff	The group of individuals who oversee the deployment process and the base operations during the deployment.	Al
Battle Staff Member Information	(Battle Staff Member Information) The list of eligible base personnel to serve on the battle staff.	Al
Blank ID Cards	(Blank Identification Cards) Personnel identification cards that are available within the PDF to be filled out with updated information or to replace worn or lost cards.	A514
Blank Wills & Power Of Attorney	Blank forms for wills and power of attorney that can be signed by an individual being deployed.	A5145
Call-In	A call to the DCC stating the status of the deployment. This status may be simply the current preparation status or may inform the DCC of a shortfall that cannot be satisfied.	A0 A2 A22
Call-In Time	The times at which deployment status calls are expected into the DCC to indicate the work centers are operational.	A3
Cargo & Pax Data	A summary of the cargo and passenger data expressed as the total number of passengers by ULN and PIN and short tons, measurement tons (including barrels), total square feet of bulk, oversize, outsize, and non-air-transportable cargo by ULN and CIN.	A24
Cargo Placement	A layout for how the cargo will be placed on the transporting aircraft, as approved by the Load Master.	A53
Cargo Ready Status Call-In	Units notify the DCC that the cargo has reached a specific point of preparation. This also includes the identification of increments that have been rejected, thus producing shortfalls.	A5 A52 A523 A524
CB Computation Procedure	(Center of Balance Computation Procedures) The steps used to convert the weight and measurement information into the necessary center of balance designation.	A5214 A5232
Certification Documents	(Certification Documents) The records accompanying the hazardous materials planned for loading into an aircraft. These documents certify the designated aircraft has been approved to transport the material.	A5231
Certification Signing Requirements	(Certification Signing Requirements) A definition for how a hazardous material must be documented before it can be loaded into a transporting aircraft.	A5231
Chalk Priorkization	A listing of chalks with specific cargo that must go on each chalk and the order the chalks must depart.	A24
Chalk Schedules	The latest time that each chalk can be completed to ensure loading onto the conveyance and the integration of those times ensure loading of all increments within the chalk.	A25
Chalk Status	The level of completion for a chalk.	A524

Name	Definition	Reference
Checklists & Unit Cargo Plan	(Checklists and Unit Carco Plan) A suscrift-ration of how the carco for a LITC should be	15
	organized into increments, the characteristics that are checked to determine if the increment should enter the marshaling area for continued processing, and characteristics used to determine the acceptability of the cargo increment for loading onto the aircraft.	A52
Checklists & Unit Plan	The checklists used by the various work centers within the PDF and CDF and the unit plans identifying the assigned personnel and cargo to AFSC and NSN requirements.	A0 A5
Clarification Request	A request to the MAJCOM for more detailed requirements of the UTC and mission.	A-0
		A-1
		A0
		A2 A21
Climate Dictated UTC Adjustments	(Climate Dictated Unit Type Code Adjustments) Changes to the list of UTC items to be deployed to accommodate the weather anticipated at the mission site.	A215
Climatic Conditions	Weather conditions at the reception site that may influence the tailoring of the UTCs. These	A0
	conditions would include temperature, terrain, moisture, etc.	A2 A21
		CI2A
CUA	Course of Action) This information is contained in the Battle (Count of Action) Staff Special Instructions and specifies critical base dependent information for the deployment	A0
	effort. This includes the actual facilities to be used to accomplish the deployment. the	
	changes to the normal operations of the deploying base, the definition of the threat level and	
	ure security passwords to be considered and used during the deployment.	
Commercial Flight Materials	A set of blank forms, such as tickets, that can be used to assign commercial transportation.	A5145
Completed Cargo Increment	Increments positioned in the marshaling area and ready for loading onto the aircraft.	A523
Completed Increment	An increment built by the unit and believed to be within the necessary pallet size, weight, and configuration restrictions.	A521 A5213
		A5214
Consulted Person	A deploying person who has all of his personal affairs in order and is ready to leave for the	A514
	uepioyinent.	A5145
Consulting Materials	The various forms and brochures needed for the consulting-oriented workstations within the PDF.	A514 A5145
Contracted Conveyances	External transportation sources brought onto the deploying base to support the deployment operation.	A4
Contracting Agreement	An official arrangement between the deploying base and conveyance capabilities external to the deploying base.	A4
Conveyance Rules	Rules for placing cargo and personnel on specific types of transportation and the handling of	A7
	sensitive and hazardous material on that type of conveyance.	A24
Conveyance With Cargo	The transporting aircraft with the cargo elements positioned and ready for transport.	A53

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Name	Definition	Reference
Crisis Hot Spot & Mission Requirements	The name and location where a deployment is required or being planned and the mission to be accomplished by the deploying forces.	A-1
Current Site Operations	The manner in which personnel and facilities are currently being used on the base.	A-0 A-1 A0 A1
DD Form 93	Blanks forms which emergency data can be recorded.	A5145
Deliberate Tasking	This tasking is documented in the OPLAN and is specific for each selected site and mission scenario. This plan is developed by the Wing Planners and specifies the overall requirements in terms of the unit to be deployed, the mission for each unit, and the order of deployment. The OPLAN comprises a TPFDD.	A-I
Deploy- Ready Personnel	The individuals who have processed through the PDF and are ready for loading into the transporting aircraft.	A5 A51 A53
Deployed Increments	The groupings of cargo that have been placed on the transporting aircraft.	A53
Deployed Personnel	The names of the personnel loaded into the transporting aircraft.	A53
Deployed Resources	A combination of all the personnel and cargo successfully processed through the deployment process and on the aircraft ready to leave the base.	A-1
Deployed Rasources & Manifest (Personnel & Caroo)	Cargo and equipment aboard a conveyance deployed from the home base.	A-0
		A-1 A0 A53
Deploying Call-In	A status call-in to the DCC when cargo and passengers have completed specific milestones established in the DSOE.	A0 A5 A53
Deploying Cargo Items	The individual cargo elements identified to be included in the deployment.	A5 A52 A521 A521
Deploying Resources	The personnel and cargo identified for deployment.	A0 A5 A51
Deployment Conditions	Factors that must be consider during the deployment effort. These factors include the political conditions of the area to which the deployment is directed; the threat conditions directed at the site performing the deployment; and the weather and geographic conditions of the receiving area.	A0 A-0 A-1

Name	Definition	Reference
Deployment Notifications	The various forms of notifications to direct, guide, or provide information on the deployment	A0
	process.	A-0
		A-1
Deployment Objectives	The goals the base has set to attain during the deployment.	Al
Deployment Orders	Orders, such as warning orders, TPFDD, etc., issued by the competent authority to prepare forces for movement or to move forces, for instance, to increase deployability posture of units.	A0 A1
Deployment Plan	The current use of facilities, such as buildings, located on the base to which a deployment	A0
	assignment has been made.	Al
		A2 A73
Deployment Procedure	Guidance on how to plan and execute deployment within the base.	A-0
		A-1
		A0 A2
Deployment Related Information & Person	(Deployment Related Information and Person) A person selected to be deployed and the person's file containing that person's deployment related information.	A514
Deployment Status	An update on the current state of the conveyance to deploy the resources, the transportation	A0
,	requirements to move the resources among the base to prepare for deployment, any personnel	Al
	or cargo changes or shortfalls, the work centers' status, when the resources are ready to be	A2
	processed through the work centers, when the resources are ready to be loaded on the	A25
	conveyance, and when the conveyance is ready to leave the base with the deploying resources.	
Destination & Mode	(Destination and Mode) The reception site location, and any intermediate stops, associated with the deployment.	A514
Documentec HazMat Item	(Documented Hazardous Material Item) A single hazardous material item along with its shipper's documentation.	A521
DSOE	(Deployment Schedule of Events) A prioritized set of actions developed by the IDO that	A0
	must be performed and completed in accordance with the dates and times specified in the	A2
	SOE. The dates and times specified are defined as "no later than" dates and times.	A22
		A25
		A3
		A5
		A51
Eligible Person	An individual meeting the job requirements being deployed.	A514 A5145
Eligible Person With Exceptions	An individual meeting the job requirements being deployed who has a need to be consulted	A514
	or provide updated information for emergencies, legal, religious, financial, and travel.	A5145

Definition (Emergency Update Information) Pertinent information that the ir revalidates and supplies current information necessary in the case	idividual being deployed of an emergency. This	Reference A5145
revalidates and supplies current information neces includes next of kin, points of contact, insurance in	sary in the case of an emergency. This nformation etc.	¢
(Equipment and Personnel and Increment Identific security number of each assigned qualified indivic serial number of each piece of equipment assigned increments to which each piece of equipment is to	cation Assignment) The name and social lual to satisfy each AFSC position, the 1 to satisfy each NSN requirement, and the be included in the UTC.	A2 A22
An NSN requirement of the UTC that cannot be si	atisfied.	A22
A time-oriented list of when specific actions are to	occur during the deployment process.	A4
(Executive Order, Letter of Instruction, Schedule o	f Events, and Time-Phased Force	A0
deployment. The LOI provides information that is	to be used an existing the start of the specific to the deployment effort. The	74
TPFDD contains the detailed cargo, personnel, and each tasked unit The SOF identifies the specific co	movement data of the deployment for	
resources along with arrival and departure times.		
(Execution Order, Letter of Instruction, and Time	-Phase Force Deployment Data) The	A2
execution order directs the unit to start the deplo	yment. The LOIs provides unique	A21
instructions specific to the deployment. This in the deployment, the shots required for the deplo	formation includes the clothes to be taken for wing personnel, etc. The TPFDD contains the	
detailed cargo, personnel, and movement data (of the deployment for each tasked unit.	
A notification to the Wing Commander, and to	the IDO, which identifies specific information	A1
about the planned base deployment. This noti information except that it contains only the ha	fication is very similar to the TPFDD se's denlovment responsibilities	
(Facility and Equipment Assignments) A list	of the buildings, runways, general areas, and	A0
base-owned equipment that could support the	deployment effort, if selected, along with a	A2
description for how the facility and equipment	t are used during non-deployment operations.	A23
Developed by the Load Planner, this plan is de	livered to the Load Master as a starting point	A5
for the loading of the aircraft.		A52 A53
Changes made by the individual being deployed	1 to certain aspects of their finances.	A5145
(Financial Information Requirement) The list o deployed wishes to make.	f financial changes that the individual being	A5145
Forms that can be filled out by the individual be financial situation, such as a financial institution	ing deployed to change various aspects of the 1 automatic deposit.	A5145
The floor plan for each work center, along with detailed process sequence for each work center,	its designated location, annotated with a and for each UTC assigned to the	A23
deployment.		

Name	Definition	Reference
Frustrated Curgo Status	A list of TOMs indicating which cargo elements did not pass the incheck process and are in need of additional repair or work.	A523 A5231
HazMat Approved Increment	(Hazardous Material Approved Increment) An increment containing hazardous materials that has been approved for transport aboard a specific aircraft.	A5231
HazMat Iten		A521
HazMat Packing Guidelines	(Hazardous Material Packing Guidelines) The rules, which dictate how the various hazardous materials must be packed individually and how, they must be packed with respect to one another.	A5231
HazMat Placement Guidelines	(Hazardous Material Placement Guidelines) The rules for placing hazardous materials on a pallet or in a bin.	A5213
HazMat Postioning	(Hazardous Material Positioning) The placement on hazardous materials onto the increment in accordance with the designated guidelines.	A5213
HQs Assigned Transport	(Headquarters Assigned Transport) The conveyance assigned by headquarters to move deploying resources off the base.	A5 A53
HQs Assigned Transport With Possible Cargo Infornation	The conveyance assigned by headquarters to move deploying resources off the base, which may already contain some cargo on it when it arrives.	A0 A5
ID Card	(Identification Card) A card that contains personal information and data of a person identified to be deployed.	A514
Identified Resources	A generic list of resources identified to fulfill an anticipated military intervention action.	A-1
Immunization Supplies	The supply of shots required for the deployment and available for administering as necessary to the personnel being deployed.	A514
In-Check Accepted Cargo Increment	A cargo increment built by a unit and successfully processed through the in-check process.	A52 A523 A574
In-Check Checklist	The basic set of cargo increment characteristics that are checked to determine if the increment should enter the marshaling area for continued processing.	A52 A523
Increment C3	(Increment Center of Balance) The point within the cargo increment at which the increment can be raised and it will be balanced so as to prevent a loading danger.	A5232
Increment Documentation Guidelines	Specific directions for what and how information is to be placed on the increment placard and the placard is to be placed on the increment.	A521
Increment ID	(Increment Identifier) The TCN for an increment and used to relate the increment to its assigned chalk.	A523 A524
Increment ID to Chalk Assignment	(Increment Identification to Chalk Assignment) The list that correlates the increment ID to the chalk number to which the increment is to be included.	A523 A5231

Name	Definition	Reference
Increment Information	(Increment Information) The identifier for the increment along with the size, weight, and	A52
	center of balance for the increment.	A521
		A523 A5232
Increment Length, Width, & Height	(Increment Length, Width, and Height) The length, width, and height of an increment that is measured in accordance with the size computation procedures.	A5232
Increment Measurement Guidelines	The rules for determining the increment's physical characteristics that are important to assure its safe transport.	A521 A5214
Increment Measurement Procedure	The steps to be used by the UDM to accurately measure an increment.	A5214
Increment Ready Items	The designated resources ready to be placed in the increment.	A521 A5213
Increment Weighing Procedure	The steps to be followed in weighing an increment.	A5214
Increment Weight	The number of pounds contained in the cargo increment.	A5232
Increment With Weight & Size Information	(Increment With Weight and Size Information) An increment with an attached placard containing the physical characteristics of the increment.	A5214
Increment With Weight Information	(Increment With Weight Information) An increment that has been weighed as part of the unit's buildup.	A5214
Inefficient Load Plan	A processing sequence that does not make full utilization of available cabin load.	A24
Ineligible Person	A person not meeting certain criteria and therefore cannot be deployed to the reception site.	A51 A514
Ineligible Person ID	(Ineligible Person Identification) The name and identification of a person who has been found ineligible to be deployed and who must be replaced by an individual who qualifies for the same AFSC.	A51
Ineligible Person Information	(Ineligible Person Information) The name and social security number of an ineligible person that was originally proposed to satisfy an AFSC position of the UTC specified in the mission.	A22
Ineligible Person's Mobility Bags	The mobility bag of an individual who started through the PDF and was determined to be ineligible.	A51
Info & Concition Status	(Information and Condition Status) The information that must be accurate on the identification card and the criteria for judging when a card should be replaced due to its physical condition.	A514
Informed Person	An individual being deployed who has received information on the deployment location, and the various cultural issues and laws for the location.	A514
Initial Movement Plan	The correlation between anticipated movement requirements and the schedule for the movement.	A4
Inspection Checklist	A list of the increment parameters the In-Check personnel will consider when determining if an increment is ready for placement into the marshaling area.	A523 A5231
Inspection Guidelines	The criteria used by the Marshaler to determine if an increment will be placed into the chalk area or set aside for packing corrections.	A524

Name	Definition	Deference
Intra-Base Cargo I ransporting	(Intra-Base Cargo I ransporting Requirement) A communication to the on-base	A5
Kequirenses	transportation focal point within the DCC defining the requirement of transportation focal point within the DCC defining the requirement of	A52
	cargo. This request includes the type of cargo to be moved, the source and destination points,	A521
ı	and the required pickup and drop-off times.	A523
		A524
Intra-Base Personnel I ransporting	(Intra-Base Personnel Transporting Requirement) A communication to the on-base	A5
Requirement	transportation focal point within the DCC defining the requirement for the movement of	A51
	personnel. This request includes the number of personnel, the source and destination points,	
	and the required pickup and drop-off times.	
Item Documentation Procedure	The procedure specifying the information required to accurately document an item.	A5211
Item List	The identification of the resources designated to be included in the building of an increment.	A5213
Item Measured by Unit	The item that has been properly prepared, weighed, and measured by the unit.	A5211
Item Measurements From Unit	The size of an item as determined by the unit building it.	A5211
Item Packaged by Unit	A cargo item that has been properly prepared for shipment.	A5211
Item Placement Guidelines	The rules for placing non-hazardous materials on a pallet or in a bin.	A5213
Item Weighed by Unit	The item that has been properly prepared and weighed by the unit.	A5211
Item WeightFrom Unit	The weight of an item as determined by the unit building it.	A5211
Legal Info Update	(Legal Information Update) Information an individual would like to put in a will and the	A5145
	person to be assigned the power of attorney.	
LIMFACS/ Shortfalls	(Limiting Factors/Shortfalls) A factor or condition that, either temporarily or permanently,	A-1
	impedes a mission. Examples: transportation network deficiencies; lack of in-place	
	facilities; malpositioned forces or materiel; extreme climatic conditions, distance, transit or	
	overflight rights; and political conditions. ShortfallA lack of forces, equipment, personnel,	
	materiel, or capability, apportioned to and identified as a plan requirement that adversely	
	affects the command's ability to accomplish its mission.	
List of Increnents by Chalk	A listing of the increment's TCNs that have been included as part of a chalk.	A523
Load Master Checklist	A list of the conditions that the Load Master must consider to ensure the successful transport	A53
	of the personnel and cargo.	
Load Time	The time at which the personnel are to be ready for movement to the loading site.	A51
Loading Checklist	A list of procedures to ensure all loading is conducted safely, all documentation is correct,	A5
	and all personnel are performing the proper function for inspecting and loading the aircraft.	A53
LOI	(Letter of Instruction) Deployment instructions that are specifically related to the mission to	A0
	be accomplished at the reception site. Can come in the form of a messenger or be included as	A21
	part of the Warning Order, Execute Order or Air Mobility Tasking Order. The LOI can come	A215
	as a message or be included as part of he warning order, execution order, or Air Mobility	A5
	Tasking order.	A51
		A514

Name	Definition	Reference
LOI Dictatel UTC Adjustments	(Letter of Instruction Dictated Unit Type Code Adjustments) Changes to the list of UTC items to be deployed to accommodate the information received through the LOI.	A215
MAJCOM Specified UTC	(Major Command Specified Unit Type Code) A non-standard UTC that was tailored by the MAJCOM or higher levels to account for mission needs that may not be satisfied with the standard UTC.	A21
Manifest	The official listing of the cargo elements and personnel placed into the transporting aircraft.	A53
Manifest Recording Requirements	(Manifest Recording Requirements) The guidelines for developing and presenting the final manifest of personnel and cargo loaded onto the transporting aircraft.	A53
Marshal Actepted Increment	A cargo increment ready to be placed in the appropriate chalk.	A524
Marshaling Checklist	A list of actions to be performed in the marshaling area with respect to receiving, storing, and releasing increments	A52
Material & hfo Requirement	(Material and Information Requirement) The material and equipment requirements for each work center and the UTC assigned to the deployment.	A23
Measured Ircrement	An increment ready of consideration for inclusion into the marshaling area. The consideration indicates how well the increment meets the aircraft load limitations	A523 A5727
Measurement Procedures	The techniques designated to accurately measure the size of an increment and an item	A 5711
		A523 A523 A5232
Mission Recuirements	(Mission Requirements) A statement specifying, in a general sense, the goals of the planned military operation, and scenario for using the forces requested for deployment.	A21
Mission Recuirements & Site Survey Request	(Mission Requirements and Sit Survey Request) A definition of the mission to be accomplished through a deployment location or base, and a request for a list of the resources	A-1
	available at that location that could support the mission requirements.	
Mobility Bag	The standard A-3 bag being carried by a deploying individual upon arrival at the PDF.	A51
Mobility Bags	Luggage authorized for personnel tasked to deploy that contain items of clothing and equipment that are necessary for daily duties.	A5 A51 A57
Name & SSN of Proposed Person	(Name and Social Security Number of Proposed Person) The name and social security number of an eligible person recommended to satisfy an AFSC position of the UTC, along with their deployment and training history.	A22
New Force kequirement	(New Force Requirement) The identification of a resource required at the reception site, which was not previously identified.	A-1
Next of Kin& Insurance Beneficiary Information and Delivery Information	(Next of Kin, Insurance Beneficiary Information, and Delivery Information) The emergency information designated by an individual being deployed. Also, the instructions for where and to whom the information should be provided.	A5145
NSN Requirement & Quantity	(National Stock Number Requirement and Quantity) The equipment requirements, in terms of numbers of each NSN, needed to satisfy the UTC specified in the mission.	A22

Name	Definition	Deference
NSN Shortfill	(National Stock Number Shortfall) An NSN requirement of the UTC that cannot be satisfied at the unit level	A22
Off-Base Trunsport Capabilities	The conveyances not associated with the deploying base assigned to move deploying personnel and cargo among sites or to the reception site.	A4
On & Off Base Transport	The various conveyances and drivers available within the deploying base and those conveyances assigned to move deploying personnel and cargo among sites or to the reception site.	A0 A4
On-Base Transport Capabilities	The various conveyances available within the deploying base.	A4
Operational Work Center	A work center that is set up with the supporting equipment.	A3
Package Apyroved Increment	An increment determined to be packaged correctly for safe transport.	A5231
Packed Increment	The completed placement of items such that the increment is believed ready for transport.	A5213
Packing Gutielines Increment Picture	A pictorial representation for how a specific increment should be packed to ensure consistency and safety.	A5231
Pallet Building Guidelines	The rules that must be followed when placing cargo elements on a pallet to form an increment.	A521 A5213
PAX Loading Records	(Passenger Loading Records) The personnel loaded onto an aircraft and the list of their names and information relating to them.	A53
Personnel & DRF	(Personnel and Deployment Readiness Folder) The individual being processed for deployment and the folder containing all the necessary medical and personal information.	A51 A514
Personnel & Training Requirement	(Personnel and Training Requirement) The staffing and training requirements for each work center for the UTC assigned to the deployment.	A23 -
Personnel Pacement	A layout for how the personnel will be placed on the transporting aircraft, as approved by the Load Master.	A53
Personnel R3quirement	(Personnel Requirement) The number of people required to support the operation of a deployment work center.	A3
Personnel Slortfall	An AFSC requirement of the UTC that cannot be satisfied by the assigned unit.	A22
Personnel Status Call-in	A status call-in to the DCC when personnel have completed specific milestones established in the DSOE, such as ready to transport to the PDF or to the loading area.	A5 A51
Personnel T ₁ AFSC	(Personnel To Air Force Specialty Code) The assignment of a specific person's name to an AFSC requirement for deployment.	A51
Placard Procedures	The manner in which an increment must be denoted to effectively relay the increment related information throughout the deployment process.	A523
Placement Restrictions	The rules followed in determining where a cargo increment should be placed in the marshaling area.	A524
Predefined Frioritized Assignments & Folders	A matrix identifying the primary, secondary, and tertiary resources eligible for each AFSC or NSN requirement of a standard UTC. This list includes the personnel deployment and training history.	A2 A22

Name	Definition	Reference
Preliminary Load Plan	A load plan developed by the load planner based on standard information for the specific	A0
	cargo increment.	A3
<u>.</u>		A5
		A52
		A524
Prep Checklst & Default Properties	(Preparation Checklist and Default Properties) The list of considerations the UDM must	A521
	consider in preparing a cargo element and the value ranges for those parameter considerations.	A5211
Prep Checklst & Unit Cargo Plan	(Preparation Checklist and Unit Cargo Plan) A specification for how the cargo for a UTC	A52
	should be organized into increments.	A521
Prep Guideines	(Preparation Guidelines) The rules stating how to effectively build an increment that will be safe to move throughout the deployment process	A5211
Prepared Cago Increment	A cargo increment prepared by the unit and ready for transport to the in-check area.	A52
		A521
	(<i>Pre-I</i> allored Unit Type Code) A non-standard version of this UTC that was previously tailored for these mission requirements or another mission with similar requirements	A21
Problem Padkaging	An increment returned to the unit because one or more of the items was not properly prepared	A521
	and packaged.	A5211
Problem Palet Build	A pallet identified somewhere in the deployment process as being unsafe to continue through	A521
D. 11 . 01	ure deployment process because it did not meet the necessary pallet building parameters.	A5213
rroolem suppers Document	(Problem Shippers Documentation) A shippers document identified somewhere within the deployment process as being incomplete or inaccurate.	A521
Process Flov	The sequencing among the various deployment work centers necessary to efficiently and successfully accomplish the deployment	A23
Process Initiation	The time at which the necconnel from a unit and to bacic mercine it. I is not	
	Any time at which the personned from a unit are to begin processing through the PDF.	A51 A514
Process Mesurement Points	A detailed schedule, including milestones, established for each chalk.	A25
Processed Ptrsonnel	Personnel who are ready for deployment but not ready for loading onto the conveyance.	A51
B		A514
Frocessing Checklist	The set of checklists that are used by the various work centers within the PDF.	A51
Dronocod I and Dian		A514
	A tentative load plan identifying all cargo and passengers on the chalk, where they are to be	A2
	received on the chain, and the other in which they should be loaded on the chalk.	A24
Recention Ste Special Conditions	Charific considerations of the second in the destine is the destine of the second se	CZA
support of any output	operative considerations at the reception site that must be considered during the religions consultation processing.	A514 A5145
Recommended Airlift	Airlift that would optimize the processing of standard UTCs assigned for the dealoyment	041CV
		A24

Name	Definition	Reference
Recommended Transportation/ Schedule	A recommendation to change/define the type of conveyance required to move the cargo and	A2
Changes	personnel that are to be deployed, and to refine the schedule based on the necessary conveyance.	A24
Rejected Increment	An increment determined to have something sufficiently wrong to prevent it from being	A521
	loaded into the transporting conveyance.	A5213
		A5214 A524
Religious Into Update	(Religious Information Update) Religion related issues that an individual being deployed intends to discuss.	A5145
Religious Materials	A set of religious materials that can be provided to a person being deployed.	A5145
Religious Miterials & Support	Religious materials taken by the deploying individual.	A5145
Reports	Documents stating the status of the deployment effort. Can be verbal via radio, telephone, or	A-0
	runner, electronic, or manually written in a logbook or posted board.	A-1 A0
		Al
Resource Awilability	A listing for which resources can be used to support a base deployment.	A-1
Resource Status	A comparison between the deployment support requirements and the assignments of	A-1
	resources to satisfy those requirements.	
Restraining Guidelines	The rules for placing netting over a pallet or closing a bin door.	A5213
Rolling Stock Increments	An increment, usually consisting of one item that is not placed on a pallet for deployment.	A5214
Rolling Stocc With CB Information	(Rolling Stock With Center of Balance Information) A rolling stock increment that has the center of balance information attached.	A5214
Schedule & JTC Movement Requirement	(Schedule and Unit Type Code Movement Requirement) A time-oriented list of when specific actions are to occur during the deployment process and the type and size of	A0
	conveyances needed to move the personnel and equipment specified within the UTC desionated for deployment	
Serial Number of Proposed Equipment	(Serial Number of Proposed Equipment) The serial number of a piece of equipment recommended to satisfy an NSN requirement of the UTC superified in the mission	A22
Shipment Ready Items	An increment the UDM is ready to have released to the incheck process.	A521
Shortfall	A lack of forces equipment personnel materiel or canability apportioned to and identified	1170
	as a plan requirement that adversely affects the command's ability to accomplish its mission.	A22
Shot Record:	An up to date listing of the person's medical shots.	A514
Site Briefing Materials	The charts used to brief the personnel being deployed.	A514
Site Set-Up Time	The time required getting a base ready to perform a deployment.	A25

Name	Definition	Reference
Site Survey Information	(Site Survey Information) Information regarding the capabilities of the receiving site used to	A-0
	tailor a UTC.	A-1
		A0
		A2
		A21
		A215
Situation Aralysis	Political conditions of both the reception and deploying sites that may influence the current	A0
	base operations during the deployment.	AI
Size Computation Procedures		A5232
Skill Requirement & Quantity	(Skill Requirement and Quantity) The personnel skills, in terms of numbers of each AFSC, needed to satisfy the UTC specified in the mission.	A22
SOE	(Schedule of Events) A schedule identifiving no later than times for nersonnel/caroo	A7
	deployment processing and the conveyance assigned to move them.	A24 A75
SOE, TPFDD	(Schedule of Events, Time-Phased Force Deployment Data) A listing of the UTCs heino	A7
	deployed and the deployment schedule for the UTC. The arrival and departure schedule of a	A25
	conveyance for a deploying base.	
Special Mecical Requirement	(Special Medical Requirement) The medication that needs to be administered that was not	A514
	province for the reception site out is now needed because of the fillssion conditions.	
Specific I ravel Requirement	(Special Travel Requirement) The directive for how personnel are to be transported to the reception site if it is different than standard military transport.	A514
Standard Brefing Conditions	The normal information presented as part of a deployment operation and the manner in which it is presented.	A514
Standard Consulting Conditions	The manner in which the various consultation afforts are howilled	A 51 4
		A5145 A5145
Standard Elgibility Conditions	The criteria used to determine if a person meets the standards for the deployment.	A514
Standard Medical Requirement	(Standard Medical Requirement) The medication that has been predefined for deployment to a given location.	A514
Standard UTC Data	(Standard Unit Type Code Data) Information specifying the personnel and equipment defined to comprise a UTC.	A-I
Start & Conpletion Times	(Start and Completion Times) The time duration for a UTC from preparation initiation until it is at the In-Check.	A25
Status of Seected Equipment	The status of equipment proposed to satisfy an NSN requirement of the UTC specified in the	A22
Ctature I La Jaco		
status Opdae	A call-in to the DCC reporting that transportation has been initiated based on a request from a unit.	A0 A4
Standard Equipment Requirement	(Standard Equipment Requirement) The equipment requirements for a standard work center.	A23 .

Name	Definition	Reference
Std Setup Times	(Standard Setup Times) The times established by the individual unit and used as the basis for	A2
Std Space Rauirement	Structuring the preparation and totaung of a 0.1 C. (Standard Snace Remitrement) The snace requirements for a standard work contor	C74
Std Staff Rejuirement	(Standard Staff Requirement) The personnel requirements for a standard work center	A23
Support Perconnel Availability	The list of personnel trained to perform one of more of the tasks required to support the deployment.	A23
Tailored UTC and LIMFACS/Shortfalls	(Tailored Unit Type Code and Limiting Factors/Shortfalls) All the tailored deployment requirements defined by the tasked unit and any limiting factors or shortfalls that must be	A-0 A-1
	sent to MAJCOM for approval or a required response.	A0 A1
Tailored UTC Person/ Equipment Requiremen	(Tailored Unit Type Code Personnel and Equipment Requirement) The personnel and equipment requirements of the UTC that must be satisfied by the tasked unit.	A2 A22
TPFDD	(Time-Phased Force Deployment Data) A listing of the UTCs being deployed and the schedule for their arrival at the reception site.	AI A21 A21
TPFDD AirFlow	(Time-Phased Force Deployment Data Air Flow) The schedule for the airflow designed to accomplish a deployment and distributed through the Air Mobility Tasking Order.	A-1
Training Requirement	(Training Requirement) The skill the augmentees must have to support the operation of a deployment work center.	A3
Transferred Transportation Requirement	(Transferred Transportation Requirement) A call that is made between the DCC's transportation focal point and the vehicle controller in response to a movement request.	A4
Transport R [,] ady Cargo & Information	(Transport Ready Cargo and Information) A cargo increment placed appropriately in the chalk with the necessary increment information attached.	A5 A52 A52 A53
Transport Ryquest	A request presented to base transportation for the movement of cargo or personnel from one place to another. This request is given in terms of the source and destination; type, quantity, specific characteristics of the resources to be moved; and the time at which the move must be completed.	A0 A4 A5
Transportation Means	The conveyances and drivers assigned to move deploying resources.	A0 A-0 A-1
Travel Authorization	The paper work, which specifies the travel necessary for the deploying person.	A514
Travel Requrement	(Travel Requirement) The specification for which individuals will travel on commercial conveyances.	A514 A5145
Troop Comnander Packet With Manifest	A list of the personnel being transported on the aircraft along with other critical information such as the hazardous materials and their locations in the aircraft.	A5145

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Name	Definition	Reference
UnacceptedCargo Increment	A cargo increment determined not to meet the inspection criteria, thus making the increment	A52
	unsafe to load onto a conveyance.	A521
		A523
		A5231
Unit Cargo Plan	The way in which a unit has planned to prepare and pack the cargo contained in its assigned UTC.	A521
Unit Deliveed Increment With ID	(Unit Delivered Increment With Identifier) The cargo increment delivered to the in-check	A52
	area with its chalk and increment number assigned.	A523 A5231
Unit Deployment Requirements	(Unit Deployment Requirements) All the tailored deployment requirements that must he	4.7
	satisfied by the tasked unit in order to meet the specific mission.	A21 A21
		A215
** *. ***		A23
Unit ID	(Unit Identifier) The unique identifier for the unit that is to satisfy a UTC requirement.	A2 A25
Unit Load Feady Call-In	A phone call made informing the DCC that the personnel are ready for transport to the loading area	A51
I Init Derconnel Dion		
	I ne assignment of a specific individual to an AFSC requirement for deployment and the set of checklists that are used by the various work centers within the PDF.	A5 A51
Unit Prep Cympletion Time	(Unit Preparation Completion Time) The time contained within the DSOF which specifies	A 51
	when the unit personnel are to be ready to be transported from the unit to the PDF.	
Unit Prep Tme	(Unit Preparation Time) The time stated in the DSOE by which the unit must report to the DCC that their denloving resources are ready	A521
[]nit Prenard Personnel	The nerconnel identified for dealorment and neares do he transmorted to the DDE	A 2 1
Unit ReadvCall-In	A call to the DCC stating that the unit merconnel are ready to be transported to the DDF.	101
Indated IDCard	(Tindated Identification Card) A neuronal identification and that is is 200 diversed at	104
	(Opuated ruentification Card) A personal identification card that is in good snape and contains accurate information.	A514
Updated Person & Records	(Updated Person and Records) An individual being deployed who has received all the	A514
	necessary shots and their medical records depict an accurate representation of their medical	
	(1 hit Tumo Code I and 2) The teilened HTC	
	(Unit type Code Level 2) The failored UTC requirements expressed as the number of	A2
	passengeus, suori tonis, and incasured tons expressed as outs, oversized, and non-air transportable cargo for the tailored UTC to he denloved.	A23 A74
UTC Level 1	(Thit Tyme Code Level 4) Detailed data expressed with the number of monomore her A DOC	104
	code by ULN and PIN and individual dimensional data length, width, height, and Center	A215 A215
	Balance (CB) of cargo by equipment type (individual NSN) by ULN and detailed by priority	
	OI SHIPHIREIH.	

Name	Definition	Reference
UTC List Clanged by Climatic Conditions	(Unit Type Code List Changed by Climatic Conditions) The resulting UTC list after being changed as based on the weather conditions at the mission site.	A215
UTC List Clanged by LOI Requirements	(Unit Type Code List Changed by Letter of Instruction Requirements) The resulting UTC lists after being changed based on the LOI information.	A215
UTC/UIC	(Unit Type Code/Unit Identification Code) A 6-character alphanumeric designator that uniquely identifies each unit. A UTC identifies a combat capability to include the UTC code, title, MISCAP, and manpower and equipment detail. UTC packages consist of A, B, and C records. The A record provides the UTC title and the five character code, the B record provides the MISCAP statement, and the C record provides the manpower skill detail (grade and AFSC) within the UTC. A UTC becomes standard when it is registered in MEFPAK and entered in the TUCHA file, which is contained in the JOPES database and contains complete movement characteristics. The UTC provides the baseline for unit deployment, unit readiness reporting which is derived from SORTS, and support force planning. (Unit Identification Code) A six-character alphanumeric code that uniquely identifies each Active, Reserve, and National Guard unit of the Armed Forces tasked to provide the capabilities of the UTC.	A21
UTC-to-Unt Assignments	(Unit Type Code-to-Unit Assignments) The identification of a specific unit selected to satisfy the need for an operational capability as specified by the UTC identifier.	A0 A5 A51
Warning Order	A notice to the Command Post that the base may be receiving a deployment or execute order.	Al
Weighing Pocedures	The techniques used to accurately weigh a cargo increment or item.	A5211 A5232
Will, Powerof Attorney, & Delivery Directions	A Will and/or Power of Attorney signed by a person being deployed and the instructions for who should receive copies of these documents and the addresses of these individuals.	A5145
Work Center Completed Status	A deployment function that is fully equipped, has the supporting supplies, and is ready to do its part of the deployment process.	A3
Work Center Definition	The layout and equipment listing for a work center.	A3
Work Center Definition & Location	(Work Center Definition and Location) The name of the work center indicating the type of	A0
	processing performed at the work center and the physical location at which the work center is positioned.	A2 A73
		A25
		A3
		A5
		A51 A52
Work Cente Equipment	(Work Center Equipment) The typewriters, desks, chairs, etc. used to support the operation of a work center.	A3

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LOG-AID AS-IS MECHANISM GLOSSARY

Kole	Description
Build Team	The group of individuals responsible for preparing an increment by placing and fastening the items correctly.
CALM	(Computer-Aided Load Manifesting) The computer program used to determine how the increments could be loaded into the aircraft to assure flight safety.
CAT	(Crisis Action Team) Command and staff personnel assembled to respond to war, and certain contingency or emergency situations that require continuous actions. Its purpose is to provide continuous response during periods of increased readiness and expanded operations. Also called a Battle Staff.
Chaplin	An individual located in the PDF during a deployment effort to provide spiritual support to those leaving for a deployment.
CMOS	(Cargo Movement and Operation System) The AF system that automates base shipment processes and serves as the source data system essential to a manual visibility of cargo and passenger movement.
Command Fost (Manned by a Wing Commander representative)	The base location in which the Battle Staff is present during a deployment.
COMPES	(Contingency Operations/Mobility Planning and Execution System) The AF subsystem of JOPES that operations, logistics, and personnel planners at all command levels use to develop and maintain force packages and task requirements for operation plan time-phased force and deployment data.
Consulting Personnel	A group of individuals within the PDF responsible for supporting the personal needs of deploying individuals. This group includes the personnel to document the names of personnel to be notified in case of emergency, legal representatives, the chaplain, financial personnel, and the travel agent.
DCC Staff	(Deployment Control Center Staff) The personnel located in the DCC during a deployment and responsible for the coordination of the base deployment.
DeMS	(Deployment Management System) An automated system designed to meet the deploying unit's need to identify and select personnel and equipment resources to meet tasking requirements.
Emergency Jata Personnel	The augmentee personnel within the PDF responsible for documenting the Emergency Data Card (DD93).
Financial Personnel	A support person located in the PDF responsible for helping deploying personnel arrange for the receipt of their paycheck and all financial matters that must be arranged.
IDO	(Installation Deployment Officer) The host-unit officer who maintains base deployment guidance and directs and coordinates base deployment under the direction of the installation commander.
InCheck Personnel	The people responsible for verifying the accuracy of an increment buildup by the unit and before it is placed in the marshaling area.
Installation Commander Staff & Tools	The team of people and their support tools responsible for analyzing the deployment requirements and developing the course of action for their base. This team is also responsible for interacting with the Head Quarters concerning LIMFACS and Shortfalls.
Legal Personel	The individual within the PDF responsible for satisfying the legal requirements of those deploying.

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Load Master	The individual resonnsible for ensuring the careo and perconnel are loaded onto his aircraft in accordance
	with guidance so as to ensure flight safety.
Load Planner	The individual responsible for determining how the personnel and cargo included in a chalk is to be positioned in the conveyance.
Log Planner	(Logistics Planner) The Logistics Planner works with the IDO to direct and supervise the deployment activities and define the organizational structure to meet all command and control, cargo preparation, and personnel preparation deployment requirements.
LOGFOR	(Logistics Force Packaging System) is a COMPES subsystem that provides equipment & materiel requirements & summarized transportation characteristics through its LOGDET component.
LOGMOD-3	(Logistics Module-Base Level) A COMPES software program that base-level planners use to aid deployments. Equipment and cargo information. Manpower & Personnel Module - Base Level Base level automated capabilities in COMPES that support operation, contingency, deployment and exercise planning, readiness, & execution responsibilities. Computer-Aided Load Manifesting An AF system that automates load planning.
LOGPLAN	(Logistics Planning Subsystem) The automated part of the LOGMOD-B, a COMPES software package, that planners use in building detailed materiel data equipment requirements to support OPLANs for different deployment capabilities.
MANPER	(Manpower and Personnel Module) The combined automated capabilities, existing at various levels of command in COMPES that support operation, contingency, deployment and exercise planning, readiness, & execution responsibilities.
MANPER-B	(Manpower and Personnel Module - Base Level) The base-level version of the automated capabilities in COMPES that support operation, contingency, deployment and exercise planning, readiness, & execution responsibilities.
Manpower	The organization responsible for tracking all manpower information on a base.
Marshaler	The person responsible for storing and safeguarding the prepared cargo, organized by chalk, until it is ready for loading.
PDF Persomel & Equipment	(Personnel Deployment Function Personnel and Equipment) The personnel and equipment used within the PDF during the processing of personnel being deployed.
Personnel & Systems	A general name used to represent all the individuals and supporting equipment required to accomplish a deployment effort.
RAMPCO	(Ramp Coordinator) The person responsible for all activities on the flight line such as moving cargo, and loading and unloading the aircraft.
READY	(Resource Augmentation Duty) A program requiring each installation to identify and validate its own temporary augmentation and local resource needs to meet deployment requirement.
SBSS	(Standard Base Supply System) An automated inventory accounting system that provides on-line support for all supply transactions.
SORTS	(Status of Resources and Training System) A system used to track the readiness level of units to determine which units can satisfy the UTC requirements, as described in their DOC statement.

Role	Description
TCU	(Transportation Control Unit) The on-base organization responsible for controlling all air traffic into and out of the base and all on-base vehicles and conjument
TMO	(Transportation Management Office) The on-base organization responsible for providing contracted vehicles and equipment to move personnel and cargo within the base during a deployment
Transportation's DCC focal point	(Transportation's Deployment Control Center focal point) The individual, positioned in the DCC, acting as the intermediary between the deploying units and the transportation equipment required to support their
Travel Agert	deployment. A person positioned in the PDF and responsible for generating tickets on commercial transportation as necessary.
Troop Comnander	Deploying individual traveling as part of a chalk who has been selected primarily because rank to take charge of the chalk, and especially the personnel until they are returned to the control of their unit commander at the reception site.
UDM	(Unit Deployment Manager) Individual in charge of preparing a unit for deployment.
Wing Comnander	The Wing Commander oversees all staff activities in support of deployment.

APPENDIX C

LOG-AID AS-IS DATA MODEL AND GLOSSARY

LOG-AID AS-IS DATA MODEL

The LOG-AID As-Is Data Model (DM) is a logical representation of the information used by and produced by the functions within the wing-level deployment process and locuments the relationship between data elements. This appendx contains the IDEF1X graphical representation of the model. Figure C-1 contains a quick reference to IDEF1X notation. The complete model is presented or a single page. This contains all the entities with their associated attributes and the relationships between them. In order to ficilitate understanding and review of the DM, the entities are subdivided into broad classes of information types called subject areas. The attributes in each entity vere examined to evaluate what type of information was represented. Then entities with similar types of information were grouped. By examining the classes of inormation represented, five major subject areas emerged: PLANS, CAPABILITY, MATERIAL, PERSON, and ACTION.

that are relaed to the subject area are included on a diagram, an entity may exist in more than one subject area. Table C-1 contains a list of the subject areas The entities that represent the key data in the subject area and the entities that are related to these entities are displayed in each subject area. Because the entities diagrams onwhich the entities appear. A narrative that provides a general discussion of the subject area is presented on the page facing each subject area diagram.




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Entity
C-1. Entity
Table C-1. Entity

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Entity Name	Subject Area Name
ACTION	ACTION
ACTION	PERSON
ACTION ORG ROLE	ACTION
ACTION PERSON ROLE	ACTION
ACTION PERSON ROLE	PERSON
ACTIVITY	PERSON
CAPABILITY	CAPABILITY
CAPABILITY	PLAN
CAPABILITY ORG ROLE	CAPABILITY
CAPABILITY ORG ROLE	PLAN
CARGO	CAPABILITY
CARGO	PLAN
CARGO CATEGORY	MATERIAL
CARGO DSOE	ACTION
CARGO INCREMENT	MATERIAL
CHALK	ACTION
DENTAL	PERSON
DEPLOYABLE MAT'L	MATERIAL
DIMENSION	MATERIAL
DSOE	ACTION
DSOE ACTION	ACTION
FINANCIAL	PERSON
FORCE RQMT	PLAN
GUIDANCE	ACTION
HAZMAT	MATERIAL
INCREMENT CHALK	ACTION
INCREMENT CHALK	MATERIAL
ITEM	CAPABILITY
ITEM	MATERIAL
LOAD LIST	MATERIAL
LOAD PLAN	ACTION
LOC ROLE	PLAN
LOCATION	MATERIAL

ubject Area Matrix	
Entity Name	Subject Area Name
LOCATION	PLAN
LOCATION CONDITION	PLAN
IOI	PLAN
MANIFEST	ACTION
MANIFEST	PERSON
MATERIAL	CAPABILITY
MATERIAL	MATERIAL
MATERIAL CONDITION	MATERIAL
MEDICAL	PERSON
NSN	CAPABILITY
NSN	MATERIAL
ORG ROLE	PLAN
ORGANIZATION	MATERIAL
ORGANIZATION	PLAN
OTHER ACTIVITIES	PERSON
PAX CHALK	ACTION
PAX CHALK	PERSON
PAX DSOE	ACTION
PAX DSOE	PERSON
PER LEVEL 3	CAPABILITY
PER LEVEL 3	PLAN
PERSON	PERSON
PERSON ELIGIBILITY	PERSON
PERSON ROLE	PERSON
PERSON SKILL	PERSON
PLACARD	MATERIAL
PLAN	PLAN
PLAN LOC ROLE	PLAN
PLAN ORG ROLE	PLAN
PLAN SUPPORT RQMT	PLAN
SKILL	CAPABILITY
SKILL	PERSON
SPECIAL HANDLING	MATERIAL

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Table

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TASKING PLAN TRAINING ACTIVITY PERSON UTC INCREMENT CAPABILITY UTC INCREMENT MATERIAL	TASKED PERSONNEL	PLAN
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UTC INCREMENT MATERIAL	UTC INCREMENT	CAPABILITY
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	UTC SKILL	CAPABILITY



PLANS

The PLANS subject area contains those data elements that represent the operations for deploying units to prepare for movement or increase their deployability posture. The PLAN details the conduct of the operations. The plan identifies a FORCE RQMT to fulfill the mission objectives. The forces and supplies needed to accomplish those objectives are identified in the TASKING, along with the movement schedule of the resources to the theater of operations. The Letter of Instruction (LOI) identifies any specific instructions unique to the deployment. Each unit line number of the TASKING references a CAPABILITY. The TASKED CARGO and TASKED PERSONNEL may identify the variations in the tasking from the standard UTC CAPABILITY. Each CAPABILITY contains detail about CARGO and personnel, PER LEVEL 3.

Each base develops a mobility plan contained in PLAN SUPPORT RQMTs, which detail how the base should operate if they were tasked to support that PLAN.

Each PLAN references many LOCATIONS in its operations. The LOC ROLE defines the roles each location may assume. The PLAN LOC ROLE identifies the specific role that LOCATION plays within the PLAN, such as a base may be identified in the PLAN as the forward operating location or a port of embarkation. The LOCATION CONDITION provides detail about each specific location, such as the information identified in a base support plan or by an ADVON team.

PLAN. The TASKED ORG ROLE identifies the organizations and the role they play in the TASKING, such as the unit may be identified as deploying a The PLAN also identifies many ORGANIZATIONs in its operations. Each ORGANIZATION can assume many different roles, which are depicted in ORG ROLE. The role identified for an ORGANIZATION in the PLAN is depicted in the PLAN ORG ROLE, such as a unit may be identified as the host unit in the ragmented UTC in the TASKING.



CAPABILITY

The CAPABILITY subject area contains those data elements that represent a specific type of mission capability.

The CAPABILITY identifies a specific UTC, which defines a specific mission capability and is detailed by the CARGO and personnel, PER LEVEL 3, needed to accomplish that capability. Different ORGANIZATIONS (shown in the complete model) are assigned a role in the CAPABILITY. This is identified in the CAPABILITY ORG ROLE, which details their relationship, such as a lead unit, follow-on unit, etc., and their unit readiness level or their ability to provide all or portions of the defined CAPABILITY.

When tasked to satisfy a specific CAPABILITY, typically the standard is tailored to mission, reception site, and environmental conditions. This is depicted in the TASKED CARGO and TASKED PERSONNEL entities. The equipment, supplies, and spare parts considered CARGO are detailed into separate UTC INCREMENTS, which serve as the primary method for organizing material for deployment. This UTC INCREMENT provides a means to establish a sequence for movements, a reference point for tailoring, and a standardization among units with like weapon systems. The UTC INCREMENT may contain one or more ITEMs which are identified in supply through an NSN. An ITEM may contain SUFFIX items, which are also identified in supply through an NSN. For example, a toolbox may be an ITEM, but may it contain many tools (SUFFIX items) within that toolbox. The number of personnel required for a CAPABILITY is documented through PER LEV 3. This list purely consists of the number of people in the UTC. The personnel requirements are then broken down by number of people with a specific AFSC and a specific skill, documented in UTC SKILL.



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MATERIAL

The MATERIAL subject area contains all those data elements that represent equipment, supplies and spare parts that are deployed or support the deployment effort. Every piece of equipment, supply, or spare parts is documented in the entity MATERIAL. MATERIAL is categorized as those that are deployed, DEPLOYABLE MAT'L, and those that support the deployment effort, SUPPORT MAT'L, such as MHE. Each MATERIAL has a MATERIAL CONDITION, which documents its status and maintenance requirements. Each MATERIAL belongs to an ORGANIZATION, such as a unit, base supply, etc. and can be found at a specific LOCATION.

A UTC INCREMENT will have a CARGO CATEGORY CODE assigned to it, which identifies shipping requirements such as its type, size and shipping Each piece of MATERIAL has an NSN identified with it, DIMENSIONs associated with it, a HAZMAT if it is hazardous material, and any SPECIAL HANDLING requirements. When tasked to be deployed, a piece of DEPLOYABLE MAT'L may be linked to an ITEM or a SUFFIX in a UTC INCREMENT. container restrictions.

CHALK. An INCREMENT CHALK contains DEPLOYABLE MAT'L which is listed in the CARGO INCREMENT entity. This list is documented in the LOAD LIST. The LOAD LIST will document characteristics about the INCREMENT CHALK such as a HAZMAT Codes and CARGO CATEGORY CODEs. A Once the UTC INCREMENT has been tailored to list exactly what is to be deployed and on which chalk it is to be transported, it is considered an INCREMENT PLACARD is attached to the INCREMENT CHALK which contains information about it, along with an assigned TCN for tracking purposes.



PERSON

The PERSON subject area contains all those data elements that represent information about the people that are being deployed and support the deployment effort.

SKILL. Their eligibility for deployment is documented in PERSON ELIGIBILITY. All the information about activities and personal preferences are documented Each PERSON has many different individual characteristics. A PERSON may have several SKILLs within their abilities which are documented in PERSON in the ACTIVITY and categorized by MEDICAL information, DENTAL information, FINANCIAL information, TRAINING information, and all OTHER ACTIVITIES, such as legal, religious, etc.

of those ACTIONS are depicted in the ACTION PERSON ROLE entity. For example, a PERSON may be assigned the role of augmentee for the ACTION of A PERSON may be responsible for many ACTIONS and have specific roles, PERSON ROLE, in those actions. The roles (PERSON ROLES) they play in each CDF in-check.

One of the ACTION PERSON ROLEs for a person can be tasked in a deployment. The PERSON will be assigned to a specific CHALK, which is documented in PAX CHALK. The MANIFEST contains the list of all those PERSONs assigned to the CHALK. The PAX DSOE schedule sequences the requirements or milestones for specific actions for PERSONs to perform for each CHALK.



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ACTION

The ACTION subject area contains those data elements that represent different activities which occur within the deployment process.

play in the ACTION. For example a unit may be identified to perform the role of transportation in a deployment ACTION. ACTION PERSON ROLE identifies ACTION defines the milestone and the timing requirements of the activity. The ACTION ORG ROLE identifies specific ORGANIZATIONS and the roles they the people and the roles they play in the action. For example, a PERSON may be assigned the role of a UDM in a deployment ACTION. An ACTION may be regulated by GUIDANCE, such as how to document something, how to pack something, how long something should take, the resource requirements that should be consumed, the conditions that must be established for implementation, etc.

the CHALK, and the PAX CHALK documents all the passengers on the chalk. The LOAD PLAN details the layout for each INCREMENT CHALK on the DSOE is developed for each CHALK, or conveyance that is to move resources off the base. The INCREMENT CHALK documents each UTC INCREMENT on The DSOE identifies milestones for equipment, CARGO DSOE, personnel, and PAX DSOE. The DSOE ACTION identifies each ACTION with the DSOE. A CHALK, and the MANIFEST lists all the CARGO INCREMENTs identified in the LOAD PLAN, along with the number of passengers on the chalk.



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LOG-AID AS-IS DATA GLOSSARY

entity or attribute name, (2) the definition of the item, and (3) the DM reference. The names of the entities are in all capitals. The names of the attributes are in all lowercase. Definitions may include comments further explaining the item and providing examples. The names of associative entities are expanded by naming This appendix contains the LOG-AID Data Glossary for the As-Is Data Model (DM). The glossary is divided into three columns: (1) the name, which is the DM each of the entities that are being associated with an "x" between them to denote the intersection of these entities.

NAME	DEFINITION	DEEDENCE
ACTION	All activities hath these and here and here it.	NEFENERCE
NOTION	An activities, bout trose supported by automated systems and those performed manually, involved in the deployment process.	Entity
Action ID	The action identifier is the unique identifier for a record of a specific action.	Attribute of ACTION
Action Type	The type and name of a performed action.	Attribute of ACTION
Start Time Scheduled	The time at which the action is scheduled to start.	Attribute of ACTION
End Time Scheduled	The time at which the action is scheduled for completion.	Attribute of ACTION
Duration Time Scheduled	The length of time in which the entire action should occur.	Attribute of ACTION
Completion Time Actual	The actual time the action was completed.	Attribute of ACTION
Action Status	The status of the action, including any problems, and corrective issues.	Attribute of ACTION
ACTION ORG ROLE	(ACTION x ORGANIZATION x ROLE) An association among an action, the	Entity
	organization, and the organizational role the organization has in the action.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
ACTION PERSON ROLE	(ACTION x PERSON x ROLE) An association among an action, the person,	Entity
	and the role the person has in the action.	
ACTIVITY	The various functions that are performed to keep personnel records current.	Entity
Activity Type	The type of activity that the person is performing which results in an update of	Attribute of ACTIVITY
	their records.	
Activity Date	The date the activity is performed.	Attribute of ACTIVITY
Activity Location	The location where the activity is performed.	Attribute of ACTIVITY
Activity Urgency	The priority or urgency of the requirement for the activity.	Attribute of ACTIVITY
	COMMENTS: For example, if a person is tasked to deploy and must have	
	specific training, the priority would be very high to have that completed before the date of the deployment.	
CAPABILITY	A mission capability that can be provided by a specific force package of	Entity
	defined technical sophistication of the forces' units, weapon systems, and equipment with the sustainability of those forces units and weapon systems	
UTC Code	A 5 character alphanumeric designator that uniquely identifies the capability.	Attribute of CAPABILITY
UTC Title	The unit type code title.	Attribute of CAPABILITY
MISCAP	The mission capability defines the type and amount of workload the force is capable of accomplishing.	Attribute of CAPABILITY
I ITC Decorintion	Dotionating	
	retuinent intormation such as the type of base where commanders will deploy, the unit's functional activities and other automatation requirements	Attribute of CAPABILITY
	including type and amount, necessary to conduct specific missions.	

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	DEFINITION	REFERENCE
CAPABILITY ORG ROLE	(CAPABILITY x ORGANIZATION x ROLE) An association among a	Entity
	capability and an organization and the role the organization plays in the	
	COMMENTS: For example, this could identify an organization and a UTC	
	and the organization plays the role of the pilot unit in the UTC.	
Readiness Level	The ability of the forces, units, and weapon systems to deliver the designated capability.	Attribute of CAPABILITY ORG ROLF
Prep Time	The length of time in which the organization requires to be at the readiness level they stated for the capability.	Attribute of CAPABILITY ORG ROLF
Capability Status Detail	Any further detail on the status of the organization and their ability to provide the capability.	Attribute of CAPABILITY ORG
CARGO	Equipment, supplies, and spare parts identified in a UTC.	Category Entity of CAPABILITY
CARGO CATEGORY	Descriptive codes assigned to cargo according to their characteristics and properties.	Entity
Cargo Type Code (char1)	A code referencing type of cargo, such as HazMat, chemical, ammunition, etc	Attribute of CARGO CATEGORY
Cargo Size Code (char2)	A code referencing the size of the cargo, such as bulk, oversized, outsized, non-air transportable, etc.	Attribute of CARGO CATEGORY
Cargo Container Code (char3)	A code referencing the container requirements such as organic vehicles, container 20 ft and 20 STONS or less, non containerable, etc.	Attribute of CARGO CATEGORY
CARGO DSOE	A portion of a DSOE, which identifies all the milestones for the cargo on one chalk.	Category Entity of DSOE
Cargo Pickup	The latest time at which the cargo for a chalk must be picked up at the unit.	Attribute of CARGO DSOE
Marshaling Start	The latest time at which the marshaling of the cargo for a chalk must be started.	Attribute of CARGO DSOE
Marshaling Complete	The latest time at which the marshaling of cargo for a chalk must be completed.	Attribute of CARGO DSOE
CARGO INCREMENT	The deployable material that is packaged into an increment that will be transported to the reception site on the designated chalk.	Entity
CHALK	A specific conveyance that has been assigned to transport resources from the deploying location.	Entity
Chalk Num	This is a sequential identifier for each chalk that is transporting resources from the deploying base.	Attribute of CHALK
Conveyance Serial Num	The serial number of the specific conveyance that is designated as the chalk.	Attribute of CHALK

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INAME		KEFEKENCE
Conveyance Type	The type of conveyance that is assigned as the chalk, such as aircraft, ship,	Attribute of CHALK
	truck, etc.	
Configuration	The unique configuration of the specific conveyance.	Attribute of CHALK
Load Characteristics	Any special loading requirements for the conveyance.	Attribute of CHALK
Departure Location	The location the conveyance is to depart from.	Attribute of CHALK
Destination Location	The final destination for the conveyance.	Attribute of CHALK
DENTAL	Activities related to a person that is associated with dental.	Category Entity of ACTIVITY
Dental Action	The name of the dental activity.	Attribute of DENTAL
Procedure Type	The type of dental procedure that was performed.	Attribute of DENTAL
No-Range of Teeth	The identification of the specific teeth the dental procedure was performed on.	Attribute of DENTAL
Dental ID	A unique identifier for the dental record.	Attribute of DENTAL
DEPLOYABLE MAT'L	Equipment, supplies and spare parts that are considered deployable and may	Category Entity MATERIAL
	be deployed from the home station to another location.	
DIMENSION	Specific parameters about material, items, increments, etc.	Entity
Dimension ID	A unique identifier for the dimension record.	Attribute of DIMENSION
Length	The length of the material, item, or increment.	Attribute of DIMENSION
Width	The width of the material, item, or increment.	Attribute of DIMENSION
Height	The height of the material, item, or increment.	Attribute of DIMENSION
Weight	The weight of the material, item, or increment.	Attribute of DIMENSION
Center of Balance	The center of balance of the material, item, or increment.	Attribute of DIMENSION
Center of Gravity	The center of gravity of the material, item, or increment.	Attribute of DIMENSION
DSOE	The Deployment Schedule of Events is a prioritized set of actions that must be	Entity
	completed. All dates and times are specified as "no later than" dates and	
	unes.	
DSOE ID	A unique identifier for the DSOE record.	Attribute of DSOE
Assembly Complete	The latest time at which all the unit's resources must have completed	Attribute of DSOE
	preparation at the unit.	
Load Start	The latest time the loading of the chalk must be started.	Attribute of DSOE
Load Complete	The latest time the loading of the chalk must be completed.	Attribute of DSOE
Manifest to QC	The latest time the manifest of cargo and people must be to quality control for	Attribute of DSOE
	review.	
Date Time Version	The date, the time, and the version number of the DSOE.	Attribute of DSOE
ETA	The estimated time of arrival of the conveyance to the deploying base.	Attribute of DSOE

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NAME	DEFINITION	neenevice
ETD	The estimated time of denarture for the conveyance from the denloving base	Attribute of DODE
Crew In Brief	The latest time at which the crew in-brief must be started.	Attribute of DSOE
Crew Out Brief	The latest time at which the crew out-briefs must be started.	Attribute of DSOE
DSOE ACTION	(DEPLOYMENT SCHEDULE OF EVENTS x ACTION) The association	Entity
	between actions in the deployment process and those identified in the DSOE.	•
FINANCIAL	Activities related to personal information that is financially associated.	Category Entity of ACTIVITY
Pay Amount	The amount of pay a person is currently scheduled to receive.	Attribute of FINANCIAL
Financial ID	A unique identifier to the financial record of a person.	Attribute of FINANCIAL
FORCE RQMT	The force requirement is a specific mission that must be accomplished.	Entity
Rqmt Definition	The numbers, size, and composition of defense forces needed to accomplish a	Attribute of FORCE RQMT
	mission.	
GUIDANCE	The rules, laws, procedures, and technical assistance that govern and aid	Entity
	defense-related processes, including the deployment process.	
	COMMENTS: For example, military regulations and instructions.	
Guidance ID	The guidance identifier is the unique identifier of a record of guidance.	Attribute of GUIDANCE
Guidance Name	The name of the guidance material.	Attribute of GUIDANCE
Guidance Format	The format of the guidance material.	Attribute of GUIDANCE
Guidance Text	Textual information that is used in the guidance material.	Attribute of GUIDANCE
	COMMENT: For example, how to document Hazmat, how to compute the	
	center of balance, conditions for replacement of ID card, etc.	
Guidance Date	The date of the latest release of the guidance material.	Attribute of GUIDANCE
Guidance Duration	Estimated duration times for specific actions.	Attribute of GUIDANCE
	COMMENTS: For example, standard set-up times for a work center, time for	
	a unit to prepare cargo, standard ground time for an aircraft, etc.	
HAZMAT	Information regarding specific cargo that is considered hazardous material.	Entity
	corrosive materials, radioactive material, etc.	
Hazmat Code	The specific code that correlates the material with the type of hazard it	Attribute of HAZMAT
	contains or is consisted of.	
HazMat Description	A description of the kind of hazardous material.	Attribute of HAZMAT
INCREMENT CHALK	The association between CARGO INCREMENT and CARGO DSOE. It	Entity
	contains a list of the increments that are identified in the DSOE to be shipped	
	on the chaik.	

NAME	DEFINITION	REFERENCE
Status	The status of the preparation and processing of each of the increments on the designated chalk.	Attribute of INCREMENT CHALK
Comments	Any additional comments about the condition, location, etc. of the increment and its processing.	Attribute of INCREMENT CHALK
TCN	The Transportation Control Number is assigned to a specific increment to be used in tracking by the transportation community.	Attribute of INCREMENT CHALK
Shipping Priority	The priority for shipping the increment. For example, some maintenance items must be at the reception site before an aircraft in order to service the aircraft when it arrives.	Attribute of INCREMENT CHALK
ITEM	An item is the next level of breakdown of what is stored on an increment. For instance, an increment may contain 10 items. A piece of rolling stock can be considered an increment and an item. Therefore, that increment contains one item	Entity
Item ID	The unique identifier for a record of an item.	Attribute of ITEM
Item Nomenclature	Textual information about the item.	Attribute of ITEM
Item Quantity	The number of the same item that are in the same increment.	Attribute of ITEM
LOAD LIST	A detailed list of items and associated information on an increment.	Entity
Total # of Pieces	The total number of items on an increment.	Attribute of LOAD LIST
LOAD PLAN	A detailed description of the layout of the conveyance and where each increment should be positioned on the conveyance.	Entity
Load Plan Version #	The version number of the specific load plan.	Attribute of LOAD PLAN
LOC ROLE	(LOCATION x ROLE) The association between a location and the roles that location may play.	Entity
Loc Role ID	The location role identifier is the unique identifier for a record of location role.	Attribute of LOC ROLE
Loc Role Detail	Textual information regarding the role the location may assume.	Attribute of LOC ROLE
LOCATION	A specific physical site at which organizations reside and assets are stored.	Entity
Pickup Type	The type of pickup that would be required for transportation. COMMENTS: For example, passengers may be picked up from a separate	Attribute of LOCATION
	entrance compared to where cargo would be picked up.	
Area	The area on the complex in which the location can be found.	Attribute of LOCATION
Building	The building number or name of the location.	Attribute of LOCATION
Room Facility	The room number or facility name of the location.	Attribute of LOCATION

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NAME	DEFINITION	REFERENCE
LOCATION CONDITION	Information regarding the status of the location. This would be where information from the BSP and ADVON team would be found.	Entity
Command Relationship	The MAJCOM the location is under command.	Attribute of LOCATION CONDITION
Condition Type	The type of condition for the report. COMMENTS: For example, maps, civil engineering information, services available, medical capabilities, WRM, munitions, security, contracting, weather, etc.	Attribute of LOCATION CONDITION
Condition Description	Detailed data about the condition type.	Attribute of LOCATION CONDITION
Condition Status	Any status relevant to the condition type.	Attribute of LOCATION CONDITION
LOI	The Letter of Instruction provides deployment instructions that are superifically related to the mission to be accountished at the receivion site	Entity
	COMMENTS: For example, the LOI may require the personnel to carry their weapons at their side during transport, so they are immediately available upon arrival at the reception location.	
LOI Detail	Detailed information about the instructions.	Attribute of LOI
MANIFEST	The manifest contains a list of the increments and passengers on the chalk, along with the load plan of the chalk.	Entity
MATERIAL	Every piece of equipment, supplies, and spare parts and belongs to an organization.	Entity
Material ID	The unique identifier for a record of material.	Attribute of MATERIAL
Serial Number	The unique serial number of the piece of material, if it has one.	Attribute of MATERIAL
MATERIAL CONDITION	Information regarding the condition, availability, status, and maintenance requirements of a piece of material.	Entity
Material Condition ID	The material condition identifier is the unique identifier for the record.	Attribute of MATERIAL CONDITION
Mat'l Availability	Information regarding the availability of the material.	Attribute of MATERIAL CONDITION
Mat'l Operational status	Information regarding the status of the operations of the material and its maintenance requirements.	Attribute of MATERIAL CONDITION
MEDICAL	Activities related to personnel that are associated with their medical history and requirements.	Category Entity of ACTIVITY

NAME	DEFINITION	REFERENCE
Medication name	The name of the medication prescribed or given to the person.	Attribute of MEDICAL
Time Interval	The time interval between necessary medications.	Attribute of MEDICAL
	COMMENTS: For example, the time between required shots.	
Medical ID	The medical identifier is the unique identifier for the medical record.	Attribute of MEDICAL
NSN	The National Stock Number is the catalogued identifier for an item of	Entity
	material.	
NSN No	The specific national stock number.	Attribute of NSN
NSN Type	The type or category of item.	Attribute of NSN
Nomenclature	The name assigned to the specific national stock number.	Attribute of NSN
Supply Class Code	The supply class code for the NSN in the supply system.	Attribute of NSN
Supply Subclass Code	The supply subclass code for the NSN in the supply system.	Attribute of NSN
ORG ROLE	The roles an organization can assume.	Entity
Org Role ID	The organization role identifier is the unique identifier for a record.	Attribute of ORG ROLE
Org Role Description	A description of the role an organization can assume.	Attribute of ORG ROLE
ORGANIZATION	An administrative structure with a mission, both government and non-	Entity
	government.	
	COMMENTS: Organizations may contain suborganizations. For example, a	
	base may contain wings, a wing may contain groups, a group may contain	
	squadrons, and a squadron may contain flights.	
Org ID	The organization identifier is the unique identifier for a record of an organization.	Attribute of ORGANIZATION
Organization Name	The unique name of the oroanization	Attribute of OBG ANIZATION
Country Code	The country in which the organization is located.	Attribute of ORGANIZATION
MAJCOM	The Major Command in which the organization is assigned.	Attribute of ORGANIZATION
GLOC	The geographic location of the organization.	Attribute of ORGANIZATION
Org Address	The specific address of the organization.	Attribute of ORGANIZATION
OTHER ACTIVITIES	Activities related to personnel that are associated with functions other than	Category Entity of ACTIVITY
	finance, medical, dental, and training.	
	COMMENTS: For example, legal, emergency data, religious requirements,	
	etc.	
Other Activity Detail	Information regarding the type of activity and the implementation.	Attribute of OTHER ACTIVITIES
Other Activity Status	Information about the status of the action.	Attribute of OTHER ACTIVITIES
Other Activity ID	The other activity identifier is a unique identifier for a record of the other	Attribute of OTHER ACTIVITIES
	activity.	

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NAME	DEFINITION	DEFEDENCE
PAX CHALK	The passengers that are assigned to a specific chalk and will be documented in the manifest.	Entity
Pax Chalk Status	The status of the preparation and processing of each passenger.	Attribute of PAX CHALK
PAX DSOE	A level of a DSOE, which identifies all the milestones for the passengers on one chalk.	Category Entity of DSOE
Deliver MRRR	The latest time at which each unit must deliver the Mobility Requirements/Resource Roster to the PDF.	Attribute of PAX DSOE
Pax Pickup	The latest times at which the passengers must be picked up at the unit and transported to the PDF.	Attribute of PAX DSOE
TDY Orders	The latest time at which all the TDY orders for all the passengers must be completed.	Attribute of PAX DSOE
Processing Start	The latest time at which the processing of the passengers through the PDF must start.	Attribute of PAX DSOE
Processing Complete	The latest time at which the processing of the passengers through the PDF must be completed.	Attribute of PAX DSOE
Briefing Complete	The latest time at which the passengers must have completed their briefings.	Attribute of PAX DSOF
PER LEVEL 3	A level of the CAPABILITY which details the UTC by total number of passengers (Level II, Level II, and Level III)	Category Entity of CAPABILITY
PERSON	A human being for whom information is maintained.	Entity
SSN	The Social Security Number of the person.	Attribute of PERSON
Person name	The name of the person.	Attribute of PERSON
Date of Birth	The date of birth of the person.	Attribute of PERSON
Birth Place	The place of birth of the person.	Attribute of PERSON
Person Height	The height of the person.	Attribute of PERSON
Person Weight	The weight of a person.	Attribute of PERSON
Eye Color	The eye color of a person.	Attribute of PERSON
Hair Color	The hair color of a person.	Attribute of PERSON
Gender	The sex of a person.	Attribute of PERSON
Blood Type	The blood type of a person.	Attribute of PERSON
Security Clearance	The security clearance of a person.	Attribute of PERSON
PERSON ELIGIBILITY	The ability of a person to meet certain eligibility requirements.	Entity
Eligibility Type	The criteria for measuring eligibility.	Attribute of PERSON ELIGIBILITY
Eligibility Start Date	The beginning date necessary for the person to meet the criteria.	Attribute of PERSON ELIGIBILITY

NAME	DEFINITION	REFERENCE
Eligibility End Date	The end date when the person must be eligible to meet the criteria.	Attribute of PERSON ELIGIBILITY
PERSON ROLE	The various roles a person can assume throughout different phases of the process.	Entity
Person Role ID	The unique identifier for the record of the type of role a person can assume.	Attribute of PERSON ROLE
PERSON SKILL	(PERSON x SKILL) The associative entity relating a person to the types of skills the person may have.	Entity
Level	The skill level of the person.	Attribute of PERSON SKILL
Training	The training completed to achieve the skill level and the time interval for which a skill qualification is valid.	Attribute of PERSON SKILL
PLACARD	The identification attached to an increment used by transportation to track in- transit visibility.	Entity
PLAN	A scheme for achieving an end over time.	Entity
	COMMENTS: For example, an OPLAN, designed for the conduct of military	
,	operations, identifies one or more operations that units carry out	
	simultaneously or in a series of connected stages.	
Plan ID No	The plan identifier number is the unique identifier for the record of the particular plan	Attribute of PLAN
Plan Name	The name of the plan.	Attribute of PLAN
PLAN LOC ROLE	(PLAN x LOCATION x ROLE) This is the associative entity between the plan and a location identified in the plan and the role the location will assume for the plan.	Entity
PLAN ORG ROLE	(PLAN x ORGANIZATION x ROLE) This is the associative entity between the plan and an organization identified in the plan and the role that organization will assume for the plan	Entity
PLAN SUPPORT RQMT	This is the document that identifies how an organization would support a plan. COMMENTS: For example, a base deployment plan would fall into this entity.	Entity
Plan Support ID	The plan support identifier is the unique identifier for the record of this plan.	Attribute of PLAN SUPPORT ROMT
Support Rqmt Status	Any details on the development of the support requirements.	Attribute of PLAN SUPPORT ROMT
SKILL	Basic proficiencies required to accomplish defense-related workloads. Includes both proficiency in a trade or following a given method.	Entity
Skill Type	The name used to identify the various personnel skills.	Attribute of SKILL
Skill Description	A detailed description of the skill.	Attribute of SKILL

NAME	DEFINITION	
SPECIAL HANDLING	The variants accorded to a lite of the state	KEFEKENCE
	1 LIE VALIOUS SPECIAL MANDING REQUIREMENTS THAT MAY DE ATTACHED TO CERTAIN CARGO.	Entity
Handling Rqmts	The name and description of the special handling requirement.	Attribute of SPECIAL HANDLING
Handling ID	The handling identifier is the unique identifier code that is assigned to the cargo when it requires special handling	Attribute of SPECIAL HANDLING
CI IEEI V		
SUFFLA	A lower level detail of pieces of equipment, supplies or spare parts that may	Entity
	be gamered together and considered an item. Items may be joined together and considered an increment This is used in the detailed decommentation for	
	cargo in a UTC capability.	
Sub Item Quantity	The number of subitems that are joined together into the item.	Attribute of SUFFIX
SUPPORT MAT'L	Support material included equipment, supplies, and spare parts that are used	Category Entity of MATERIAL
	to support the deployment, but do not deploy.	
	COMMENTS: For example, MHE such as a K-Loader may be considered	
	support material.	
TASK ORG ROLE	(TASK x ORGANIZATION x ROLE) This is the associative entity between	Entity
	the tasking and the organization identified in the tasking and the role the	
	organization assumes in the tasking.	
	COMMENTS: For example, the organization may be identified as the unit to	
	deploy.	
TASKED CARGO	The tasked cargos are the tailored cargo requirements of the UTC. Rather than	Entity
	deploy a standard UTC, the cargo may be tailored due to environmental	
	reasons, mission requirements, reception site capabilities, a fragmented order,	
	etc.	
MIONS	The total measured tons of the cargo tasked to deploy.	Attribute of TASKED CARGO
STONS	The total number of short tons of the cargo tasked to deploy.	Attribute of TASKED CARGO
TASKED PERSONNEL	The tasked personnel are the tailored personnel requirements of the UTC.	Entity
	kamer man deploy a standard UIC, the number of personnel may be adjusted	
	due to mission requirements, reception site capabilities, a fragmented order,	
	etc.	
Num of Pax	The number of people that are needed to deploy with the UTC.	Attribute of TASKED PERSONNEL
TASKING	The time phased force deployment data contains the time-phased force data,	Entity
	we not related to any personnel data, and movement data for the plan.	

NAME	DEFINITION	REFERENCE
FRN	The Force Requirement Number is a five character alphanumeric code used to	Attribute of TASKING
_	uniquely identify force entries in the TPFDD The first two characters identify the theater of operation. The five characters make up the first five of seven	
	characters in the unit line number (ULN).	
Frag ID	A single character used to identify elements of a force deploying in more than one increment. Makes up the sixth position of the UII N	Attribute of TASKING
Insert ID	A single character code used to further identify elements of a force deploying	Attribute of TASKING
	in two or more increments. Makes up the seventh (and last) character of the	
	ULN.	
Deployment Date	The date the unit identified in the TPFDD is scheduled to start deploying their forces off the home station.	Attribute of TASKING
Authorized Per Num	The Authorized personnel number is the number of passengers to be deployed	Attribute of TASKING
	plus the number of crewmembers of the aircraft.	
EAD	The earliest arrival date for when the deployed forces or replacement	Attribute of TASKING
	personnel can be accepted at a port of debarkation during a deployment. Used	
	in conjunction with the LAD to define a delivery window for transportation	
	planning.	
LAD	The latest arrival date for when the deployed forces should arrive at the port	Attribute of TASKING
	of debarkation and support the concept of operations.	
ALD	The available load date is the date in the TPFDD when equipment and forces	Attribute of TASKING
	can begin loading on an aircraft or ship at the port of embarkation.	
RLD	The ready to load date is when the forces should be prepared to depart their	Attribute of TASKING
	origin on organic transportation or are prepared to begin loading on USTRANSCOM furnished transportation.	
Mode	The type of conveyance that will be used to transport the forces from the	Attribute of TASKING
	home station.	
Source to POD	The source of the transportation for the unit resources to the port of	Attribute of TASKING
	debarkation, which may be a seaport or aerial port. The POD may or may not	
	coincide with the final destination.	
TRAINING ACTIVITY	Activities related to personal information that is associated with the training of	Category Entity of TRAINING
	the person.	
Class name	The name of the training course the person attended.	Attribute of TRAINING ACTIVITY
Test Scores	The scores and ranking of the person's results from the training.	Attribute of TRAINING ACTIVITY
Exemption	Any exemptions the person may have acquired for the training requirements.	Attribute of TRAINING ACTIVITY

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NAME	DEFINITION	REFERENCE
Training Activity ID	The training activity identifier is the unique identifier for the training record.	Attribute of TRAINING ACTIVITY
UTC INCREMENT	The Unit Type Code increment identifies the arrangement of equipment,	Entity
	supplies, and spare parts to support the cargo side of the deployment	•
	capability. The increments are used for planning purposes.	
Increment Num	The number of the increment assigned to the UTC capability.	Attribute of UTC INCREMENT
Item Description	A description of the increment of the UTC capability	Attribute of UTC INCREMENT
Inc STONS	The total short tons that comprise the increment.	Attribute of UTC INCREMENT
Inc MTONS	The total measurement tons that comprise the increment.	Attribute of UTC INCREMENT
Deploy Echelon Code	The deployment echelon codes are used to establish priorities and sequencing	Attribute of UTC INCREMENT
	of movement of increment.	
Inc Sq Ft	The total square footage of the increment of the UTC capability.	Attribute of LTC INCREMENT
UTC SKILL	The further level of detail of the personnel requirements of a UTC canability.	Entity
# of Pax per AFSC	This identifies the number of passengers by Air Force specialty code.	Attribute of UTC SKILL
Grade	This identifies if a rank requirement must be assigned to an AFSC	Attribute of UTC SKILL
	requirement.	
UTC Skill ID	The UTC skill identifier is the unique identifier of the record of UTC skill	Attribute of UTC SKILL
	requirements.	

APPENDIX D

LOG-AID AS-IS PROCESS MODEL

Node Number	Process Name	Output/Product	Description	Time to Complete (in	Frequency of Occurrence	Exceptions/ Rules	Resource
				minutes)		Variation Factors	
A0.1	Plan Site Adjustments	COA	By analyzing the deployment tasking and mapping the deployment operational requirements to the status of available resources, the battlestaff defines the base functionality during the deployment	See Decomposition			Base Commander
		Tailored UTC and LIMFACS/ Shortfalls	The battlestaff will send all the transformer y turing the opportunity. Imiting factors and shortfalls to the MAICOM for anyonyal or resource				Battlestaff
		Reports	Various reports of the base operations and deployment efforts must be sent to the higher-level authorities.				Battlestaff
A0.2	Establish Act'n Process	DSOE	A Deployment Schedule of Events is developed to identify the deployment activities to be performed by each deploying unit and the sequencing of those activities.	See Decomposition			IDO Log Plans
		Deployment Status	The IDO keeps the Battlestaff informed of the current state of the deployment effort, including any problems, shortfalls, or limiting factors.				DO
		Clarification Request	Sometimes a request is sent to MAJCOM for more information regarding tasking requirements and UTCs.				IDO, COMPES
		Preliminary Load Plan	Each chalk must be defined with which increments and passengers will be included and how they will be loaded.				Load Plans, CALM, COMPES
,		Work Center Definition & Location	With the base facilities allocated, and the processing activities and sequencing established, the layout design and implementation of the deployment work centers is initiated.				IDO, Log Plans
A0.3	Set Up Deployment Machine	Work Centers	Teams of augmentees are brought in to both set up and operate the defined work centers in accordance with the schedule.	See Decomposition			Base Personnel
		Work Center Status Call- In	When the work center becomes operational, they will inform the DCC with a call.				
		Augmentee Call-In	The necessary augmentees are identified from the augmentee list and notified to report to an augmentee preparation work center.				READY
A0.4	Arrange for Transportation	Assigned On-Base Transportation	The transportation within the base is established to ensure the necessary transportation is available when needed to support the deployment process.	See Decomposition			Trans
		Assigned Commercial Transport	The transportation within the base is contracted to ensure the necessary transportation is available when needed to support the deployment process.				Trans, Contracting
		Status Update	The DCC is notified when transportation has been initiated.				Trans
A0.5	Deploy Resources	Deployed Resources & Manifest	All tasked personnel and cargo are identified and processed for deployment.	See Decomposition			Base Personnel
		Transport Request	Transportation is requested to move cargo and personnel from a source to a destination location, including the type, quantity, and specific characteristics of the resources to be moved, and deadline for the movement.				Base Personnel
		Deploying Call-In	The DCC is notified when the cargo and personnel processing have completed specific milestones established in the DSOE.				Base Personnel





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Node Number	Process Name	Output/Product	Description	Time to Complete (in minutes)	Frequency of Occurrence	Exceptions/ Rules Variation	Resource
						Factors	
1.1A	Identity Battle	Battle Staff Member Info	Once the first warning notification is received, a list of eligible base	min 5			Command Post
	Statt		personnet to serve on the battle staff is identified.	mean 10 max 15			(Manned by a
							Commander
							representative)
A1.2	Convene Battle	Battle Staff	The battlestaff is notified and brought into the command post to oversee	Delay for Arrival			Wing
	Staff		the deployment process and the base operations during the deployment.	min 20			Commander.
			-	mean 60			DO
				max 90			
A1.3	Analyze Task	Deployment Objectives	An evaluation of the base deployment requirements in conjunction with	min 60			DO
			any political conditions produces a set of deployment objectives that must	mean 70			SORTS
			ue met by the facilities used to perform the deployment.	max 80-			
		Tailored UTC and	The battlestaff will send all the tailored deployment requirements and any			1% LIMFACS/	DO
		LIMFACS/Shortfalls	limiting factors and shortfalls to the MAJCOM for approval or response.			Shortfalls	SORTS
						2% Need	
						Approval for Tailoring	
A1.4	Determine Base	COA	Based on the current site operations and the status of the predefined	min 15		0	SORTS
	Allccation		facilities, and especially on the deployment objectives, the information	mean 20			READY
			within the deployment plan is adjusted to define the actual allocation of \int_{1}^{1}	max 30			CCS
			site facilities to be used.				CAT
		Reports	Various reports of the base operations and deployment efforts must be sent to the hisher-level authorities			-	Battlestaff

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Resource	IDO, UDM, Log Planner, LOGPLAN, LOGFOR, MANPER-B	IDO, UDM, Log Planner, LOGPLAN, LOGFOR, MANPER-B DeMS	Personnel & Systems	Personnel & Systems	Personnel & Systems	IDO, Log Plans	Personnel & Systems	Personnel & Systems	Personnel & Systems	IDO, DCC Staff
Exceptions/ Rules Variation Factors										
Frequency of Occurrence										
Time to Complete (in minutes)	See Decomposition		See Decomposition			See Decomposition	See Decomposition		See Decomposition	min 1 mean 2 max 10
Description	The specific requirements for the deployment must be established.	Sometimes a request is sent to MAJCOM for more information regarding tasking requirements and UTCs.	Knowing the requirements of the UTC and the availability of the base resources, specific assignments of personnel and equipment resources are made to meet the tasking requirements of the UTC.	If any equipment or personnel are not available for deployment, then a shortfall must be generated and sent to higher levels.	As personnel and equipment are selected and assigned to be deployed, the DCC is notified of the status, whether completed or a problem, such as a LIMFAC or shortfall.	Using the deploying requirements, the deployment work centers needed to satisfy all the requirements are identified along with the necessary flow through the work centers.	Each chalk must be defined with which increments and passengers will be included and how they will be loaded.	A recommendation is made to change the type of conveyance required to move cargo and personnel that are to be deployed, and to refine the schedule based on the necessary conveyance.	The deploying schedule is established to perform the actual deployment.	The IDO keeps the Battlestaff informed of the current state of the deployment effort, including any problems, shortfalls, or limiting factors.
Output/Product	Unit Deployment Rqmts	Clarification Request	Equip & Personnel/ Increment ID Assignment	Shortfall	Call-in	Work Center Definition & Location	Proposed Load Plan	Recommended Transportation/ Schedule Changes	DSOE	Deployment Status
Process Name	Determine UTC Rqmt		Assign Names to UTC Rqmts			Establish the Deployment Capability	Compute Chalk		Compute The Deploying Schedule	Monitor/ Control Deployment
Node Number	A2.4		A2.2			A2.3	A2.4		A2.5	A2.6





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Exceptions/ R Rules Variation Factors		<u>897251</u>	Usually phone IE equest, then L(eply is L(Classified fax M within 5-120 Fm		<u>ezz</u>	
Frequency of 0 Occurrence						
Time to Complete (in minutes)	min 30 mean 45 max 150	min 15 mean 50 max 120		min 30 mean 40 max 50	min 10 mean 15 max 20	min 60 mean 90 max 240
Description	The Unit Identification Code uniquely identifies the unit tasked to provide the capabilities defined in the Unit Type Code.	The UTC is compared against the standard UTC to determine what MAJCOM tailored to account for needs at the receiving base that the standard UTC cannot meet, or capabilities at the receiving base that the UTC will not need to meet.	A request is sent to MAJCOM for more details on the tasked fragmented UTC or specifies on what they tailored in or out of a UTC.	The LOGPLAN system is searched to see if this UTC was previously tailored when an early warning was received for this tasking or if a recent deployment tailored it for similar mission requirements and location.	COMPES is accessed to obtain all the standard LOGDET of the equipment and material requirements, summarized transportation characteristics, and manpower detail by quantity, function, grade, and AFSC for the tasked UTC.	The UTC is tailored based on specific instructions and requirements from orders and LOIs, climatic conditions, site survey information, and past experience.
Output Product	UTC/UIC	MAJCOM Specified UTC	Clarification Request	Pre-Tailored UTC	UTC Level 4	Unit Deployment Rqmts
Process Name	Identify Tasked Unit	Identify Fragmented Non-Std UTC		Locate/Correlat e Tailored UTC	Verify/Obtain Standard UTC Data	Tailor UTC
Node Number	A21.1	A21.2		A21.3	A21.4	A21.5





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Node Number	Process Name	Output/Product	Description	Time to Complete (in	Frequency of Occurrence	Exceptions/ Rules	Resource
				minutes)		Variation Factors	
A22.1	Select A Required Capability	Selected Space	The personnel skills, in terms of numbers of each AFSC, needed to satisfy the UTC specified in the mission is determined, along with the equipment requirements, in terms of numbers of each NSN.	min 10 mean 20 max 40			IDO, UDM, Log Planner
A22.2	Assign A Person	Name & SSN of Proposed Person	The name and social security number of an cligible person is recommended to satisfy an AFSC position for the UTC. Their deployment and training history is included.	min 10 mean 60 max 120			UDM, Manpower, DeMS,
A22.3	Review Persons Deploying Status	Assigned Name & SSN	If the proposed person is eligible and qualified to satisfy the AFSC requirement, then they are assigned the deployment position.	min 5 mean 60 max 180	99% Assigned 30% Ineligible - (65% Waived) (35% Refilled)		MANYEK-B UDM, Manpower & Personnel
		Non-Accepted Person	After a review of the person's eligibility, the proposed person is deemed non-acceptable for deployment.				UDM, Manpower & Personnel
		Personnel Shortfall	If none of the proposed individuals are eligible for deployment, then a shortfall is relayed to the IDO/DCC.		1% Shortfall		UDM, Manpower & Personnel
A22.4	Assign An Equipment Item	Assigned Serial #	The proposed equipment's operational status was acceptable so the n equipment is assigned to be deployed to satisfy an NSN requirement of the UTC.	min 5 mean 25 max 185			UDM, DeMS
		NSN Shortfall	If the identified equipment cannot satisfy the requirement, no substitutions are available, and supply cannot satisfy the requirement, then an NSN shortfall is identified.		2% Shortfall		JDM, DeMS
		Serial Number of Proposed Equip	Based on the prioritized list in the deployment plan, the serial number of a piece of equipment is proposed to satisfy an equipment requirement of the UTC.				JDM, DeMS
		Call-In	As equipment is selected and assigned to satisfy each NSN requirement, the DCC is notified of its status.				MQL
A22.5	Review Equipment's Availability	Non-Accepted Serial Number	After a review of the operational status of the proposed equipment during π the timeframe defined in the DSOE, the equipment was declared π incligible for deployment.	nin 30 nean 50 nax 195	5% Not Accepted	1	MQ
A22.6	Check On-Base Supply	Base Supplied Item	If base supply can satisfy an equipment shortfall identified by the unit, $\frac{1}{m}$ then they will provide the equipment to the unit.	nin 5 nean 20 nax 185		S L	JDM, Base upply, SBSS
		Equipment Shortfall	If base supply cannot satisfy an equipment shortfall identified by the unit, then a shortfall is relayed to the IDO/DCC.		0% Shortfall	S	IDM, Base upply, SBSS



A22: Assign Names to UTC Requirements

Node	Process Name	Output/Product	Description	Time to	Frequency of	Excentions/	Recurses
Number				Complete (in	Occurrence	Rules	
				minutes)		Variation	
						Factors	
A23.1	Define Work	Work Center Rqmt	The work centers are defined based on the scope of the requirements in	min 3			DO.
	Sites		terms of the quantity of passengers and cargo and any special	mean 5			Log Planner
			requirements.	max 10			6
A23.2	Identify	Process Flow	With the functionality of each work center defined, a processing flow is	min 3			UUI
	Deployment		established for the deployment process through the work centers, in	mean 5			I og Planner
	Sequence		accordance with those specified in the deployment plan.	max 10			In In I Som
A23.3	Define Facility	Floor Plan/ Sequence	Floor plans and layouts are designed for each work center in the allocated	min 1			IDO
	Rqmt		facility to accommodate the scope of the deployment requirements and	mean 2			l og Dianner
			the necessary flow.	max 5			
A23.4	Identify	Personnel & Training	Staffing and training requirements are established based on the type of	min 1			DOI
	Staffing Rqmt	Rqmt	work center, the scope and quantity of the requirements, and the available	mean 3			Log Planner
			resources within the base.	max 5			
A23.5	Identify Equip	Mat'l & Info Rqmt	Material and information requirements are defined and associated with	min I			DOI
	Rqmt		each work center and based on the quantity of the deployment	mean 3			Log Planner
			requirements.	max 5			0



Node	Process Name	Output/Product	Description	Time to	Frequency of	Exceptions/	Resource
Number	,			Complete (in	Occurrence	Rules	
				minutes)	-	Variation Factors	
A24.1	Obtain UTC	Cargo & Pax Data	Dimensional and specification information for each increment is	min 10			IDO.
	Detail		obtained, such as length, width, height, center of balance, hazardous	mean 15			Load Planner.
			material info, and shipment priority, along with the number of passengers.	max 25			LOGMOD,
							MANPER-B, CALM
A24.2	Prioritize/	Chalk Prioritization	The chalks are prioritized to meet the current schedule and mission	min 20		Second time,	IDO.
	Assign Chalks		requirements.	mean 30		t=5-20 min	Load Planner
				max 45			
A24.3	Sequence	Proposed Load Plan	A tentative load plan is developed that identifies all cargo and passengers	min 10		Second time,	IDO,
	Increments		on the chalk, where they are to be located on the chalk, and the order in	mean 60		t=10-20 min	Load Planner
		-	which they should be loaded on the chalk.	max 360			
		Inefficient Load Plan	When sequencing the processing of standard UTCs it may be identified		40%-50%		IDO.
			that it does not make full utilization of the available cabin load.		Necd		Load Planner
					Recomputed		
A24.4	Validate	Recommended Airlift	If the schedule did not identify a specific airflow, then an airlift that	min 5			DO.
	Movement Flow		would be suitable for deployment is identified.	mean 10 max 20			Load Planner
,		Recommended	During the validation of the schedule and transportation requirements,		0.5% Need to		IDO.
		Transportation/Schedule	changes may be identified to the preplanned manifests, cancellations,		change Airlift		Load Planner
		Changes	requests for additional transportation, and requests to change an aircraft		25% Need to		
			configuration or schedule.		Recommend		
	***				airlift because		
					none provided		



Node	Process Name	Output/Product	Description	Time to	Frequency of	Exceptions/	Resource
Number				Complete (in	Occurrence	Rules	
				minutes)		Variation	
						Factors	
A25.1	Schedule	Site Set-Up Time	The definition and location of the required work centers is reviewed and a	min 5			IDO.
	Deployment		time duration is established for each work center set-up.	mean 7			Log Planner.
	Site Set Up			max 10	÷		CDF PDF
A25.2	Compute UTC	Start & Completion	The TPFDD is referenced to identify the UTCs being deployed and their	min 10			IDO
	Deployment	Times	standard preparation times for the responsible unit are used to establish a	mean 20			Log Planner.
	Duration		start and stop time for each unit.	max 30			UDM
A25.3	Identify Key	Process Measurement	The proposed load plan is reviewed to identify the key deployment events	min 5			IDO
	Processing	Points	to identify points to measure the progress and status of the deployment	mean 10			Log Planner
	Events		effort.	max 20)
A25.4	Compute Chalk	Chalk Schedules	Knowing the preparation time for each UTC, the UTC-to-chalk	min 20			IDO.
	Tirrelines	ĸ	assignments, and the movement flow for each chalk, the schedules for	mean 30			Log Planner
			each chalk are developed.	max 40-			D



A25: Compute the Deploying Schedule

Node Number	Process Name	Output Product	Description	Time to Complete (in minutes)	Frequency of Occurrence	Exceptions/ Rules Variation Factors	Resource
A25.5	Coordinate Chélks	DSOE	The preparation time for each chalk and work center is integrated into a complete schedule. This schedule may be modified as the deployment progresses.	min 20 mean 30 max 40			IDO, Log Planner, RAMPCO, Scheduling Svstems
A3.1	Select Augmentee	Augmentee Call-In	Specific augmentees are selected based on their status, training requirements, and availability and are sent notices to report to specific locations on specific dates and times.	min 20 mean 30 max 45			Work Center Commanders, UDM
A3.2	Prepare Augmentee Status	Assigned Augmentee	The accepted augmentees are assigned their duties and their records are updated to reflect the training and experience gained during the deployment effort.	min 5 mean 10 max 15		Delay for Augmentee Arrival = 60 min	Base Personnel, Work Center NCOIC, READY
A3.3	Set Up The Work Center	In-Place Equip	The work center is physically set up and all the equipment is placed in the proper locations.	min 30 mean 90 max 240			Base Personnel, Augmentees
A3.4	Access The Work Center Info	Work Centers	The work centers are considered operational when they are completely staffed and all the required resources are readily available.	min 50 mean 60 max 75			Base Personnel, Augmentees
		Work Center Completed	A work center is considered completed when it is fully equipped, has the supporting supplies, and is ready to do its part of the deployment process.				Base Personnel, Augmentees
A3.5	Report To DCC	Work Center Status Call- In	The DCC is notified when the work center is operational.	min 1 mean 2 max 5			Work Center NCOIC/OIC



A3: Set Up Deployment Machine

Node	Process Name	Output/Product	Description	Time to	Frequency of	Exceptions/	Resource
Number				Complete (in minutes)	Occurrence	Rules Variation Factors	
A4.1	Estimate Transportation Load	Initial Movement Plan	A plan is developed which estimates the type of conveyances and drivers in that will be needed during the deployment time frame.	min 15 mean 20 max 30			Transportation TCC
		Anticipated Deficiency	The anticipated movement requirements are compared with the conveyances available on base and any inability to move cargo and personnel during the deployment is identified.		5% Identify Deficiency		Transportation TCC
		Allocated On-Base Vehicles/Drivers	Conveyances and drivers are assigned the responsibility to move cargo and personnel within the base as part of the deployment effort.				Transportation TCC
A4.2	Arrange Contract Support	Contracted Conveyances	Conveyances are brought onto the deploying base to support the t deployment operations.	min 30 mean 60 max 240		Delay for arrival of transports = 1-	OMT
		Contracting Agreement	An official arrangement is established between the deploying base and external conveyance capabilities to support the deployment operations.			24 IIOUI 2	DMD
A4.3	Coordinate Transport Rqmt	Status Update	The DCC is notified when transportation has been initiated based on a r request from a unit.	min 2 mean 3 max 5			Transportation
		Transferred Transportation Rqmt	The DCC transportation focal point notifies the vehicle controller regarding a movement request.				Transportation, DCC Focal Point
A4.4	Assign Corveyance	Assigned On-Base Transportation	The transportation within the base is assigned to the selected driver in n terms of what is to be transported, the source and destination of the move, n and the designated start and completion times for the transport.	min 1 mean 2 max 4	95% vehicles dispatched according to schedule 5% of call-ins generate reasignments		TCC, Transportation
		Actual Deficiency	A requirement for on-base transportation cannot be satisfied.		0.5% Deficiency		TCC, Transportation
		Assigned Commercial Transport	The transportation is contracted to ensure the necessary transportation is available when needed to support the deployment process.				rCC, Fransportation





Node	Process Name	Output/Product	Description	Time to	Frequency of	Excentions/	Resource
Number	-			Complete (in minutes)	Occurrence	Rules Variation	
A5.1	Prepare Personnel	Deploy-Ready Personnel	Personnel are considered ready for deployment when they have completed all personnel processing and are waiting to board the conveyance to leave the base	See Decomposition		ractors	UDM, PDF, Trans
		Personnel Status Call-in	The DCC is notified when the personnel processing have completed specific milestones established in the DSOF.				UDM,
		Personnel Transporting Rqmt	A request is sent to transportation to move personnel from one location to another.				PDF, trans UDM, PDF, Trans
		Personnel Bags	Bags that contain items of organizational clothing and equipment that are not necessary for daily duties and permanent issue is not warranted are separated from the passengers at the PDF				UDM, PDF, Trans
A5.2	Prepare Cargo	Transport Ready Cargo & Info	A cargo increment is placed appropriately in the chalk and all necessary information must be attached to the increment.	See Decomposition			UDM, CDF Trans
		Cargo Transporting Rqmt	A request is sent to transportation to move the cargo from the unit to the CDF.				UDM, CDF Trans
		Cargo Ready Status Call- In	The DCC is notified that the cargo is ready to be transported.				UDM, CDF Trans
		Final Load Plan	The proposed load plan is adjusted to produce the final load plan, which also depicts the cargo that is already on the conveyance upon arrival at the deploying site.				UDM, CDF, Trans
A5.3	Prepare for Transport	Deployed Resources & Manifest (Personnel & Cargo)	All deploying personnel and cargo are aboard the conveyance and ready to leave the deploying site.	See Decomposition			RAMPCO, Load Master
		Deptoying Call-In	The DCC is notified when all cargo and passengers are aboard the conveyance.				RAMPCO, Load Master



A5: Deploy Resources

									T	1	1	1	1	1
Resource	MQU	MQU	UDM	Trans	Trans	Trans	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Exceptions/ Rules Variation Factors		Delay for transport arrival = 10-30 min												
Frequency of Occurrence											0.5% Ineligible	5		
Time to Complete (in minutes)	min 30 mean 60 max 180			To PDF APT min 15 10 mean 10 15 mear 20			Control Obtain min 5 -10 mean 15 15 max 20 20		See Decomposition			min 20 mean 45 max 120		
Description	The personnel are all assembled at the unit, accounted for, and are ready to be transported to the PDF.	A request is sent to transportation to move the passengers from the unit to the PDF.	The DCC is notified when the unit is ready to be transported to the PDF.	Personnel are considered ready for deployment when they have completed all personnel processing and are waiting to board the conveyance to leave the base.	Upon arrival at the PDF, the mobility bags are separated from the passengers and considered cargo for deployment.	The passenger along with their deployment readiness folder, containing all the necessary medical and personal information, is transported to the PDF.	Within the PDF, each person releases the mobility bags and then begins the personnel processing effort.	If during the processing effort a person is released from the deployment, the identification of that person is used by mobility bag control to retract that person's mobility bag from the cargo being prepared.	Personnel who have completed PDF processing and are ready to wait in the holding area.	If during the processing effort a person is released from the deployment, the identification of that person is sent to mobility bag control to retract that person's mobility bag.	During the processing effort a person may be identified for some reason as one who cannot be deployed to the reception site.	The personnel are ready for deployment and are ready to be transported to the chalk loading area.	A request is sent to transportation to move the passengers from the PDF holding area to the chalk.	The DCC is notified that deploying personnel are ready to be transported to the chalk loading area.
Output/Product	Unit Ready Personnel	Personnel Transporting Rqmt	Unit Ready Call-In	Deploy-Ready Personnel	Mobility Bag	Personnel & DRF	Personnel Bags	Ineligible Person's Mobility Bags	Processed Personnel	Ineligible Person ID	Ineligible Person	Deploy Ready Personnel	Personnel Transporting Rqmt	Unit Load Ready Call-In
Process Name	Prepare Unit Personnel			Transport Pertonnel			Cortrol Mobility Bags		Process Personnel			Holi For Transport		
Node Number	A51.1			A51.2			A51.3		A51.4			A51.5		



A51: Prepare Personnel

Node Number	Process Name	Output/Product	Description	Time to Complete (in minutes)	Frequency of Occurrence	Exceptions/ Rules Variation Factors	Resource
A514.1	Check Eligibility	Eligible Person	A person is declared eligible for deployment if their personnel readiness information, readiness folder deployment information, and any additional information they provide matches the deployment eligibility criteria from the base deployment plan.	min 0.5 mean 1 max 2			PDF
		Incligible Person	If the individual does not meet the eligibility deployment criteria, then the person is returned to the UDM who must find a replacement to satisfy the shortfall.		3% Ineligible, but most waived 0.5% people declared ineligible		PDF
		Travel Rqmt	A review of the transportation requirements and travel requirements in the LOI may result in a need for the individual to travel commercial conveyances.				PDF
		Eligible Person With Exceptions	When a person is declared eligible they may have a need for consultation or to update information for emergencies, legal, religious, financial, or travel.				PDF
A514.2	Issue Orders	Travel Authorization	The travel orders are generated based on any special travel requirements r of the individual and those specific for the deployment.	min 5 mean 10 max 15			PDF
A514.3	Check ID Card	Updated ID Card	During the check of the ID card for accuracy and condition it may be r updated or a new card may be issued.	Check Replace min 0.5 15 mean 0.75 30 max 1 60			PDF RAPIDS
A514.4	Upćate Medical	Updated Person & Records	The deployed individual may receive shots or medication required because of the reception site, by direction of an LOI, or because they are due, and their medical records are updated to depict an accurate representation of their medical status.	min 2 mean 10 max 30		15-20 min wait after shot	PDF, Medical
A514.5	Provide Consultation	Consulted Person	The individual may require processing through a number of optional work scenters, based on exceptions.	See	2% Require Exceptions (70% 1 exception) (20% 2 exceptions) (4% 3 exceptions) (3% 5 exceptions) (3% 5 exceptions)		PDF, Consulting Personnel
A514.6	Brief Site Situations	Informed Person	All deployed personnel who have all personal matters in order are briefed n from a standard briefing for the reception site including any special n conditions that may be included in the LOI.	min 10 nean 15 nax 20			PDF





Node	Process Name	Output/Product	Description	Time to	Frequency of	Evcontions/	Recurse
Number		1		Complete (in	Occurrence	Rules	
				minutes)		Variation	
						Factors	
A5145.1	Update	Next of Kin & Insurance	The emergency data work center is responsible for ensuring that each	min 2			PDF.
	Emergency	Beneficiary Info and	deploying individual has documented the net of kin and the insurance	mean 5			Emeroency
	Data	Delivery Info	beneficiary as desired on the DD Form 93.	max 7			Data Darconnal
A5145.2	Provide Legal	Will, Power of Attorney,	The legal work center provides the opportunity for each denloving	min 5			Motor: Dublic
	Assistance	& Delivery Directions	individual to complete a will and power of attorney along with	mean 10			facel Bencened
			instructions for where those documents are to be maintained.	max 30			LEGAL F CISUINC
A5145.3	Provide	Religious Materials &	Each individual consults the chaplain to build upon their religious heliefs	min 2			Chantain
	Religious	Support	and discuss the situation they are facing, receive support materials, and	mean 5			Citapian
	Support		gain specific information related to religious and social customs of the	max 10			
			reception site.				
A5145.4	Provide	Financial Adjustments	The financial work center provides the opportunity for the deploying	min 5			PDF
	Financial		individual to establish or make adjustments to the person's financial set	mean 10			Financial
	Support		up and to receive any prepayments required for deployment.	max 30			Personnel
A5145.5	Provide Travel	Airline Tickets/	The necessary orders and travel documents are provided to either the	min 2			PDF
	Support	Directions	individual or the person assigned as the troop commander.	mean 5			Travel Agent
				max 20			3

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A5144: Provide Consultation

Node	Process Name	Output/Product	Description	Time to	Fragmentar of	Evantions/	Decourace
Number				Complete (in minutes)	Occurrence	Latepuons Rules & Variation	vesuurce
						Factors	
A52.1	Prepare Cargo	Prepared Cargo	The unit prepares the cargo, builds the increment, and attaches a tag	See			Unit, UDM
	Increment	Increment	containing the increment number, contents, weight, measurement	Decomposition			
			university with of parative, and instal upus scilsilitye material				
		Cargo Transporting Rqmt	The DCC is notified by the unit that the cargo is properly built, secured				UDM
			and documented and ready to be transported to the CDF.				
A52.2	Transport	Unit Delivered Increment	Based on the schedule and chalk assignment in the DSOE, a cargo	min 20		Wait 10-60 min	Transnortation
	Cargo	With ID	increment is delivered to the in-check area.	mean 30		for transport	
				max 40		undamn m	
A52.3	In-Check Cargo	In-Check Accepted	When the cargo has passed all inspections or fuel levels, no fluid leaks.	See			CDF. Incheck
		Cargo Increment	proper increment building, and proper hazardous/sensitive material	Decomposition			Personnel
			markings it is ready to be loaded onto the assigned conveyance.				
		Cargo Ready Status Call-	The DCC is notified when all the increments for a chalk have been				CDF Incheck
		ln.	received.				Personnel
		Cargo Transporting Rqmt	Once the cargo has completed all inspections, transportation is notified to				ODF Incheck
	,		come and move the cargo.		-		Personnel
		Unaccepted Cargo	When a cargo increment does not pass all the inspections, it is deemed		10%		CDF.
		Increment	unsafe to be loaded on the conveyance.		Unaccepted &		Incheck
					must go back		Personnel
A52.4	Accept Into	Transnort Ready Caroo	All cargo has nassed all insmentions is assembled in the monthaline as		11111 01		
	Maishaled Area	& Info	and is ready to be loaded on the assigned conveyance.	Decomposition	<u> </u>		Marshaler
		Cargo Ready Status Call-	The DCC is notified that the cargo is assembled in the marshaling yard				Marshaler
		u	and is ready to be loaded on the assigned conveyance.				
		Cargo Transporting Rqmt	A request is sent to RAMPCO to move the cargo from the marshaling			-	Marshaler
A52.5	Commite Load	Final I nad Plan	The monoced load alan is adjusted to and not the final load alan 143.1				
	[avoid		also includes the same that is autusted to produce the tilital total plan, writen in			25-33% of 1	Load Planner
	rayun		also includes the cargo that is already on the conveyance upon arrival at 1 n the deploying site	nean 15		conveyances	
				12X 20		lave	
						unexpected	<u></u>





Complete (in minutes)	Frequency of Occurrence	Exceptions/ Rules Variation	Resource
See		Factors	UDM, Unit
Decombosition			UDM, Unit
min 5			tiDM tinit
mean 10 may 15			
min 45 mean 90			UDM, Unit
max 120 See Decomposition	•		UDM, Unit
			UDM, Unit
min 5 mean 10 max 15			UDM, Unit
			UDM, Unit
nin 1 nean 2			UDM, Unit
10			
The increment properties, such as size, weight, and center of balance, are out on the placard. The DCC is notified the increment is properly packaged and is ready to be r ansported from the unit to the in-check.	The increment properties, such as size, weight, and center of balance, are but on the placard. The DCC is notified the increment is properly packaged and is ready to be min 1 ansported from the unit to the in-check.	The increment properties, such as size, weight, and center of balance, are out on the placard. The DCC is notified the increment is properly packaged and is ready to be min 1 ansported from the unit to the in-check.	The increment properties, such as size, weight, and center of balance, are int on the placard. The DCC is notified the increment is properly packaged and is ready to be min 1 ansported from the unit to the in-check.
	min 5 mean 10 max 15 min 45 min 45 mean 90 See Decomposition min 5 min 1 max 15 mean 2 mean 2 mean 2	min 5 mean 10 max 15 min 45 min 45 max 120 See Decomposition Decomposition min 5 mean 10 max 15 mean 2 nean 2 mean 2 mean 10 max 15 mean 10 mean 10 me	min 5 mean 10 max 15 min 45 min 45 mean 90 max 120 See Decomposition Decomposition min 5 mean 10 max 15 mean 2 mean 2 mean 2 mean 2 mean 2 mean 10 mean 10 mea

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A521: Prepare Cargo Increment

Node	Process Name	Output/Product	Description	Time to	Frequency of	Exceptions/	Resource
Number				Complete (in	Occurrence	Rules	
				minutes)		Variation	
111054	Drasora for	Itam Dechanad Du Vinit				<i>Factors</i>	
1.11204	Lichale IOL	Item Packaged By Unit	I ne item is properly packaged according to established guidelines for	min 10			UDM, Unit
	Iransport		issues such as placement within containers, proper fluid levels, correct	mean 15			
			markings, etc.	max 30			
A5211.2	Weigh Item	Item Weighed by Unit	The item has been properly prepared and weighed by the unit.	min 10			UDM, Unit
				mean 15			×
				max 20			
		Item Weight From Unit	The packaged item is placed on a scale to document its weight.				UDM Unit
A5211.3	Determine Item	Item Measured by Unit	The item has been properly prepared, weighed, and measured by the unit.	min 3			UDM, Unit
	Size			mean 5			
				max 7	1		
		Item Measurement From	Once the item is weighed it is measured, which is documented.				UDM, Unit
		Unit					
A5211.4	Document	Shipment Ready Items	The item has been packaged and weighed and measured and all the	min 5			UDM, Unit
	Increment Info		documentation is updated.	mean 7			5
				max 10			



A5211: Prepare Item

Node Number	Process Name	Output/Product	Description	Time to Complete (in minutes)	Frequency of Occurrence	Exceptions/ Rules Variation Factors	Resource
A5214.1	Estimate Weight	Increment With Weight Info	The weight of the increment is estimated and documented.	min 10 mean 15 max 20			UDM, Unit
A5214.2	Determine Incrament Size	Non-Rolling Stock Increments	Non-Rolling stock increments that have been weighed and measured.	min 3 mean 5 max 7			UDM, Unit
		Rolling Stock Increments Rejected Increment	Rolling stock increments that have been weighed and measured. If the increment size does not satisfy the conveyance restrictions, the increment must be repacked.				UDM, Unit UDM, Unit
A5214.3	Compute Carrying Position	Rolling Stock with COB Info	Rolling Stock with a computed center of balance.	min 10 mean 15 max 20			UDM, Unit





Node Number	Process Name	OutputProduct	Description	Time to Complete (in minutes)	Frequency of Occurrence	Exceptions/ Rules Variation Factors	Resource
A523.1	Inspect Increment	Accepted Cargo Increment	The cargo is considered acceptable after an evaluation passed the physical condition, placement of hazardous material and hazardous documentation.	See Decomposition			CDF, In-check Personnel
		Unaccepted Cargo Increment	The cargo is considered unacceptable if its physical condition is a mess, the hazmat material is not correct, or the hazmat certification document is incorrect.				CDF, In-check Personnel
		Frustrated Cargo Status	When problems are identified that cannot readily be fixed, the UDM and DCC are notified.				CDF, In-check Personnel
A523.2	Determine Increment Parameters	Measured Increment	The increment is measured to obtain the parameters such as weight, height, width, and center of balance.	See Decomposition			CDF, In-check Personnel
		Increment Parameters	The listing of parameters for a specific increment such as weight, height, width, and center of balance.				CDF, In-check Personnel
A523.3	Compare Actuals to Limiting factors	Completed Cargo Increment	If the cargo parameters fall within the conveyance load limitations, the increment is accepted.	min 2 mean 5 max 10			CDF, In-check Personnel
		Unaccepted Cargo Increment	The increment parameters are compared to the conveyance load limitations, and the increment is unacceptable if they fall outside the limitations.				CDF, In-check Personnel
		Frustrated Cargo Status	When an increment is unaccepted, the UDM and DCC are notified of the problem.				CDF, In-check Personnel
A523.4	Attach Increment Info	Completed Cargo Increment	All the cargo documentation, including the placard, is updated with the information collected during the in-check.	min 2 mean 5 max 10			CDF, In-check Personnel
A523.5	Relay Increment Status	Cargo Transporting Rqmt	The DCC is notified when all the increments of a chalk are ready to be transported from the in-check to the marshaling yard.	min 1 mean 2 max 5			CDF, In-check Personnel
		Cargo Ready Status Call- In	The DCC is notified when a chalk is completed through the in-check, or when a cargo is frustrated.				CDF, In-check Personnel





	Process Name	Output/ Product	Description	Time to	Fromency of	Evcontions/	Recursed
				Complete (in	Occurrence	Rules	VICEOR CC
				minutes)	v	Variation Factors	
	Verify Chalk Assignment	Assigned Increment	The cargo increment has been matched to a specific chalk.	min 1 mean 2 max 5			CDF, In-check Personnel
		Unaccepted Cargo Increment	If the cargo does not identify the chalk it is to be deployed on and it cannot be linked with an assigned chalk, then it is considered unacceptable.				CDF, In-check Personnel
		Frustrated Cargo Status	When a cargo cannot be matched to a chalk, the UDM and DCC are notified that it is considered frustrated.				CDF, In-check
		Certification Docs	If the cargo contains hazardous material, documentation must accompany the increment to show it is certified and the designated aircraft has been approved to transport the material.				CDF, In-check Personnel
N	Verify HazMat Placement	HazMat Approved Increment	The hazardous material on the increment is properly packaged and located and is considered acceptable for transport on the assigned conveyance.	min 1 mean 2 max 5			CDF, In-check Personnel
		Unaccepted Cargo Increment	The cargo is considered unacceptable if the hazardous material is not packaged properly or in the proper location on the increment.				CDF, In-check Personnel
		Frustrated Cargo Status	When the hazardous material is not properly packaged or placed in the proper location on the increment, the cargo is considered frustrated and the UDM and DCC are notified.				CDF, In-check Personnel
m	Visually Inspect	Package Approved Increment	The increment is considered approved if it was built properly.	min 1 mean 2 max 5			CDF, In-check Personnel
		Unaccepted Cargo Increment	The cargo is considered unacceptable if it is not properly built and cannot be quickly fixed at the in-check.				CDF, In-check Personnel
		Frustrated Cargo Status	When problems are identified with the increment buildup that cannot readily be fixed, the UDM and DCC are notified that the increment is considered frustrated.				CDF, In-check Personnel
4	Verify HazMat Certification Docs	Accepted Increment	The cargo is considered acceptable after an evaluation of the physical condition and pallet buildup, hazardous material packaging and placement, and the hazardous documentation identify no problems.	min 1 mean 2 max 5			CDF, In-check Personnel
		Unaccepted Cargo Increment	The cargo is considered unacceptable if the hazmat certification document is incorrect or has been signed by an unauthorized individual.				CDF, In-check Personnel
		Frustrated Cargo Status	When the hazardous material certification documentation is unacceptable, the UDM and DCC are notified that the cargo increment is considered frustrated.				CDF, In-check Personnel



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Node	Process Name	Output/Product	Description	Time to	Frequency of	Exceptions/	Resource
Number				Complete (in	Occurrence	Rules	
-				minutes)		Variation	
						Factors	
A5232.1	Determine	Increment Weight	The cargo increment is weighed to identify the number of pounds it	min 1			CDF, In-check
	Weight		contains.	mean 2			Personnel
				max 5			
A5232.2	Determine	Increment LWH	The cargo increment is measured to identify it length, width, and height.	min 1			CDF, In-check
	Diffensions		-	mean 2			Personnel
				max 5			
A5232.3	Determine	Increment COB	The cargo increment is measured for its center of balance point where it	min I			CDF, In-check
	Center of		can be raised and it will balance so as to prevent a loading danger.	mean 2			Personnel
	Balance			max 5			
		Measured Increment	The increment parameters for weight, length, height, width, and center of				CDF, In-check
			balance.				Personnel



A5232: Determine Increment Properties

Node Number	Process Name	Output/Product	Description	Time to	Frequency of	Exceptions/	Resource
				Complete (In	Uccurrence	Kules	
				(63)1111		Factors	×
A524.2	Inspect Cargo	Marshal Accepted	The cargo increment has passed a visual inspection and is ready to be	min 3			Marshaler
	_	Increment	placed on the appropriate conveyance.	mean 5			
				max 10			
		Rejected Increment	A visual inspection of the cargo increment identifies a problem with the				Marshaler
			increment that will prevent it from being loaded on the aircraft for safety				
			reasons.				
A524.4	Annotate Load	Chalk Status	Each increment identified in the load plan is checked off as it is inspected	min 3			Marshaler
	Plan		to show the status of all cargo for the conveyance.	mean 5			
				max 10			
A524.1	Place Cargo	Transport Ready Cargo	All cargo has passed all inspections, is assembled in the marshaling area	min 5			Marshaler
	into Chalk or	& Info	and is ready to be loaded on the assigned conveyance.	mean 10			
	HazMat Area			max 15			
A524.3	Report Status	Cargo Transporting	A request is sent to RAMPCO to move the cargo from the marshaling	min I			Marshaler
		Rqmt	yard to the assigned conveyance.	mean 2			
				max 10			
		Cargo Ready Status Call-	The DCC is notified that the cargo is assembled in the marshaling yard				Marshaler
		u	and is ready to be loaded on the assigned conveyance.				



A524: Accept in Marshaling Area
Resource		I oad Master			I nad Macter	RAMPCO.		Load Master.	RAMPCO	Load Master.	RAMPCO	Load Master.	RAMPCO		Load Master,	KAIMIPLU	KAMPLU,	Load Planning	CMOS	CALM	COMPES	RAMPCO
Exceptions/ Rules	Variation Factors																					
Frequency of Occurrence											,											
Time to Complete (in	minutes)	min 5	mean 7	max 10	min 2	mean 5	max 10					min 1	mean 2	max 3		min 1	1 IIIII I	mean 3	c xam			
Description		The Load Master reviews the final load plan, which specifies the	positioning of cargo on the conveyance, along with information on	hazardous cargo, and makes adjustments, as he deems necessary.	When all cargo is loaded on the conveyance, the conveyance is ready for	the passengers to board.		As each cargo increment moves onto the conveyance, the Load Master	confirms the move by designating it on the final load plan.	The groupings of cargo that have been placed on the transporting	conveyance.	All deploying personnel and cargo are aboard the conveyance and ready	to leave the deploying site.		As each person enters the conveyance, the Load Master confirms his or her names assimt the list provided by the PDF.	The manifest is finalized identifying all passengers and cares about the	CONVEVENDE					The DCC is notified when all cargo and passengers are aboard the conveyance.
Output/Product		Load Master Approved	Load Plan		Conveyance With Cargo			Annotated Load Plan		Deployed Increments		Deployed Personnel			Pax Loading Records	Manifest						Deploying Call-in
Process Name		Review Load	Plan		Position &	Record	Increments			_		Position &	Record	I CINUMICI		Prepare &	Present	Documents				
Node Number		A53.1			A53.2							A53.3				A53.4						





APPENDIX E

STRENGTHS, WEAKNESSES, AND DPIs

E.1 INTRODUCTION

DPIs for the wing-level deployment process were developed through an in-depth understanding and analysis of the deployment process from a user perspective. Through this perspective insights about the strengths and weaknesses of the process were identified and integrated with user comments and suggestions about the process. By developing ways of building on the process strengths and correcting the weaknesses, the individual DPIs were developed and categorized into groupings of information systems, process, training, policy, and personnel attitude. The remainder of Appendix E presents the DPIs by category. Within each category is a listing of strengths and weaknesses. Within each grouping, a listing and discussion of the strengths and weaknesses is the presentation of the DPIs within the category.

E.1.1 Information Systems

Information represents a critical aspect of the deployment process. Through the streamlining of the data within the deployment process and the improved use of information systems for handling, processing, integrating, and interfacing the information with the user, significant improvement benefits will be realized. While only one DPI addresses all aspects of the deployment process, the implementation of this DPI is not meant to be as a single, centralized information systems effectively integrated together. Some of the required information system modules already exist or are being developed, but possibly requiring adjustments to satisfy the full requirements of this DPI.

Strengths

- Relatively consistent information flow among sites
- "Home Grown" information systems being developed
 - * Personnel empowered to act on information
 - * Agreement that standard systems not totally accepted
 - * Commonality among "home grown" information systems
 - Organizational boundaries being addressed through "home grown" system definition

<u>Weaknesses</u>

- Isolated Information Systems
 - Manual information transfer increases time and decreases accuracy
 - Personnel are more information handlers than information analysts and decision-makers
 - Required information is not always available to decisionmakers
 - * Minimal training, documentation, and support available
 - * Localized information systems being developed

Strengths

Relatively consistent information flow among sites

Regardless of the deploying base selected or the unit type selected, the types of information considered and processed, as part of the deployment remained relatively consistent. The technologies used to access, process, and store the information varied across the sites and units, but the basic information did not.

"Home Grown" information systems being developed

The majority of units were not fully supported by Air Force established information systems. Because of this, many units developed their own "home grown" information systems that supported their specific information handling requirements. While having non-standard, "home grown" systems in place is not the most effective approach for the overall deployment process, these systems provide real value to the unit and the LOG-AID analysis effort. The development of the "home grown" system demonstrated the individual unit's willingness to take control of the responsibilities and to develop those tools they felt necessary to effectively accomplish their operational and deployment activities. In taking their actions, a united statement was made that current standard systems are not providing the support needed to get the job done. As the various "home grown" systems were compared across units, the commonality among those systems became very apparent. While some were more elaborate, further developed, and more effectively designed, the basic concepts of the systems and the goals of the tools remained very consistent across the unit implementations. Finally, in developing the "home grown" information systems, the units, and especially individuals within the units, made important steps in understanding how their specific task responsibilities interface with interfacing organizations and individuals.

Weaknesses

Isolated Information System

While the "home grown" information systems provide strengths on which to build, they also present weaknesses that must be overcome in the design and development of an integrated information system. Through their "home grown" development, isolated or non-integrated systems required the manual transfer of information among the systems. This manual transfer may be in the form of a disk transfer or a manual reentry of the information. This increases performance time while potentially decreasing the accuracy of the information. Because of this limited interface capability, unit individuals spend a significant amount of their time handling information rather than analyzing the information and making processing decisions based on the information. The time and accuracy delays also provide the possibility that the necessary information will not be mailable to the decision-makers when needed.

In addition to information availability, "home grown" systems present significant problems in that minimal training and documentation usually exist to support the system.

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While the developer remains on site and is available to use and maintain the system, the effectiveness of the system continues. However, because of the military environment in which personnel get transferred, the effectiveness of these systems are reduced or possibly eliminated when the developer is transferred. Thus, while "home grown" or localized systems provide important benefits to the deployment process, they also present significant problems with respect to providing a deployment support capability that extents beyond the unit boundaries.

E.1.1.1 Information DPI

Implement highly integrated information systems across levels of command, across and within deployment and reception sites to include a task receipt-to-airlift-manifest information system.

(i.e., Apply an information processing system that links and transfers information throughout the Wing-level deployment process and provides decision suggestions to the deployment personnel

Optimizing the operational effectiveness of the deployment process with respect to information requires baseline rules that facilitate information access and handling as well as minimizing the information interpretation currently required by deployment personnel. Through the development and implementation of an integrated information system, the personnel supporting the deployment would spend much less time being information handlers and more time on their truly important task of decision-making. In accomplishing this change in focus, this DPI concept eliminates the manual information transfer among personnel and existing systems, and then generates and presents a suggested decision. The augmentee reviews the information and suggested decisions. When acceptable, the individual sends the information back into the information systems for continued use throughout the process.

Facilitating the development and implementation of the integrated information systems requires identification of the numerous modules that will eventually form the final systems. Some of these modules are identified and described in the following paragraphs.

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E.1.1.2 DSOE Module

The Deployment Schedule of Events (DSOE) module provides the capability to quickly generate a schedule for use in guiding the deployment process and in helping identify the n to for processing adjustments to meet the goals of the deployment.

E.1.1.3 DPViz Module

The DPViz module analyzes the process segments of planning, deployment, movement, reception/beddown, and employment. The DSOE module for the establishment of baseline segment time averages will initially support the deployment segments, which include preparation and loading. DPViz measures project completion times and suggests actions to help expedite out-of-bounds processes.

E.1.1.4 UTC-DT Module

The Unit Type Code-Design and Tailoring module provides planner with the capabilities to analyze equipment and manpower requirements for a specific operational scenario and recommend quantities needed to accomplish the mission. In iteration with Integrated Deployment System, UTC-DT generates force-tailoring recommendations at the individual equipment level based on specific mission requirements. This on-the-fly tailoring is critical to attaining the Agile Combat Support objective or reducing the deployment footprint.

E.1.1.5 Commander Selection Module

The Commander Selection Module evaluates information related to the personnel identified for a chalk and identifies the person meeting the necessary qualifications. Once identified, the tools verify the selection with the UDM and prepare the necessary materials.

E.1.1.6 Overlap Selection Module

The Overlap Selection Module assesses the TPFDD to determine which unit are being deployed to which locations and their deploying timeframes. From this information, the module generates a deployment schedule that denotes the overlap of units positioned at the same locations. This information is feed to UTC-DT as part of the information needed to optimize the sharing of resources among units, thus supporting the tailoring of UTCs.

E.1.1.7 Augmentee Selection Module

The Augmentee Selection Module helps determine the type and level of deployment activities needed to support a tasked deployment effort. From this information, the module identifies the type and number of augmentees required and uses this information to suggest to the UDM a selection of augmentee to support the deployment effort. Once approved by the UDM, the module notifies those augmentees of their assigned duties.

E.1.1.8 Load Plan Module

The Load Plan Module accepts information about the increments and personnel being deployed as a chalk for a particular type of transport. Using this information, the module develops a 3-D presentation of the load arrangement on the transport. Presentation of the suggested load plan to the Load Planner allows for necessary adjustments to ensure flight safety.

E.1.1.9 Status Collection Module

The Status Collection Module consists of a set of processing sensors located at predefined spots within the deployment process. As cargo and personnel are processed past these spots, necessary information system collected and transmitted to the DSOE for process status update and analysis.

E.1.2 Process

Process analysis focuses on the manual activity contained in the deployment process. The process analysis evaluated each activity in terms of the products produced, the value of those products, the resources used to produce those products, and the interrelationships among the activities. This analysis identified the processing value of each activity and the critical path for the process. The DPIs identified ways of streamlining the process by maximizing the benefits provided by each activity.

The strengths and weaknesses identified in this area are listed below, followed by a more detailed explanation.

Strengths

- Good operations and flight safety
- Significant consistency across sites
- UTC concept is effective

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Weaknesses

- Non-uniform tasking delivery
- Numerous load planning cycles due to inaccurate and incomplete information
- Minimal coordination between deploying units and TRANSCOM
- Deployment footprint not minimized to meet tailoring requirements of mission
- QA checks make up a significant portion of the deployment process

Strengths

Good operations and flight safety

Units spent significant time and effort planning and practicing for their operational missions as well as for the safety aspects related to their performance of their missions. Thus, from an operational perspective, units are ready mission operations.

Significant consistency across sites

During the data collection and analysis effort for the LOG-AID program, numerous sites were visited and personnel interviewed. Insights gained from this effort highlighted the fact that regardless of the location and the type of units, there existed significant consistency across these varied locations. This consistency was obvious in the types of information associated with the location and the general process by which they handled their deployments. The technologies and techniques used to handle and process the information and the manner in which the deployment process was implemented varied somewhat from location to location, but the underlying concepts and goals remained consistent.

UTC concept is effective

Through the discussion with personnel there existed a disagreement as to the effectiveness and value of the UTC concept. Some believed the UTC concept was useful while others felt the concept should be eliminated, the items selected for deployment using a bottom-up approach. Our analysis provide the conclusion that the concept of UTC is valid, but the content of the UTCs should probable be adjusted to better reflect the mission types and duration being anticipated for the future.

Weaknesses

Non-uniform tasking delivery

Deployment taskings are anticipated and received in many different ways. Units anticipate taskings using information received from CNN; through rumors and phone calls from personnel contacts; and through unofficial and official taskings. Units respond to these taskings in a leaning-forward manner to help ensure they met the timeline they will receive once the tasking is official. The current deployment process limits the unit's ability to perform their day-to-day operations while reacting to the official deployment tasking once it is received.

Numerous load-planning cycles due to inaccurate and incomplete information

The tasking, both unofficial and official, causes units to lean forward in preparing for deployment or performing the actual deployment. Even after the receipt of the official deployment tasking, changes to the tasking arrive on a fairly regular basis. In response to each unofficial, official, or change to the tasking, the load planning continues, but because of its relative slowness, has trouble getting completed so as to become an effective part of the deployment process decision-making. Rather, each cycle of load planning needs to be completed quickly enough to help control the deployment footprint and to help establish the transportation requirements.

Minimal coordination between deploying units and TRANSCOM

The deployment taskings for a mission must go to both the bases and units identified for deployment and to TRANSCOM to initiate their planning to provide the most effective transport. Because of the time requirements at the unit to identify the resources for deployment and to relay those requirements to TRANSCOM, TRANSCOM would not have sufficient reaction time to supply the necessary transport. Rather, TRANSCOM uses the standard UTC content definitions for the UTCs identified in the tasking as the basis for determining the type of transport allocated and the schedule for moving among deploying sites. This non-coordinated communications delay causes a conflict with respect to who is the driver for determining the transportation requirements.

Deployment footprint not minimized to meet tailoring requirements of mission

When tailoring occurs as part of the unit planning for deployment, the level of tailoring often focuses on fitting into the allocated transport. The focus of the tailoring should instead be aimed at effectively and efficiently satisfying the mission goals.

QA checks make up a significant portion of the deployment process

In looking at the processing for both personnel and cargo, there are only two situations where the basic states of those resources are changed. The first is with respect to the preparation of those resources for deployment at the unit level. The second is the loading of those resources into the transport for movement to the deployed site. The other deployment activities relative to those resources focus on ensuring the primary activities, especially the unit preparation, are completed correctly. For example, the pre-inchecks performed at many locations, the CDF and PDF processing, and the marshalling area check processing represent activities that should only change the status of those resources if the unit did not perform their duties accurately and completely. Often time the approach to addressing a deployment preparation problem is to insert additional inspections to spot and correct the problem after it occurred rather that identifying the cause of the problem and correcting the cause.

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E.1.2.1 Maximize Production and Minimize Inspection Activities

(i.e., Improve cargo/personnel preparation so that pre-incheck, in-check, marshaling check, and most PDF stations can be reduces or removed.)

Within the perspective of the LOG-AID program, the military capability consisting of both cargo and personnel required to satisfy a specified tasking are prepared and loaded onto a conveyance for deployment to a designated area. Within this process, the personnel and cargo should not change from the time of preparation until the loading is complete. Therefore, the personnel and cargo should be able move directly from the preparing unit to the conveyance.

However, within the current deployment process, there exist checkpoints within the process where reviews and inspections of the personnel and cargo occur to ensure that previous preparation activities were performed accurately. The number and type of these checkpoint activities vary somewhat from site to site, with the standard checkpoints being the Personnel Deployment Function (PDF), the Cargo Deployment Function (CDF), and the marshalling area check. Because their primary purpose involves verifying and possible correcting problems initiated during preparation, the intermediate checks represent duplications of activities that covering up processing problems within preparation.

The DPI removes all of these intermediate check and convenience points, leaving only those that truly benefit the deployment process. The one point providing continued value may be the chalk area that acknowledges the receipt of the deploying resources and reduces the loading time of the conveyance once it arrives.

E.1.2.2 Adjust Responsibilities and Improve Integration of Units, Manpower, and Personnel

(i.e., Improve the information exchange to provide the units with up-to-date, accurate information.)

Personnel and Manpower remain the maintainers of the Personnel Data Systems (PDS) database but the UDMs must have direct access to the information. In this way, the UDM interface to the PDS could make a recommended selection for the UDM based on eligibility and present to the UDM the full list of those available with a notation indicating the persons eligibility and the computer recommended person. From this list, the UDM could make his final selection without direct interaction with Manpower and Personnel. Once selected, those names would be held in a temporary file and adjusted as other problems arise during the deployment requiring replacement selections. At the completion of the deployment, the manifest is automatically matched to the Deployment Requirements Manning Document (DRMD) to confirm the final list, with the manifest being considered the most accurate document. This temporary file could then either be used directly to update the PDS database or given to Manpower and Personnel for them to update the PDS database.

Currently there is cyclic processing that occurs between Manpower, Personnel, and the unit. Within this process, Manpower and Personnel have two primary responsibilities. One, they are responsible for maintaining the personnel information database. Two, they are responsible for providing the personnel names possessing the necessary Air Force Specialty Code (AFSC) and skill, the personnel deployment eligibility status, and developing the travel orders for the deploying personnel.

The first problem is with the maintenance of the personnel database. At most sites the personnel database is not up to date even though the units have provided personnel change information. The lack of an accurate personnel database significantly reduces the usefulness of the information. Currently, many units have developed their own personnel databases which they keep up to date on a daily bases with very little effort once the

initial loading has been completed. Because of this, the units usually pay little attention to the personnel information generated by Manpower and Personnel.

The second problem is that the units have, or could have all the information needed to generate the travel orders. Personnel could generate the common information associated with a UTC deployment and the unit could automatically generate the deployment orders as a by-product of the name assignments. Within the PDF and the unit, a tool would be necessary to adjust the travel orders as personnel changes are made during processing.

E.1.2.3 Capitalize on Cargo and Personnel Processing Similarities

(i.e., Develop a single information system that documents both cargo and personnel information.)

While the personnel and cargo requirements are contained within almost every standard UTC, their tracking and processing remains independent throughout unit readiness, deployment, and employment activities. Supporting this process requires independent information systems, either manual or automated, separate personnel to track status and select resources for deployment, and separate actions to develop, maintain, and train to the two information processes.

However, few differences exist between the information requirements of personnel and cargo. Figure E-1 presents an example of the similarities between personnel and cargo data that allow for the consolidation of personnel and equipment data into a single database, thus capitalizing on their commonalties. For example, as represented in Figure E-1, both personnel and equipment possess unique identifiers in the form of a Social Security Number (SSN) for personnel and a serial number for equipment. Both personnel and equipment possess non-unique names, and both are assigned to originating or owning positions but may be located at a specific location. Personnel are categorized by their AFSC while equipment is categorized by a part category. One common information aspect of specific interest is the record listing. Personnel possess medical records to include the type of shots needed, when last administered, and when to be administered next. In much the same manner, equipment possesses maintenance records, to include the

type of maintenance needed, when last performed, and next performance time.

There does remain, however, some information not common between personnel and equipment, such personnel rank for which equipment has no corresponding information. While the differences between personnel and cargo still have to be addressed, understanding the common and different information requirements for personnel and equipment provides the bases developing one information system with the capability to handle both personnel and equipment. A common information structure and system reduces the information development and maintenance time for the systems, reduces the training time, reduces the number of personnel required, and possibly reduces reduce the actual processing time for maintaining records and preparing for a deployment.



Figure E-1. Personnel and Cargo Possess Common Information Requirements

E.1.2.4 Collect Process Status and Effectiveness Information using Passive Means

(i.e., Reduce the need for deployment personnel to manually report to the DCC, and to collect and analyze processing information for continuous process improvement.)

At predefined points during the deployment process, the deployment personnel are responsible for reporting to the DCC regarding the current status of the deployment process. For example, the CDF personnel call in when an increment successfully passes inspection and is ready for movement to the marshalling area. The marshalling area controller tracks the arriving increments for each chalk and notify the DCC when a chalk is complete within the marshalling area, thus waiting for loading into the transport. If during the processing, an increment does not meet the processing schedule, a call to the DCC triggers the actions necessary to determine the actual status of that increment along with the actions necessary to get the process back onto schedule.

These event call-in times are noted in the DSOE as "no later than" times, meaning that a status call to the DCC must be make by that time. However, for a number of reasons, personnel may forget to make the calls or may wait until the stated time to call even though their preparation work was completed much earlier. In either case, the inaccurate status information provided to the DCC impacts the effectiveness of the deployment operation. In addition, when the deployment workload is heavy, the time required to provide the status update to the DCC might actually delay the deployment processing.

The intent of this DPI is to provide the capabilities necessary to identify the completion of critical steps in the process and to report those to the monitoring operation, which is currently the DCC, immediately. This passive status collection provides accurate and timely status information, and removes the reporting responsibility from those whose attention should be focused on accomplishing the deployment actions rather than performing administrative activities.

In addition to supporting the actual deployment, the information collected also provides the basis for generating the post-deployment brief information, for evaluating the

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effectiveness of the deployment process in terms of a continuous process improvement analysis, and for providing support in the training of the deployment process.

E.1.2.5 Improve In-Transit Visibility

(i.e., Provide the capability to know the location of deploying resources at any point in time during the deployment and up to the beginning of employment.)

Currently the TCN is allocated to an increment number identified in the LOGDET. With this use of the TCN, any combining of pallets results in a discrepancy of what the transportation system believes is included in a TCN. In the future the TCN should be assigned to a pallet in the later stages of the process. With accurate information exchange they will know the actual cargo included in the TCN and not what the LOGDET stated should have been included in the TCN.

E.1.2.6 Control Tasking Receipts into the Base

(i.e., Have everyone work to the same set of mission requirements.)

Currently the taskings come from different places and often received in different places. This communication problem is a result of the loosening of the standards defined in the regulations. Sometimes they receive taskings from their MAJCOM, sometimes from other commands, and sometimes from other services. Sometimes the tasking comes into the base to the battlestaff, sometimes the IDO, sometimes Manpower and Personnel, and sometimes the unit commander or UDM. It is recommended that the standards be more stringent on the flow of orders and taskings down through the DoD infrastructure. It should be through one command to the Wing Commander, and not the units or the IDO. This would help to minimize all the effort spent in validating various directions.

E.1.2.7 Reduce the Number of Coverage Days Included for Initial Deployment

(i.e., Considering the goals of lean logistics, shorten the number of days considered during employment before sustainment begins.)

With reduced deployment turnaround and with the implementation of Lean Logistics, the current deployment requirement for 30 days of supplies should be reducible to something less, possibly 20 days, thus reducing the amount of materials to be transported in the near term. The actual time period would depend on a number of issues such as the resupply capabilities at the reception site location. But the major goal aims at minimizing the resources required for deployment during the initial phase of moving into a mission theater.

E.1.2.8 Better Define the Objective and Criteria for UTC Tailoring

(i.e., Establish a common understanding among units that UTC tailoring should be done to best satisfy the mission requirements.)

Through LOG-AID, the intent of UTC tailoring is to minimize the resources deployed to a reception site while retaining the capability to accomplish the designated mission. Currently, tailoring is viewed from two aspects that are sometimes conflicting. Current tailoring is often performed so as to fit the resources into the airlift provided for transport rather than to the mission requirements. Two, units vary in opinion as to whether or not tailoring should be done. This DPI aims at establishing the perspective that tailoring information system not only acceptable, it is needed to satisfy future mission goals.

E.1.3 Training

Training analysis viewed the deployment process from the perspective of those resources, unusually referred as augmentees, responsible for performing the deployment rather than the training of those resources being deployed. This analysis identify the type of training provided, the time required for the training, the effectiveness of the training, and the benefits of the training received by the individual augmentee. The training DPIs identicated ways of minimizing the impact training has on primary responsibilities of those working as augmentees. The impact relates mainly to the time required to obtain the training and the effectiveness of the training.

Strengths

Weaknesses

- Heavy focus on augmentee training
- Exercises are not representative of real-world deployments
- Difficulty tracking and keeping qualified augmentees
- Variations in interpretation

Strengths

Heavy focus on augmentee training

Majority, if not all, the bases visited viewed augmentee training as an important aspect of base operations. Training ranged from classroom lessons usually lasting a few days, to processing observation, to hands-on practicing, to the performance of actual deployments. While personnel sometimes objected to delaying their primary work responsibilities to accommodate the training, the augmentee work force accepted the training as a high priority requirement.

Weaknesses

Exercises are not representative of real-world deployments

Most exercise scenarios focused on the deployment of full or standard UTC capabilities. In contrast, many of the evolving real world deployment requirements focus on moving partial UTCs to better address the tasked missions objectives. When exercising to deploy full UTCs, the needs are reduced for the level of planning reduces, for tailoring, for coordination among units, and for the generation of non-standard increment. Real world deployment taskings dramatically change these training scenario assumptions. Thus, during a real world deployment, trained personnel must adjust their trained capabilities and assumptions to effectively address the requirements of the deployment tasking.

Difficulty tracking and keeping qualified augmentees

A conflict existed between the goals of deployment and the transfer requirement of the Air Force. For efficiency, deployment processing requires trained and experienced augmentees to support the deployment, with the augmented work force composed, to a very large extent, of military personnel. To train these augmentees and to have them available when needed requires significant financial resources. In contrast, the Air Force transfers personnel on a regular cycle of about two years, and with a policy of not documenting the augmentee skills as part of the personnel record. Thus, when an individual who is trained as an augmentee at one base moves to another base, those augmentee skills are lost unless the transferring individual volunteers to apply his experience at the new base location. Thus, for a deployment training perspective, each base represents an island of deployment skills, with no official way of moving and applying that skill at another base.

Variations in interpretation

While significant effort is placed in the training of augmentees, situations still exist in the deployment process where the process understanding gained through the training differs among individuals, resulting in conflicts and processing delays. For an example, a real world situation identified to have occurred at a number of deployment sites begins with a unit developing an increment in a manner they consider to be correct and accurate based on their pallet building knowledge gained through training. Upon arrival at the CDF, the increment was declared to be frustrated based on a problem with the placement of hazardous materials in the increment. The justification for frustrating the increment came from the understanding gained through training. After much debate and time delay, the increment was determined to be safe for transport as built by the unit. The point being that both unit and CDF personnel meant to be correct in performing their activities, but they simply gained a different interpretation of the correctness from the training.

DPIs

E.1.3.1 Apply Real-World Training Characteristics to Exercises

(i.e., Train to both fraged and full UTC requirements.)

While they usually practice in terms of satisfying a complete UTC, they are usually requested to supply bits and pieces of equipment and small number of personnel. This leads to the situation where the unit has to wait basically to the last minute to establish the packing and loading of the materials, and prevents them from "leaning forward" in the preparation for deployment and forces them closer to a "just-in-time" type of deployment concept.

E.1.3.2 Maximize Training Benefits

(i.e., Tracking of UDM and deployment support personnel training as they transfer among bases.)

Significant investment is placed in individuals during a base tour of duty with respect to training them to perform as augmentees during deployment operations. For a number of reasons, records of this training do not stay with the individuals as they transfer among bases. Thus, the base receiving the previously trained individual does not benefit from the individual's experience gained at the previous base and must again invest resources before using the person as an augmentee.

Tracking personnel with respect to their deployment training as they move from base to base and using those skills in some manner would help maximize the investment made in that individual. This would help reduce the training requirements for the current deployment process and would further reduce the training requirements if the deployment process were more unified across bases. Gaining this benefit must not be accomplished at the expense of the individual, specifically by placing them into the same augmentee position following each transfer. Rather, transferring personnel with skills gained as augmentees could be used, for example, in the training of inexperienced individuals, supporting the improvement analysis of the bases deployment process, or development of the individual deployment processing manuals.

E.1.3.3 Include Total Process Training

(i.e., Provide general, total process training in addition to the current focused training.)

Currently, augmentees primarily receive training focused on specific segments of the deployment process. During deployments, this focused training does not provide the insight needed to understand the impact a given situation can have on the overall success of the deployment process. As a result, individual augmentees may make slight adjustments to their part of the process, producing processing problems for individuals further down the processing chain. Through the implementation of total process training, the change-to-impact relationship does not prevent augmentees from making slight processing changes, but helps ensure their changes do not produce a negative impact on the performance effectiveness of the overall deployment process.

E.1.3.4 Incorporate Training and Efficiency Evaluation Capability into the LOG-AID System

(i.e., Embed training sessions into the tools used for deployment and evaluate augmentee efficiency from these sessions.)

Individuals primarily focused on for training are the load planner and the UDM. The intent would have two levels of training. One level would be to have training scenarios entered into the system and allowing personnel to practice. The other level would be to have testing scenarios entered into the system; the personnel perform the scenarios, with the results and possibly the grades presented back to the personnel. This training would help accomplish a uniform understanding, the lack of which currently causes some conflicts. Specifically, there are often differences of opinion among the various QA checkpoints at to whether or not an increment is acceptable. At times this difference of opinion concerns cargo acceptance, but the time required to clear up the difference may cause unacceptable delays.

E.1.4 Policy

Current policy was not a limiting factor for the analysis of the As-Is deployment process or the development of the LOG-AID 2010 CONOP. The policy analysis focuses on the impact of current policy on the process and how deployment personnel operate to most effectively function within the constraints of the current policies. New policies development will occur following the finalization of the LOG-AID 2010 CONOP so as to control the streamlined process rather than being developed first thus possibly constraining the development of the streamlined process.

Strengths

- Establish Base Deployment Plans

- Development of individual support manuals at bases
- Flexibility through Air Force Instructions (AFIs) has encouraged and accelerated effective standardization

Weaknesses

Multiple views on UTC tailoring

- Base deployment plan not used extensively
- Significant time and effort to develop and maintain deployment plans

Strengths

Establish Base Deployment Plans

Each base has the requirement to develop a Base Deployment Plan defining the operations of the base during a deployment effort. These plans provide a common focus to which base personnel can direct their efforts and help the build and maintain the total base team effort required to successfully accomplish a deployment.

Development of individual support manuals at bases

Some bases placed emphasis on the development of individual support manuals containing specific information related to the performance of individuals assigned responsibilities. While not specifically specified, these manuals contained such information as process step descriptions, form completion instructions, pictures of processing steps, and phone numbers for important points of contact. In addition to guiding the individual during the deployment processing, these manuals also because valuable transition training tools for personnel as new individuals took over the responsibilities for deployment. The importance of these manuals was obvious by the wear they showed.

Flexibility through Air Force Instructions (AFIs) has encouraged and accelerated effective standardization.

Many units viewed the Air Force Regulations (AFRs) as being too specific and restrictive, to the point where units felt they could not be effectively applied to their operations. The AFIs removed much of those restrictions, thus providing the units the requirements for what was to be produced but allowing the flexibility in how the units implemented the process to produce their product. While many units also disliked the AFIs because of their lack guidance, units took the opportunity to implement their deployment processes in ways they believed to be most effective. The result of this freedom to implement was that many units independently migrated to very similar process, regardless of their unit type. Thus, the freedom made available through the AFIs resulted in more commonality among unit processing than did the tighter direction provided by the AFRs. The commonality provided a solid starting point for developing the LOG-AID CONOP.

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Weaknesses

Multiple views on UTC tailoring

Units, and particularly UDMs, view the requirement for UTC tailoring for a deployment from different perspectives. To one extreme, the view is that the tasking identifies the deployment of a UTC and the UDM is responsible for providing all the elements contained in that UTC. To the other extreme, the view is that only the UDM possess the understanding and knowledge to truly understand what a unit needs to successfully accomplish the assigned mission. Thus, the unit makes the final decision for the resources deployed. The weakness inherent in this situation is not whether one view is wrong and one is right, but rather that the two views exist. There should exist a common understanding that tailoring should be considered for each deployment tasking regardless of whether or not tailoring actually occurs.

Base deployment plan not used extensively

Once developed, the base deployment plans are usually mandatory reading for personnel transferring into the base. Following the mandatory reading, the plans are referenced on occasion, but to a great extent any referencing made of the plan is minimal at most. Thus, while the plan is important to base operations, the level of reference made to the plan is minimal relative to the resources used to develop the plan.

Significant time and effort to develop and maintain deployment plans

In terms of their size and content, base deployment plans represent a significant investment in resources of personnel and time. While majority of the resources go into the actual writing of the document, resources are also invested in the review and approval cycle as well as in the maintenance cycle to ensure the accuracy of the plan.

DPIs

E.1.4.1 Provide the UDM Capability to Produce more Deployment-Ready Personnel and Cargo

(i.e., With the UDM being the key person with respect to streamlining the deployment process, it should be viewed as a specialty skill.)

UDMs are the key management positions within the base level deployment process. As key positions, they must have the skills necessary to accurately know when cargo and personnel are prepared for deployment so as to allow for the direct transfer from the unit to the transporting aircraft.

E.1.4.2 Develop Deployment Guides for each Deployment Position

(i.e., Document deployment position information such as detailed instructions, phone numbers or points of contacts, reference pictures, etc.)

These individual deployment guides would include detailed directions for how to perform a specific deployment position; directions for information to be received, generated, and transmitted; phone numbers for important points of contact; and pictures of various items such as pallets for use as future references. These guidebooks would provide two significant benefits. One, they would guide the individual when performing the deployment task. Two, they would provide an effective transition tool as augmentees transfer among augmentee positions or among bases.

E.1.4.3 Refine the AFIs as Necessary to Best Guide the Deployment Process

(i.e., The AFIs should be developed to document and control the agreed upon streamlined deployment process.)

The AFIs have been developed to allow significant site-specific flexibility from that provided in the previous Air Force Regulations (AFRs). This flexibility appears to have benefited the deployment process in that sites have adjusted their implementations to better fit their needs, thus encouraging the site to have pride and ownership in their specific implementation. It appears, however, that this freedom of implementation diversity implementation has demonstrated their similarities because independently the sites are developing many of same operational requirements. As the LOG-AID program develops the To-Be base level deployment process, the current AFIs should again be tightened to control the process, but probably not be tightened to the AFR level.

E.1.5 Personnel Attitude

Augmentees play a critical role in accomplishing the deployment process. However, base personnel are often reluctant to work as augmentees because of the limited value provided in terms of personal rewards. The personnel attitude DPI aims at finding ways of rewarding the augmentee so as to improve the availability of personnel as augmentees.

Strengths

Weaknesses

- Deployment problems realized, but corrective vehicles not readily available
- Experienced personnel take charge to ensure success
- Most personnel are not over-eager to be augmentees
- Personnel do not want augmentee training to remain in their personnel folder
- Commitment for exercises is different than from real-world situations

Strengths

Experienced personnel take charge to ensure success

Any one deployment effort becomes a challenging experience when unexpected situations happen and when all the good intentions of planning, training, and preparation fall short to some degree. The capabilities and ingenuity of experienced, take-charge individuals provide the leadership necessary to ensure the deployment

Weaknesses

Most personnel are not over-eager to be augmentees

Working in an augmentee position during deployment requires significant time for receiving the necessary training, and performing in various exercises and real-world deployments. Working as an augmentee does not, however, relieve the person from the responsibilities of their primary job, thus the workload builds up during the time the individual works as an augmentee. Also, working as an augmentee is not a position in which the individual receives a rating in terms of pay increases and promotions. Thus, working as an augmentee places a negative impact on the career of the individual even though the job is critical to the true objectives of the Air Force.

Personnel do not want augmentee training to remain in their personnel folder

The Air Force personnel file contains information related to the skills and performance of the individual, and used as the primary information source for awarding pay increases and promotions. It is in part through this information that individuals get assigned to jobs as they move within a base or transfer to another base. In contrast, placing the skills gained, as an augmentee in the personnel folder is not viewed as advantageous to the individual. This is for two reasons: (1) the skills are not a significant determinant for advancement, and (2) possessing an augmentee skill tends to place the individual into the same augmentee position as they transfer amon₁ ases. Rather, if the individual must perform as an augmentee, they at least want to gain a broader range of experience to expand their overall understanding and value to the Air Force.

Commitment for exercises is different than from real-world situations

The rewards placed on the performance of tasks impact the personnel attitude of those performing the tasks. In addition to providing training, deployment exercises provide the baseline by which Air Force bases and wings are rated with respect to their deployment readiness. As such, exercises receive significant visibility from base leadership to ensure everything goes smoothly, accurately, and efficiently in accordance with a predefined process. The purpose of real-world deployment changes from one of readiness rating to one of satisfying a tasking and getting the job done without the strong restriction of having to completely follow the defined deployment process. This difference in commitment, especially by the upper command, causes the deployment personnel to view the two situations as having difference levels of importance.

<u>DPIs</u>

E.1.5.1 Develop a Process to Encourage Augmentees to Participate in Deployments

(i.e., Develop a reward system that benefits those working as augmentees.)

Individuals working out of their normal job description generally perform deployments. With a limited number of exercises and actual deployments, practice is limited and not all individuals are highly trained or experienced in their deployment position. Therefore, it becomes necessary to have the individuals work in an environment that is comfortable and familiar as possible. This means selecting the appropriate personnel for the appropriate deployment positions. This might include removing a person from a position assigned at a previous base, to a position that the individual would prefer to work in. The proper atmosphere in the stressful deployment environment will encourage teamwork and hand work to accomplish the given task in a time critical situation.

E.1.5.2 Develop a Process to Encourage Augmentees to be Committed to Real-World Contingencies to the Same Level as Exercises

(i.e., Ensure the Base leadership monitors and measures the effectiveness of real world deployments that encourages augmentees to work to their true potential.)

Currently, deployment exercises receive significant attention by Base leadership because the base is evaluated and rated on the effectiveness of those exercises. On the other hand, real world deployments focus on getting the job done but are not used to evaluate deployment effectiveness. This difference in deployment goals affects the focus of the augmentees.

E.1.6 DPI Conclusion

The strengths, weaknesses, and DPIs presented in this section address the entire base/ wing-level deployment process. The DPIs have been prioritized based on user inputs and can be structured to allow for their time-phased implementation as needed by each site. In this manner, operational benefits can be received early on and incrementally as the DPIs are gradually implemented. The ultimate intent is that the DPIs can be implemented at all sites, with the level of technology used to accomplish the implementation varying due the site's ability to justify the cost. Through this approach, a more consistent deployment approach will exist across bases, but more importantly, the implementation of the process using technologies within a given base can be adjusted to meet the level of deployment requirements of each site.

APPENDIX F

LOG-AID TO-BE ACTIVITY MODEL NODE LIST DIAGRAMS AND TEXT DATA GLOSSARY MECHANISM GLOSSARY

LOG-AID AS-IS ACTIVITY MODEL

The LOG-AID As-Is activity model presented in this appendix is a hierarchical, functional representation of the activities performed within the wing-level deployment process. This representation includes the products generated by each activity, the inputs used to produce those outputs, the controls defining how the inputs are transformed into outputs, the mechanism performing the activities, and the product relationships among the activities. The model also includes a node list of all the activities in the model, a textual overview description of each diagram, and a glossary for the interrelationship arrows. Figure F-1 contains a quick reference to the IDEF₀ notation used to present the model.



Figure F-1. IDEF0 Notation Overview

LOG-AID TO-BE ACTIVITY MODEL NODE LIST

A-1 SCOPING THE CONTINGENCY DEPLOYMENT PROCESS

A-0 DEPLOY FOR CONTINGENCY

A0 DEPLOY FOR CONTINGENCY IN 2010 (Context)

A1 PLAN SITE OPERATIONS

A2 EXECUTE ACTIVATION PROCESS

A21 COMPUTE DEPLOYMENT ROMTS

A211 IDENTIFY UNIT OVERLAPS AT SITE

A2111 COMPARE DEPLOYING UNIT ON-SITE SCHEDULES TOGETHER

A2112 COMPARE ON-SITE UNIT SCHEDULES

A2113 IDENTIFY OVERLAPS FOR CONSIDERATION

A2114 PROMPT USER FOR VALIDATION

A212 LIST REQUESTED RESOURCES

A2121 ACCESS FULL UTC RESOURCE LIST

A2122 ADJUST FOR FRAGING

A2123 ADJUST PER LOI INSTRUCTIONS OR MAJCOM TAILORING

A2124 PRESENT FOR USER VERIFICATION

A2125 COMBINE ALL RESOURCE RQMTS

A213 PERFORM RECEPTION SITE SURVEY

A214 CORRELATE DEPLOYING RESOURCES

A2141 CORRELATE WITH RECEPTION SITE

A2142 COMPARE ITEMS AMONG BASE UTCs

A2143 COMPARE ITEMS ACROSS BASES

A2144 ASSIGN ITEM RESPONSIBILITY TO UNIT

A2145 VERIFY BY USER

A215 PERFORM UNIT TAILORING

A2151 DETERMINE STANDARD SUPPORT ROMT

A2152 ADJUST TO DEPLOYMENT DURATION

A2153 ADJUST TO ENVIRONMENTAL CONDITIONS

A2154 ADJUST TO HISTORICAL USE

A21541 CATEGORIZE THE DEPLOYMENT TYPE

A21542 ACCESS PREVIOUS DEPLOYMENTS

A21543 PRESENT LIST OF PREVIOUS DEPLOYMENTS

A21544 COMPARE DEPLOYING RESOURCES

A2155 VERIFY TAILORING

A2156 INTEGRATE ACROSS ASSIGNED UNITS

A22 TRANSLATE TO AIRLIFT

A221 COMPUTE QUANTITY

A222 IDENTIFY SPECIAL NEEDS

A223 COMPUTE AIRLIFT

A224 VERIFY AIRLIFT RQMTS

A23 DEFINE CHALKS

A231 IDENTIFY PARTIAL PALLETS

A232 BLEND ITEMS INTO INCREMENT

A233 IDENTIFY RESPONSIBLE UNIT

A234 COMPUTE LOAD PLAN

A235 ADJUST AND VERIFY

A24 EVALUATE PERSONNEL & EQUIP QUALIFICATIONS

A241 TRACK RESOURCE STATUS

A2411 RECEIVE RESOURCE STATUS INFO

A2412 UPDATE THE MAINTENANCE & STATUS RECORDS

A2413 IDENTIFY RESOURCES REQUIRING DEPLOYMENT PROCESSING

A2414 GENERATE UNIT STATUS REPORTS

A242 ASSIGN RESOURCES TO RQMTS

A2421 CHECK QUALIFICATIONS

A2422 CHECK AVAILABILITY

A2423 CHECK DEPLOYMENT HISTORY

A2424 COMPARE PERSONNEL RANKS

A2425 CHECK PREPARATION STATUS

A243 VERIFY/ ADJUST SELECTION

A244 IDENTIFY INCREMENTS REQUIRING IN-CHECK

A2441 CHECK FOR HAZMAT & SPECIAL HANDLING

A2442 CHECK FOR UNIT CARGO MIX

A2443 CHECK UNIT PREPARATION QUALIFICATIONS

A2444 IDENTIFY FOR INCHECK

A245 IDENTIFY PERSONNEL REQUIRING PDF PROCESSING

A2451 CHECK TAG STATUS

A2452 CHECK SHOT STATUS

A2453 CHECK FINANCE STATUS

A2454 CHECK LEGAL STATUS

A2455 CHECK MINISTRY SUPPORT NEED

A25 DEVELOP DEPLOYMENT SCHEDULE

A251 DEVELOP GENERIC CHALK GENERATION TIMES

A2511 INCLUDE PREP TIME

A2512 COMPUTE PERSONNEL PROCESSING TIME

A2513 COMPUTE CARGO PROCESSING TIME

A2514 INCLUDE MOVEMENT TIME

A2515 INCLUDE LOADING TIME

A252 COORDINATE PRODUCTION AMONG CHALKS

A253 TRANSLATE TO ACTUAL TIMES

A254 MAINTAIN DEPLOYMENT STATUS

A255 VERIFY THE DSOE

A3 SET UP DEPLOYMENT MACHINE

A31 SELECT AUGMENTEE

A311 DETERMINE SUPPORT RQMTS

A312 ASSIGN AUGMENTEE NAMES

A313 VERIFY

A314 NOTIFY AUGMENTEE

A32 PREPARE AUGMENTEE

A33 SET UP THE WORK CENTER

A34 ACCESS THE WORK CENTER MATERIALS

A35 CAPTURE STATUS

A4 ARRANGE FOR TRANSPORTATION

A41 ESTIMATE TRANSPORT LOAD

A42 MAP REQUIREMENTS TO AVAILABILITY

A43 ARRANGE CONTRACT SUPPORT

A44 VERIFY LOCAL TRANSPORT SCHEDULE

A45 COORDINATE TRANSPORT ROMT

A46 VERIFY LOCAL TRANSPORT ASSIGNMENT

A5 DEPLOY RESOURCES

A51 PREPARE RESOURCES

A511 NOTIFY RESOURCES

A512 UPDATE RESOURCE STATUS

A513 BUILD INCREMENTS

A5131 POSITION ELEMENTS

A51311 DETERMINE PROBLEM FOR REJECTION

A51312 REPLACE/ ADJUST ITEMS

A51313 PLACE CONSTRAINTS

A5132 DETERMINE INCREMENT PROPERTIES
A51321 DETERMINE ITEM SIZE

A51322 PLACE ON SCALE

A51323 COMPUTE CARRYING POSITION

A51324 COMPARE ACTUALS TO LIMITING FACTORS

A5133 DOCUMENT INCREMENT CONTENT

A51331 DOCUMENT INCREMENT LIST

A51332 SELECT HAZMAT ITEMS

A51333 PREPARE SHIPPERS AUTHORIZATION

A51334 IDENTIFY SHIPPERS DOC AUTHORIZATION

A51335 SELECT ONE PERSON FOR SIGNATURE

A51336 ACCESS SHIPPERS DOC AUTHORIZATION

A5134 PRODUCE & PLACE PLACARD

A5135 INSPECT INCREMENT

A5136 DESIGNATE TRANSPORT PATH

A514 MOVE TO UNIT HOLDING AREA

A515 DETERMINE INCREMENT MOVEMENT NEEDS

A516 NOTIFY CONTACTS

A52 TRANSPORT

A53 PROCESS THROUGH PDF

A531 VERIFY INDIVIDUAL

A532 COLLECT MOBILITY BAGS

A533 REPLACE/ UPDATE ID CARD

A534 UPDATE MEDICAL

A535 PROVIDE CONSULTATION

A5351 UPDATE EMERGENCY DATA

A5352 PROVIDE LEGAL ASSISTANCE

A5353 PROVIDE RELIGIOUS SUPPORT

A5354 PROVIDE FINANCIAL SUPPORT

A536 HOLD FOR TRANSPORT

A54 PROCESS THROUGH CDF ·

A541 INSPECT INCREMENT

A5411 VERIFY CHALK ASSIGNMENT

A5412 VERIFY HAZMAT ITEMS

A5413 VISUALLY INSPECT

A5414 VERIFY HAZMAT CERTIFICATION DOCS

A5415 REPORT CDF RESULTS

A542 DETERMINE INCREMENT PARAMETERS

A543 COMPARE ACTUALS TO CONVEYANCE LIMITATIONS

A544 ADJUST INCREMENT INFO

A545 RELAY INCREMENT STATUS

A55 PREPARE FOR TRANSPORT

A551 REVIEW LOAD PLAN

A552 POSITION INCREMENTS & PERSONNEL

A553 RECORD INCREMENTS & PERSONNEL

A554 ADJUST & PRESENT FINAL DOCUMENTS

A-11 EVALUATE WORLDWIDE SITUATION

A-12 DEVELOP OPERATION PLAN (OPLAN)

A-13 PERFORM CRISIS ACTION PLANNING

A-14 BEDDOWN RESOURCES AT FINAL DESTINATION

LOG-AID TO-BE ACTIVITY MODEL DIAGRAMS WITH TEXT

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A-1 SCOPING THE CONTINGENCY DEPLOYMENT PROCESS

Ensuring a peaceful world environment requires an effective and efficient force deployment capability to locations anywhere in the world to perform war-fighting, peacekeeping, and humanitarian support operations. Deployment begins with the identification of a potential scenario at anticipated crisis points within the world and the development of operational and deployment plans to address the scenario. As necessary, the military units deploy to the designated sites.

Military leaders from each of the world theaters (PACOM [Pacific], EUCOM [Europe], SOUTHCOM [Southern], USACOM [Atlantic], and CENTCOM [Southwest Asia]) analyze the world environment and identify specific locations having a high probability of non-peaceful activities, and potential scenarios for each location. Using this information, Theater Commanders establish the mission requirements to address the scenarios. These mission requirements the appropriate MAJCOMs drive long-range or deliberate deployment planning.

The deliberate planning, documented in an Operations Plan (OPLAN), identifies the scenarios and operational capabilities needed to address situations at designated locations throughout the world. While the deliberate planning anticipates world hot spots, the Perform Crisis Action Planning activity focuses by the identification of specific locations to which a deployment addresses a given operational scenario. However, because the specific hot spot could be either a real situation or an anticipated hot spot defined by deliberate planning or a potential hot spot selected for training purposes, the deployment functionality involved remains basically the same.

Wings and units are assigned UTC deployment responsibilities, thus designating the capabilities of their mission. A LIMFACS/Shortfalls report documents any mission requirements not be satisfied by existing UTCs or by an assigned unit. This report initiates the modification of an existing UTC, an increased number of units assigned with the specific UTC, or the development and unit preparation of new UTCs.

In general, this activity refines, as appropriate, the information provided in deliberate tasking products, the order of arrival for each UTC capability at the reception site, and assigns complete or fragmented UTC requirements to available units. These refined requirements established by the MAJCOM assign deployment responsibilities to the units through the TPFDD. A unit self-evaluation documents the readiness of the units to

satisfy a UTC and is delivered to the MAJCOM through SORTS (Status of Resources and Training System). Any operational factors or resource requirements not satisfied with available resources within a unit are documented as limiting factors or shortfalls (LIMFACS/Shortfalls). These LIMFACS/Shortfalls provide the information necessary to procure the necessary resources, to adjust an existing UTC or to develop a new UTC. A partial TPFDD or contingency plan to the Wing documents the resulting information.



A-0 DEPLOY FOR CONTINGENCY

The tasking to a unit initiates the basis contingency deployment activities. The tasking consists primarily of the Time Phased Force and Deployment Data (TFDD) and the Letter of Instruction (LOI). These documents specify the deploying UTCs or capabilities and the deploying time frame for those capabilities. If unclear, tasking clarification calls to the MAJCOM fill the information voids. The deployment process at a specific base is controlled by a set of deployment procedures identified within its Base Deployment Plan. Adjustments or tailoring to the UTC resources account for a number of deployment conditions such as weather and mission duration, and site survey information such as personnel housing capabilities. If a unit realizes its inability to satisfy the UTC deployment requirement using its own or its base's resources, a LIMFAC/Shortfall notification provided to the MAJCOM allows them to reassign the deployment requirement.

With the deployment requirements specified, airlift requirements sent to TRANSCOM helps them assign their airlift resources and establish the airlift schedule. The specified airlift requirements also define the requirements for intra-base transportation necessary to facilitate the deployment. With the deployment infrastructure in place, the units collect, process, and load the necessary resources onto the conveyance. At specified points throughout the process, call-ins to the MAJCOM relay the deployment status to provide process visibility. Following the deployment, reports document the resources deployed and the effectiveness of the deployment effort.





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A0 DEPLOY FOR CONTINGENCY IN 2010 (Context)

A tasking in the form of a Time Phased Force and Deployment Data (TPFDD) triggers a contingency deployment activity for a unit. The TPFDD contains the Movement Flow that assigns a unit's departure and reception site arrival dates; cargo and personnel deployment preparation data; and the specifications for moving cargo and personnel. The receipt of the tasking triggers the base commander to note the units assigned for deployment, to identify the supporting units impacted by the deployment, and to convene a battle staff consisting of the lead individual from each appropriate organization. The battle staff analyzes the deployment tasking and adjusts the current operational characteristics of the base to support the deployment operational requirements. These battle staff special instructions are documented as the Course of Action (COA).

Tailoring of the UTC equipment and personnel requirements ensures they effectively address the mission requirements. The tailored UTC must support the environmental conditions at the reception site and the needs of the mission, and it must coordinate with the reception site resources. A Deployment Schedule of Events (DSOE) guides the total base deployment effort. The UTC and DSOE requirements drive the allocation of necessary base resources and facilities and the assignment of specific personnel SSNs and equipment NSNs.

The layout and implementation of the deployment work center begin with the allocation of base facilities allocated, and the sequencing of processing activities. Through the Resource Augmentation Duty (READY) program, selected augmentees are selected and notified to set up the work centers in accordance with the DSOE. Augmentees normally perform operational duties for the base, but they are trained to perform deployment duties when necessary.

Also, augmentees selected to operate the work centers arrive at the work center, check in, check their training currency, and receive their assignee responsibilities. On-base transportation arrangements are then overlaid onto the deployment schedule and requirements to support the deployment processing.

With all of the supporting structure established, the assigned personnel and equipment resources receive notification; arrive at their designated location, and process through the deployment work centers in accordance with the DSOE. As the deployment progresses, collected status information provides a correlation between the planned and actual processing progress.





A2 EXECUTE ACTIVATION PROCESS

The execute activation process describes the part of the deployment process that begins with requirements computation to satisfy the tasking until the completion of the DSOE. Knowing the standards specified for a UTC, the resources available at the reception site, and the requirement insights gained from previous deployments, computing the deployment requirements begins based on the deployment tasking. Using standard guidelines for the loading capacity of transporting aircraft, computed airlift computations define the airlift requirements for the deployment of airlift requirements of the arcs.

In parallel with defining the airlift requirements, the allocations of prioritized increments define the chalks for the deployment. Knowing the resource requirements and the responsible unit, specific personnel and equipment assignments fill the requirements based on the deployability, maintenance, and selection criteria. Knowing the processing times for each increment and the assigned chalk departure times, the generation of the DSOE integrates the total deployment process into an optimized and controlled set of events. This minimizes the deployment time for all chalk preparation.





A21 COMPUTE DEPLOYMENT RQMTS

Computing the deployment requirements focuses on deploying the minimal amount of resources needed to accomplish a mission. This computation requires an in-depth look at the resources requested, the resources available at the reception site, and the sharing of resources of co-deployed units. Overlaying unit deployment schedules identify units, which have some amount of common time at the same location. Overlap selection criteria establishes the rules for how long that common time must be to consider the effective sharing of resources.

In parallel with identifying overlapping units, the tasking and LOI requests provide the pointers into the contents of the standard UTC to produce a list of the deployment resources requested. Also, a list of the resources available at the designated reception site is generated by accessing site history information updated with current site survey information. This reception site analysis identifies the shortages and overages at the site with respect to the requested mission requirements.

Adjustments are made to the requested deployment requirements based on the shortages and overages identified at the reception site and the sharing of resources by deployment overlapping units. These adjustments produce a list of deployment requirements for each unit. Taking their assigned deployment requirements, each unit further tailors their requirements based on the operational weather and terrain environment, the lesser of employment duration and the time until sustainment begins, and the history of what resources were used during similar previous deployments.





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A211 IDENTIFY UNIT OVERLAPS AT SITE

The unit correlation tool supports the users in identifying which units have potential for sharing resources at the reception site, thus supporting the goal of effective tailoring across units. Units considered for sharing resources are those currently deployed at a specific site and those tasked to deploy to the site. The units currently at the sites and their deployment schedule are obtainable through the unit on-site schedules. The unit deploying to the designated reception site and their deploying schedule is available through the TPFDD.

The TPFDD schedule information specifies the arrival and departure times at the reception site, thus identifying their overlaps at the reception site. Overlaying the deploying schedule of units currently at the site provides a complete picture for those units with reception site overlap times, thus with a potential for sharing resources. However, the effectiveness of sharing resources among units depends to a great extent on the duration of that overlap. Using the overlap selection criteria, those unit overlaps that meet the defined criteria are annotated for consideration and presented to the user for verification.

The user evaluates the potential for sharing among these units and adjusts the annotation to reflect the manual adjustments. As the user adjusts the selections, the information system records the selections and makes that information available for the subsequent tailoring efforts.





A212 LIST REQUESTED RESOURCES

The initial UTC tailoring for a tasked deployment occurs by identifying resources for a standard UTC and then adjusting those resources as necessary to accommodate fragmentation and Letter of Instruction (LOI) information. For each UTC identifier contained in the tasking TPFDD, access to the standard UTC data produces a list of the resources contained within that UTC. Any UTC frag designations in the TPFDD specify adjustments to this standard resource list. Further adjustments made to the list of UTC resources reflect information contained in the LOI or directed by MAJCOM. An annotated format, such as bold or italic characters, designates tailored out resources.

When completed, the user reviews the annotated list and makes adjustments as necessary to reflect decision logic not incorporated in the decision support system. The user makes the final adjustments to the list. Users then verify the recorded adjustments. Once accepted by the user, the aggregation of prioritized resources provides a total list of resources for deployment from a Wing.



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A214 CORRELATE DEPLOYING RESOURCES

Once selected, deploying units identify the resources assigned through the tasking and aggregate those resources into a list. A series of comparisons then annotates with identified duplicate resources for possible removal of the duplicates, thus reducing the deploying footprint.

The first correlation compares the list of deploying resources with those available at the reception site. These net resource deployment requirements provide the starting point for two parallel comparisons. The Compare Items Across UTCs function compares those UTCs deployed from the same base and with overlapping employment schedules at the reception site. In parallel, the Compare Items Across Bases function compares deployment resource requirements across bases and with overlapping employment schedules.

The annotated net resource list, annotated to indicate the common intra- and inter-base resources, is further annotated with the units selected to deploy the common items. This selection assumes that only one of the common items is necessary for deployment. A set of criteria controls the unit assignment. As information becomes available, these criteria improve as more specific guidance determines the possible removal of resource duplication and more specifics for selecting the assigned unit.

The suggested assignment of common resources presented to the stakeholder for verification also includes the name and phone number for the responsible organization/POC. This information allows the designated units to communicate and quickly resolve the need and assignment of the common resources.

The stakeholder adjustments or acceptance controls the updates to the completed deployment list and allows the units to begin their deployment preparation process.





A215 PERFORM UNIT TAILORING

Unit tailoring initiates once the units coordinate on the resources each is to supply. The standard 30-day deployment guidelines specify the standard level for the assigned resources. Adjustments to the standard level reflect the unit's employment duration as defined in the unit deployment schedule and the reception site's operational environment. These adjustments combine to produce the operational driven requirements.

Additional adjustments to the operational driven requirements reflect the historical use of resources during previous similar deployments, resulting in the proposed list of deploying resources for each unit. The proposed list is presented to the UDM for confirmation and adjustments based on their experience and insights not incorporated into the decision support system.

Once approved by the UDM, an integration of the unit resource lists within a base and ordered by deployment priority provides the baseline for developing the chalk definitions.





A2154 ADJUST TO HISTORICAL USE

Historical information from previous deployments provides significant insights for determining the realistic resources needed for the current deployment. Accessing the historical information requires that the current deployment be categorized by type to provide a pointer into the deployment history database. The categorization of the current deployment is derived primarily from the destination or reception site location and the mission objectives. The deployed resources and their level of usage are selected from the deployment history database by using the deployment type as the pointer into the database. A comparison between the historical information and the operation driven deployment lists identifies variations that are annotated on the list of operation driven requirements. The historical data base information includes the resource identifier, its redeployment status, and a designation as to whether or not the resource was used during the employment phase.





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A22 TRANSLATE TO AIRLIFT

Effective assignment of airlift to the various bases and units requires that TRANSCOM know the amount and type of resources being deployed by the units. The amount of short tons (STONS) contained within the deployment and the required airlift is computed based on the prioritized list of deploying resources and the standard weights for each item. An analysis of the resource list with respect to the standard item sizes identifies oversized items.

The mapping of STONS and identified oversized equipment information to the standard airlift carrying capacity produces the proposed airlift requirements. The planners review these requirements and identify necessary adjustments to the airlift requirements. Once incorporated, the final airlift requirements are transmitted to TRANSCOM.





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A23 DEFINE CHALKS

Minimizing the airlift needed to transport the deploying resources requires maximizing the loading capacity of each increment. Accomplishing this goal requires designing the increments with three factors in mind. These factors are: resources from one or more UTC/unit may be aggregated onto one pallet, hazardous materials are aggregated onto a minimum number of increments, the increment priority represents that of the highest priority element in the increment, and the aggregation does not hinder the safety, unloading and unpacking of the increments at the reception site.

Standard UTC definitions include the identification of its increments. Mapping the tailored list of resources for each UTC to the standard list identifies filled or partially filled pallets. Information for the filled pallets goes directly to the load planning activity. Information about partially filled increments provides the opportunity to aggregate the non-filled increments. The priority assigned to the increment comes from the highest priority elements, and the responsibility for developing and processing the increment is with the unit owning those highest priority elements.

The load plan development uses the information about the standard and blended increments to build the load plan in accordance with the loading standards for the assigned aircraft. Sequencing the increments by priority, the load planning analysis takes the increments in sequence to safely fill the assigned aircraft with the assistance of the load-planning tool.

The user reviews the proposed increment layout and load plans, with the capability to adjust the information based on their skill and understanding. The user adjustments feed back to the load planning activity to eventually produce the specific information about the increments and chalks.





A24 EVALUATE PERSONNEL & EQUIP QUALIFICATIONS

To be effective, deployment must reflect day-to-day operations rather than detached operations triggered by a deployment tasking. To accomplish this objective, the status of maintenance and personnel records for deployable resources are tracked and updated as the changes occur. When the deployment requirements, as designated by chalk, arrive at the unit, a quick analysis of the deployment requirements allows for the mapping of the resources to the requirements, based on a set of deployability criteria. This mapping produces the initial manifest for the chalk, as well as any shortfalls identified by the unit. Presented to the user, adjustments identified by the user are incorporated into the designations and feedback to update the manifest.

Each increment is annotated as to whether or not its processing requirements include going through in-check. The need for increment incheck derives from three considerations: 1) the existence of HazMat within the increment, 2) the proven preparation reliability of the preparing unit, and 3) the existence of cargo from multiple units on an increment.

For each individual identified to deploy, checks made against the preparation status identify which PDF sites must be visited by the individual. The LOI may levy additional deployment requirements on the individuals, and therefore must also be considered when determining which PDF sites must be visited. [This processing should probably also consider that for some of the PDF sites only the information is needed rather than having the individuals there.] The combination of the in-check and PDF process requirements define partial flows of the deploying resources as well as the level of effort needed within each action.





A241 TRACK RESOURCE STATUS

To support the success of the year 2010, the deployment process requires that the day-to-day information processing of unit personnel and cargo integrate with deployment operations. This builds on the premise that personnel and equipment information possess many common data elements.

For both personnel and equipment, there exists a set of required data collected on a regular basis, with the intent being to collect changes when they occur rather than on incremental time basis. In accordance with the collection requirements, near real-time approaches collect and verify the specified data, then use it to update the maintenance and status records. Information extracted from the status database provides the basis for producing status reports as required. The reporting requirements may be defined at regular intervals or as requested by any authorized organization.

As deployment assignments are identified, the resource database provides the information necessary to determine the maintenance required by the resource during deployment processing.





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A242 ASSIGN RESOURCES TO RQMTS

Through the tailoring process, the units receive and tailor a list of the resources for which they are responsible for deploying. Each unit then assigns a specific resource (both personnel and equipment) to fulfill those resource requirements.

Taking items from the list one-at-time, their inventory is reviewed to identify those resources that could potentially satisfy the item requirement. Deployment related information for each of these items is then analyzed with respect to the qualification requirements and the list of potential resources reduced to those meeting the criteria. The qualified list is further reduced by determining the availability of the resources and reviewing the deployment history of the resource. The selection process produces the proposed manifest (for both personnel and equipment) for the deployment. The names of all personnel for a chalk are used to access the ranks for those individuals. The ranks (and possibly other information) are compared to the chalk commander selection criteria to identify the person assigned as the Troop Commander.

As troop commander, the preparation checklist provides the guidance necessary to ensure that each of the selected resources (personnel only) completes the necessary preparation records prior to boarding the airlift.





A244 IDENTIFY INCREMENTS REQUIRING IN-CHECK

A starting point for streamlining the deployment process requires that not all of the cargo increments process through the CDF. The criteria for identifying cargo requiring in-check includes the presence of hazardous materials, the existence of mixed cargo, and the preparation qualifications of the responsible unit.

For each cargo increment, the item list is compared to the list of HazMat items to identify the existence hazardous materials. All items containing hazardous materials must go through the in-check. Each increment is then reviewed with respect to the units having cargo on the increment. If two or more units place cargo on the increment, the increment, requires in-check. Finally, for non-mixed and non-hazmat increments, the preparation history of the controlling deployment history determines those increments that can by pass in-check due to preparing units successful deployment history.

The increments requiring in-check for each chalk are summarized and distributed to the involved units.





A245 IDENTIFY PERSONNEL REQUIRING PDF PROCESSING

While there is a need to make the PDF processing line available in some form, not all personnel should require PDF processing. A comparison between information in the selected personnel files and the requirements for the deployment identifies the personnel requiring PDF processing requirements.

The personnel file contains an indication for the need of a new dog tag. Maintenance of these tags should be done as necessary during day-today operations, but exceptions may occur. There exists a standard set of shot requirements for deployment status. The LOI identifies shots specifically required for the deployment. Mapping these requirements to those in the personnel file produces a list of shot requirements for each deploying individual.

The finance status guidelines provide suggestions for arranging financial information in preparation for a deployment. During the normal day-to-day operations, each individual reviews these suggestions and provides an indicator in the personnel file as to whether or not their financial records are ready for them to deploy. In much the same manner as the financial records are maintained, the legal status is also confirmed.

The planning for and presentation of ministry support prior to the notification of a deployment are impractical. It is possible for the deploying personnel to indicate that need, however, prior to processing through the PDF. Upon their notification of deployment, each deploying personnel connotes in their personnel file their desire of whether or not to receive ministry support. This summarized list becomes a part of the PDF processing requirements and provides the primary indicator for the need of the PDF line.




A25 DEVELOP DEPLOYMENT SCHEDULE

A Deployment Schedule Of Events (DSOE) provides the controlling baseline for the deployment effort at the Wing level. The DSOE development involves a three-step process. Step one involved in the development of a unit specific DSOE for each unit involved in the deployment. Step two correlates the unit-level DSOEs into an integrated DSOE. Step three requires monitoring and adjusting the integrated DSOE as necessary during the course of the deployment activity to ensure the effective execution of the deployment.

Knowing their deployment and loading requirements for each chalk, each unit computes an optimal unit level DSOE that assumes full access to the base deployment support resources. Development of this optimal schedule starts with a standard set of processing duration times rather than start and completion times for the processing duration times Adjustments to these standard times reflect the physical locations of the deployment operations within the base as well as security movement restrictions existing on base as specified in the COA. Additional adjustments reflect the types and amount of deployment processing requirements specified for the unit deployment processing.

The development of an optimal DSOE for each unit is based on the standard loading and processing times specified for each standard UTC. However, these standard times vary to reflect the differences between the standard UTC resource list and the resource list specified for the deployment. The preparation schedules for UTCs designated to the same chalk combine to produce a chalk-specific schedule of events.

Because of conflicts with availability of support capabilities, coordination among the individual chalk schedules produces a generic, integrated DSOE across all chalks. When the departure times for the assigned airlift become known, the generic interval timings are used and adjusted to build backward from the airlift departure times.

The user reviews the completed DSOE and inputs adjustments as necessary. Distribution of the user-approved DSOE provides the master schedule for the entire deployment process. As the deployment occurs, status updates received at various points in the process are mapped to the DSOE. This mapping identifies variations between the planned and actual processing progress. As these variations exceed pre-established limits, the variations are highlighted and presented to the user for analysis. In a majority of cases, distribution of the annotated DSOE suffices to get the



deployment activity on track. Otherwise, communications between the user and the UDM, or responsible person, clarifies and corrects the problem.



A251 DEVELOP GENERIC CHALK GENERATION TIMES

Standard times exist for the preparation and processing of UTCs. Using these standard times as the baseline preparation time for each increment, adjustments to the time reflect the uniqueness of a specific deployment effort. Personnel preparation time changes in accordance with the number of individuals being deployed and the cargo processing time changes in accordance with the number of increments identified for processing through the in-check. The cargo and personnel movement times consider the location and length of the move along with the personnel and of the improved deployment is to have a full chalk.

The above process description focuses on the processing by one unit. When a chalk comprises increments from two or more units, processing coordination must exist to allow for the efficient sharing of common resources such as the CDF and PDF. Incorporating the adjustments produces the optimal unit level DSOE, which forms the primary controlling guide for the preparation of that chalk.





A3 SET UP DEPLOYMENT MACHINE

Accomplishing the deployment effort requires a support structure consisting of support personnel or augmentees and workstations at which augmentees perform specific deployment tasks. The level of activity at any one workstation may change significantly among deployments. Therefore, the computation of the deployment requirements and the deployment DSOE drive the level and type of deployment support required. Considering this level of support, the augmentee selection process schedules the augmentees to report for duty.

As the selected augmentees arrive for duty, a review of their deployment experience identifies the training needed for each augmentee in order for them to effectively perform their assigned deployment task. Providing the defined training prepares the augmentee for the assigned deployment task.

Augmentee duties consist of two aspects -- setting up the deployment capabilities and using those capabilities to perform the deployment. Represented in this diagram are the activities for setting up the deployment capabilities. Most deployment bases have defined locations for their work centers. However, these standard locations may change due to deployment conditions such as deployment size and threat conditions. The COA, therefore, provides the means by which the battle staff documents their decisions for the deployment specific locations of the work centers. Knowing the designated work center locations, the augmentees access and set up the equipment necessary for the work center to function. Then, considering the level of processing support needed to accomplish the deployment, the appropriate supplies are accessed. These supplies include such materials as blank personnel identification cards, blank dog tags, medications for the shots, etc.

At the completion of the work center setup, a setup status goes to the DSOE monitoring effort.





A31 SELECT AUGMENTEE

An analysis of the DSOE for the deployment effort and the deployment process required defining the number of augmentees required, their requirement schedule, and the skills required by the augmentees. Mapping these requirements to the listing of augmentees identifies one or more individuals available to satisfy each requirement. Presentation of this correlated list to the user allows for adjustments and acceptance based on information known to the user. The listing, containing zero or more adjustments, is used to annotate the augmentee records to ensure they receive the appropriate credit for participating in the deployment support. While these record updates identify their planned participation, future support.

When accepted by the user, notification sent to the augmentees informs them when and where to report, along with a minimal description of their planned responsibilities.





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A4 ARRANGE FOR TRANSPORTATION

the amount and type of cargo and personnel requiring transporting, the time Through the definition of the deployment requirement is defined frame in which the requirement occurs, and the beginning and ending points base transportation capabilities identifies the type of transportation Comparing the transport capability requirements, the availability of on-base transportation, and the transporting time and paths produces a proposed assignment schedule for transporting deficiencies. One way of satisfying these deficiencies is to arrange for contract support. Thus, the deficiencies are matched to available contracting resources and one or more contracting potentials are or each transporting leg. Mapping the transporting requirements to the on-This comparison also identifies any projected dentified to satisfy the deficiencies. The proposed on-base and proposed contracted transportation vehicle schedule is presented to the on-base capabilities required for the deployment. on-base conveyances. controller for review.

The user adjusts the transporting schedule as necessary. The adjustments are fed back to update the on-base transportation database. The approved on-base transport schedule becomes available to support the performance of the deployment.

As transportation requests arrive, either as driven by the DSOE or by personal requests, the coordination module proposes the assignment of a conveyance based on the approved schedule. This proposed assignment is presented to the assignment user who adjusts it as necessary and makes the necessary communications to initiate the availability of that conveyance. Information from the assignment is fed back to update the assignment schedule and availability of the transporting capability list.

(The development of the local transportation resources requires a database of transportation capabilities, maintained similar to that used for the tracking of the deployable equipment.)





A5 DEPLOY RESOURCES

Once identified, preparation of both personnel and cargo focuses on getting them ready for loading onto the transporting conveyance. Standards control this preparation by specifying, to a great extent, who needs what to satisfy the deployment requirements. Information provided to the unit includes their preparation schedule, the list of personnel being deployed, and the name of the troop commander for the chalk of which they are a part.

Those deploying personnel requiring processing complete as much of the processing as possible at the unit location. Those individuals requiring PDF processing are transported to the PDF for completion of the processing and then returned to the unit. As necessary, travel orders are generated at each unit by extracting information developed during the planning step. At the time designated in the DSOE, the personnel move to a sterile area near their transporting area.

Much like the personnel processing, the cargo elements selected for deployment are prepared and brought together as increment groupings. A check is made to ensure correlation between items and manifest, and the existence of electronic documents for the hazardous materials. The actual loading of the cargo elements into the increments is done in accordance with the predefined packing designation for the assigned transport. As each increment is completed, the necessary transporting requirements are sent to the on-base transport controller. On the way to the chalk area, the transporters have the increment measured and weighed, and if designated, have it processed through the CDF on its way the secured chalk area.

Within the controlled areas, the personnel and cargo wait for loading time. During this waiting time, any last minute problems are addressed and the identified chalk's troop commander takes control of the personnel.



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A51 PREPARE RESOURCES

With the specific personnel and equipment identified for deployment, the unit focuses on preparing those resources for loading into the transporting aircraft. Using the list of identified personnel, notifications transmitted to the individuals inform them when to report to their unit. Using the list of selected equipment, preparation efforts access the equipment, thus beginning the cargo preparation processing.

For each of the selected personnel, status updates include checking the medical records with respect to the deployment medical requirements, updating as many of the requirements as possible within the unit, and identifying any processing requirements to be done during the actual deployment processing. The personnel preparation may require materials normally available within the service centers of the PDF. For the selected equipment, status updates include the necessary maintenance and packaging.

The unit prepared cargo elements aggregate into increments as defined and specified through the load plan and increment layout respectively. This increment building includes checks to ensure the accuracy of the increment. This checking process may identify specific equipment items that require replacement. The prepared personnel and increments move to a holding area in preparation for further processing.

As the increment building process progresses, an indication placed on each increment specifies the processing path to be taken by the increment from the unit and to the transporting aircraft. The increment CDF processing requirements specify primarily whether the increment must go through in-check.

Increments and personnel move to a unit holding area at the completion of preparation and, as the time nears for departure, to the transporting aircraft. When all resources are ready, a preparation completion notification transmits for reference to the DSOE. A notification to the on-base transportation identifies the amount of resources ready for transport.





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A513 BUILD INCREMENTS

The units designated for deployment prepare their cargo and move it towards the transporting aircraft in accordance with the DSOE. In preparation for building the increments, the unit prepares the individual cargo items or elements designated for deployment.

Building the increment requires the placement of these items onto a pallet or into a cargo box. The increment layout illustrates the placement that satisfies all the packing standards established for flight safety. Computing the increment properties determines whether or not the increment satisfies the limitations specified in the load plan. Adjustments to the increment packing correct any measurement problems identified for the increment.

As the increment build occurs, a listing of the contents provides a manifest for the increment. The computed properties are documented along with the increment manifest, both of which are attached to the increment for immediate reference. A unit inspection ensures that the increment's subsequent the necessary guidelines. A reference made to the increment's subsequent inspection requirements determines the path taken by the increment from the unit to the transporting aircraft.





A5131 POSITION ELEMENTS

As increments are developed and processed through the deployment process, rejection of some increments occurs and the increment is designated as a frustration. When a frustration occurs, corrective actions repair the problem and get the increment back into the processing sequence so as to prevent any delays to the DSOE. A fast reaction team receives the frustrated increment. This fast reaction team may consist of the increment preparing unit or a team of specialized individuals.

Upon receipt of the unaccepted or rejected increment, a quick review reveals the cause of the rejection. At this point in the deployment process, the causes usually consist of improper building of the increment or improper placement of hazardous items within the increment. Information provided by those who noted the increment as frustrated usually identifies the cause of the frustration. Otherwise, repeating the inspection process that involves comparing the increment to preparation standards and to the planned increment build design determines the rejection cause. Knowing the adjustment requirement allows the correction team to replace and adjust the problem items, and then redoing the necessary restraints or netting covering the increment.

The problems causing the frustration may also be improper netting over the increment. If so, the correction team corrects the netting as specified by the adjustment requirement.

For the first time build of the increment, the cargo items are prepared for shipping and are packaged together into an increment, according to the preparation standards and the planned increment layout design. If the increment is a rolling stock or cargo box, it is secured. If the increment is a pallet, restraints, usually in the form of netting, are placed around the increment to secure all items in place.





A5132 DETERMINE INCREMENT PROPERTIES

Once developed, the measurement of the increment properties provides the information needed to develop the load plan for presentation to the Load Master. As the increment arrives at the measurement site, the appropriate procedures guide the determination of its size and weight. For rolling stock increment, a Center of Balance (COB) determination adds an additional parameter to the increment. To ensure the increment will fit into the designated aircraft, a comparison of these computed factors with the initial load plan is performed. Acceptance of the increment occurs if the parameters are within the load plan limits. Otherwise the increment is designated as frustrated and returned to the owning unit.





A5133 DOCUMENT INCREMENT CONTENT

Directly after the development of an increment, the generation of records finalizes the documentation of the increment contents. The documentation process begins with the increment list produced during the planning stage and verified during increment building. Identification of the hazardous materials within this list is controlled by a master list of hazardous materials. Considering the identified hazardous materials, the appropriate shipper's documents are developed, as well as a list of individuals authorized to sign the documents. The list of authorized individuals is presented to the UDM who selects a person easily accessible for their signature. Upon the selection, a notification transmitted to the selected individual occurs to facilitate the signing of the documents.





A53 PROCESS THROUGH PDF

Unit deploying personnel arrive at the PDF, verify their place on the designated chalk via the unit personnel manifest, and hand over any mobility bags required for the deployment. When collected, the mobility bags are palletized and placed in a holding area. Because their PDF processing requirements were identified as part of the unit preparation, each individual proceeds to the necessary workstations within the PDF. Individuals fully prepared prior to arriving at the PDF processing join those in the holding area. Individuals requiring some type of processing join those

As each workstation processes an individual, information automatically recorded identifies the individual and unit. At the completion of the deployment processing, the automated compilation of the records summarizes statistics regarding the PDF processing requirements.





A535 PROVIDE CONSULTATION

During normal day-to-day unit operations, each individual maintains information critical to deployment. At times, the need for specific consultation for a deployment may arise. The unit processing identifies these consultation requirements, allowing the consultation to occur at the unit site or during a PDF visit, depending on the number of personnel involved.

The consultations begin after satisfying the deploying person's medical requirements. The consultations begin with the update of emergency information and continue with the preparation of legal documents, the providing of religious support, and the adjustments of financial information.

Personnel are not required to complete each consultation, only those deemed necessary for the deployment.





A54 PROCESS THROUGH CDF

Inspections of those increments identified for processing through the CDF verify that the increment packing meets flight safety requirements. The controlling factors for the inspections include the increment layout used to build the increment and the CDF inspection checklist. This checklist defines what aspects of an increment need inspection and the standard rules for packing a pallet.

Measurements taken of the correctly packed increment are used to adjust the unit-determined measurements. A review of the measured increment to the load plan verifies that the increment fits correctly into the designated airlift. Knowing the increment fits into the designated airlift, the necessary adjustments update the placard attached to the increment.

The status of the CDF processing, collected on a regular basis, becomes available to those needing that information.





A541 INSPECT INCREMENT

The CDF inspects unit prepared cargo on an increment-byincrement basis. The increments inspected include those designated for inspection and those selected as a sampling set. As an increment arrives at the CDF, the increment number is validated against the load plan ensuring the increment is designated to the correct chalk. Using the HazMat Certification documents accompanying the increment, a comparison between the certifications and the HazMat items confirms that each HazMat item is documented. A continued inspection of the increment layout to ensure the correct positioning of the items, especially the HazMat items. The increment layout and the packing checklist also provide the guidelines for visually inspecting the packing of the total increment. Finally, a review of the HazMat certifications ensures they are correct and signed by an

Any problems found with the increment are documented, the increment is identified as frustrated, and both the increment and associated reason for the frustration are presented to the preparing unit.





A55 PREPARE FOR TRANSPORT

Preparing for transport involves the coordination between the Load Master and the individual responsible for loading the chalk. The loading preparing begins with Load Master ensuring safety of the chalk by reviewing the load definition with respect to the loading standards for that aircraft. The Load Master and the base load planner coordinate on adjustments to the load plan. Once approved by the Load Master, the load plan provides the official guidance for positioning the increments and personnel within the aircraft.

In majority of situations, the loading of the increments occurs prior to loading the personnel. However, certain load plans may dictate other loading sequences. For each chalk, positioning of the increments and personnel reflects that specified in the load plan. The cargo preparation standards specify how the increments arrive at the aircraft and how they move into position to minimize any unnecessary steps and time delays in the loading process. As positioning of each increment and individual occurs, an annotation on the load plan indicates their presence. At loading completion, the finalizing, review, and approval of the loading plan by the load master produces the load manifest for the aircraft. The aircraft is ready for take-off and the appropriate status report is transmitted to update the DSOE.





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LOG-AID TO-BE ACTIVITY MODEL GLOSSARY

This section of the appendix contains the LOG-AID To-Be Activity model data glossary divided into two parts: (1) Input, Control, and Output Glossary and (2) the Mechanism Glossary which identifies both systems and personnel roles

The Input Control, and Output glossary contains three columns identified as Name, Definition, and Reference. The Name identifies an interface arrow within the model and the Definition describes what that arrow represents. The Reference column identifies the one or more diagrams on which that arrow name appears, with the reference list presented with respect to the model hierarchy. The Mechanism Glossary contains two columns: (1) the mechanism name, and (2) the mechanism description. The glossaries are sorted with respect the name column. LOG-AID TO-BE GLOSSARY .

Manic	Delinition	Keference
# of Personnel/Increments	(Number of Personnel per Increments) The number of personnel and increments to be loaded on each chalk.	A251
30-Day Support	The amount of replacement materials that allows the operational capability of a UTC to continue for a period A of 30 days.	A215
Accepted Increment IDs	(Accepted Increment Identifiers) A cargo increment that's physical packing is acceptable for safe loading into A the transporting aircraft.	A513
Adjustment Criteria	The standards used to adjust standard UTC item content to better match a deployment time period than that A used to build the standard UTC.	A215
Adjustment Requirement	(Adjustment Requirement) The reason to replace or repair an increment found to be frustrated or unacceptable A for shipment.	A5131
Aircraft Type	The identification for the aircraft assigned to transport a chalk for deployment.	A25 A251
Airlift Carrying Capacity	The amount of material and personnel that can be safely transported in an aircraft type.	A22
Airlift Requirement Adjustments	(Airlift Requirement Adjustments) The adjustments made by a user to the airlift requirements proposed to A them by the automated tools implemented to support that decision-making activity.	A22
Airlift Requirements	(Airlift Requirements) A listing containing short tons (STONS), volume, and size definitions for the cargo and A	A-0
	personnel identified for movement, including a recommendation for the number and type of aircraft.	A-1
	A	A0
	A	A2
	A	A22
Airlift Transportation	The type and number of aircraft available to provide airlift in support of a deployment.	A-0
Resources	A	A-1
	A	A-2
	A	A0
		A5
	A	CCA
Allocated MHE	(Allocated Material Handling Equipment) The equipment assigned within a base for use in supporting the deployment effort.	A25
Allocation Adjustment	A change, made by a decision maker within the deployment process, to the type and amount of support A capabilities assigned to a deployment.	A214

Name	Definition	Reference
Anticipated Deployment Requirement	(Anticipated Deployment Requirement) Using various sources of intelligence information and personal connections, the type of missions the military may be required to support an event.	A-1
Approved Augmented List	A list of the individual selected for recall in support the planned deployment effort.	A31
Approved On-Base Transport Schedule	The equipment and its planned allocation of use to move personnel and cargo within a base during a deployment effort.	A4
Arriving Resources	The personnel and equipment brought into the unit's facility to initiate the deployment preparation process.	A51
Assigned A/C Type and	(Assigned Aircraft Type and Departure Times) The type of aircraft assigned to transport one or more chalks	A2
Departure I imes	and the time at which the aircrafts are scheduled to takeoff from the base.	A25
Assigned Aircraft Type	The designation of the aircraft to which a specific chalk is designated for transport.	A2 A23
Assigned Airflow	The schedule of aircraft arriving and departing a base in support of a deployment.	A-0
		A-1
		A-2
		A0
		A2
Assigned Augmentee	Those individuals selected to support the current deployment effort, trained and ready to perform the assigned tasks.	A3
Assigned Increment	A cargo increment assigned to a specific chalk.	A541
Assigned Transport	The specific type of local transport conveyance assigned to satisfy the requirements of a transport request.	A0
		A4
		AS
Assignment Status	A report that annotates the list of deployable resources so as to identify those selected for deployment.	A24
		A241
Automotica I intine		A242
	A list of all deployment processing augmentees for the deploying base.	A31
Augmentee Kecall	Notification to the selected augmentees as to when and where they are to report for duty.	A-0
		A-1
		A-2
		A0
		A3
		A31
Authorized Personnel	List of qualified individuals for signature authorization and means for contact.	A513
Authorized Signature List	The names of individuals qualified to sign the Hazardous Material documentation.	A5133

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Name	Definition	Deference
Availability Criteria	The parameters considered when determining whether or not a specific resource (personnel and equipment) can be considered for selection to satisfy a deployment requirement.	A242
Available Resource	The resources meeting the availability criteria, thus, the resources from which a deployment requirement can be filled.	A242
Background Criteria	The parameters used to check the history of an individual as part of deciding whether or not that individual is available for filling a deployment requirement.	A242
Base Operations Characteristics	The manner in which personnel and facilities are currently being used on the base.	A0
Base Resources	The capabilities existing on the base and assigned to support a deployment as they are required.	A-2 A-1
		A-0 A0
Blank ID Cards	(Blank Identification Cards) Personnel identification cards that are available within the PDF to be filled out with updated information or to replace worn or lost cards.	A53
Blank Wills & Power of Attorney	Blank forms for Wills and Power of Attorney that can be signed by an individual being deployed.	A535
Blended Increment Definition	The layout of the items contained within a blended increment and the unit identified as responsible for building and controlling the movement and deployment of that increment.	A23
Blended Increment Layout	The 3-dimensional building structure for increments composed of items from two or more UTCs or units.	A23
Cargo and Personnel ID & Placement by Chalk	(Cargo and Personnel Identifier and Placement by Chalk) The unique identifier for each increment and passenger within a chalk and the notation specifying where each increment is to be placed within the aircraft and where the passengers should be located.	A55
Cargo Prep Standards	(Cargo Preparation Standards) The rules defining how items must be arranged to produce an effective and safe increment.	A55
CB Computing Procedure	(Center of Balance Computing Procedures) The steps used to convert the weight and measurement information into the necessary center of balance designation.	A5132
CDF Accepted Increment	(Cargo Deployment Function Accepted Increment) An increment processed through the CDF and found to be accurately produced.	A54
CDF Checklist	(Cargo Deployment Function Checklist) A list of increment features checked as the increment passes through the CDF.	A5 A54
CDF Materials	(Cargo Deployment Function Materials) The blank forms and materials completed as cargo is processed through the CDF.	A5 A54
Name	Definition	Reference
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CDF Rejected Cargo Increment & Accepted Increment ID	(Cargo Deployment Function Rejected Cargo Increment & Accepted Increment Identifier) Increments rejected during the CDF inspection and the identifier for those increments that passed the CDF inspection.	A5 A51
· .	• • • • • • • • • • • • • • • • • • •	A513 A54
		A541
CDF/PDF Processing Designation	(Cargo Deployment Facility/ Personnel Processing Function Processing Designation) A designation given to each increment and deploying individual indicating whether they are to move directly from the unit to the aircraft or to a work center.	A5 A51
Certification Documents	(Certification Documents) The records accompanying the hazardous materials planned for loading into an aircraft. These documents certify the designated aircraft has been approved to transport the material.	A541
Certification Requirement Checklist	(Certification Requirement Checklist) The list of items that must be included and completed within the Certification Docs.	A541
Chalk Content by Unit	The correlation between the items in the increment and the unit owning the item.	A24 A242
Cmdr Selection Criteria	(Commander Selection Criteria) The parameters used to check the ranks and roles of personnel assigned to a chalk to identify the best candidate for troop commander.	A242
COA	(Course of Action) This information is contained in the Battle Staff Special Instructions and specifies critical base dependent information for the deployment effort. This includes the actual facilities to be used to	A0 A2
	accomputed the deployment, the changes to the normal operations of the deploying base, the definition of the threat level and the security passwords to be considered and used during the deployment.	A25 A251
Completion Status & Personnel Movement Requirements	(Completion Status and Personnel Movement Requirements) The level of completeness for the current deployment effort. The definition for how many individuals need to be transported from one location on the base to another and at what time.	A51
Confirmed Loading	A status obtained during the deployment process stating that all the personnel and increments for a chalk are loading into the transporting aircraft.	A55
Consultation Requirement	(Consultation Requirement) The stated need that a deploying individual wants to meet with a Chaplain or other support functions prior to leaving on the deployment.	A53 A535
Consulted Person	A deploying person who has all of his personal affairs in order and is ready to leave for the deployment.	A53 A535
Consulting Materials	The various forms and brochures needed within the consulting-oriented workstations within the PDF.	A53 A535
Contracted Conveyances	External transportation sources brought onto the deploying base to support the deployment operation.	A4
Current Personnel & Equipment Information	(Current Personnel & Equipment Information) Information describing the status of personnel and equipment with respect to status needed to satisfy deployment requirements.	A241

Name	Definition	Reference
Current Resource Information	(Current Resource Information) The information describing the status of personnel and equipment at the time a selection for deployment is to be made.	A24 A241 A242
DD Form 93	(Department of Defense Form 93, Emergency Data Card) Blanks forms which emergency data can be recorded.	A535
Deliberate Tasking Plan	This tasking is documented in the Operations Plan (OPLAN) and is specific for each selected site and mission scenario. This plan is developed by the Wing Planners and specifies the overall requirements in terms of the unit to be deployed, the mission for each unit, and the order of deployment. The OPLAN comprises a Time-Phased Force Deployment List (TPFDL).	A-1
Deployability Maintenance & Record Requirements	(Deployability Maintenance and Record Requirements) For equipment, the listing of the maintenance performed and the list of scheduled maintenance requirements for the equipment. For personnel, the listing of shot and training records, including the list of those scheduled and required.	A24 A241
Deployability Maintenance and Selection Criteria	The standards used to evaluate the current maintenance and readiness status of personnel and equipment, and to determine if their status eliminates, or puts at low priority, their potential for satisfying a deployment requirement.	A2 A24
Deployability Maintenance Requirements	(Deployability Maintenance Requirements) The maintenance and shot administration actions that must be performed on equipment and personnel respectively to prepare them for the planned deployment.	A241
Deployability Selection Criteria	The parameters used to select the specific item from a list of possible candidates to fill the deployment requirement.	A24 A242
Deployed Increment and Personnel	The groupings of cargo and personnel that have been placed on the transporting aircraft.	A55
Deployed Resources and Manifest	Cargo and equipment aboard a conveyance deployed from the home base.	A-0 A-1 A0 A5 A55
Deployed Resources for Similar Deployment	Used as a reference for the current deployment planning, this listing of deployed resources identifies those resources deployed on a previous, similar deployment.	A2154
Deploying & Support Resource Information	(Deploying & Support Resource Information) Information about the base level resources used as the basis for evaluating and selecting the resources either to be deployed or to support the performance of the deployment operation.	A0 A2

Name	Definition	Reference
Deploying Resource Information	Information about the base level personnel and cargo that are identified or eligible for deployment.	A2 A21
		A214
		A24 A241
Deploying Unit Overlaps	The list of items common among two or more UTCs being deployed to the same location during the same time period.	A211
Deploying Unit Schedules	The deployment processing schedules and requirements for all units involved in a deployment to the same reception site.	A211
Deployment Destination and Mission Requirement	(Deployment Destination and Mission Requirement) The identification as to where a deploying unit is going and the mission to be performed by that unit.	A215 A2154
Deployment History	A history of what resources was used during similar previous deployments. It provides significant insight for determining realistic resources.	A21 A215 A2154
Deployment Order	The prioritized list of personnel and cargo for a deployment.	A212
Deployment Plan	The current use of facilities, such as buildings, located on the base to which a deployment assignment has been made	A-0 A-1
Deployment Processing	(Deployment Processing Requirements) The individual processing steps that specific personnel and	A2
Requirements	equipment must perform to complete their deployment processing.	A24
		A25 A251
Deployment Ready Increments and Personnel	The increments and personnel assigned to a chalk and ready for deployment.	A55
Deployment Ready Resources	Deploying resources placed at the aircraft and ready for loading into the transporting aircraft.	A5 A55
Deployment Schedule	The schedule and requirements of units, which have some amount of common time at the same location.	A21 A211
Deployment Specifications	A complete set of requirements that must be satisfied to successfully accomplish a planned deployment.	A0 A2
Deployment Standards	The information used to judge when the increment layout, chalks, and load plan are correctly defined so that the actual deployment processing can begin.	A23

Name	Definition	Reference
Deployment Status	An update on the current state of the conveyance to deploy the resources, the transportation requirements to move the resources among the base to prepare for deployment, any personnel or cargo changes or shortfalls, the work centers' status, when the resources are ready to be processed through the work centers, when the	A0 A5 A51
	resources are ready to be loaded on the conveyance, and when the conveyance is ready to leave the base with the deploying resources.	A53 A535 A54
Deployment Type	A coding of a deployment so as to provide a pointer into a history database of previous deployments.	A2154
Designated Location	The places at which the various work centers required to accomplish the deployment are designated to be positioned.	A3
Destination	The location to which the deploying resources are going.	A242
Destination Climate	The weather conditions at the reception site.	A215
Documentation Format	The approved presentation of information contained in the chalk manifest.	A55
Documented Increment	The electronic recording of the items contained in an increment.	A513 A5133
DSOE	(Deployment Schedule of Events) A prioritized set of actions developed by the IDO that must be performed and completed in accordance with the dates and times specified in the SOE. The dates and times specified are defined as "no later than" dates and times.	AS
DSOE & Communications	(Deployment Schedule of Events and Communications) The DSOE defines and controls the sequencing of tasks required to complete the Wing/Base level deployment effort. The communications represent the transfer of deployment status information relative to the DSOE.	A2 A25
DSOE, Communications, & Level Support Requirements	(Deployment Schedule of Events, Communications, and Level of Support Requirements) The processing schedule that guides the performance timeline of the base level deployment effort. Communications represent the information flow to the augmentees identified to setup and operate the various work centers contained within the deployment process. Level of Support Requirements represents the amount of deployment	A0 A3 A31
	activities anticipated at each work centrel during the period inaries of the deployithent.	

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Name	Definition	Reference
DSOE, Communications, Manifest, etc.	(Deployment Schedule of Events, Communications, Manifest, Troop Commander, Processing Requirements, Increment Layout and Load Plan) The DSOE defines and controls the sequencing of tasks required to complete the Wing/Base level deployment effort. The communications represent the transfer of deployment status information relative to the DSOE. The manifest identifies all the personnel and increments assigned to a chalk. The Troop Commander identifies the individual in charge of the chalk's personnel from the loading preparation of the personnel until those personnel reach their respective units at the reception site. The processing required for each individual and increment included in the deployment. The increment layout specifies the build up of items into a transport-ready aircraft.	A0 A5
Duration Driven Requirements	(Duration Driven Requirements) The selection of deploying resources based on how long the unit anticipates being stationed at the reception site and the supply capabilities at the reception site.	A215
Emergency Information Update	(Emergency Information Update) Pertinent information that the individual being deployed revalidates and supplies current information necessary in the case of an emergency. This includes next of kin, points of contact, insurance information etc.	A535
Environmental Driven Requirements	(Environmental Driven Requirements) The deployment requirements that exist because of the terrain, weather, and location of the reception site.	A215
Finance Changed Requirement	(Finance Changed Requirement) A need identified by a deploying individual that the person must process through the finance station within the PDF.	A245
Finance Status	The guidelines used to determine when a check of a persons financial arrangements must be made.	A245
Financial Arrangements	Information designating how a deploying individual's paycheck and bills are to be handled while being deployed.	A535
Financial Info Update	(Financial Information Update) The list of financial changes that the individual being deployed wishes to make.	A535
Financial Materials	Forms that can be filled out by the individual being deployed to change various aspects of the financial situation, such as a financial institution automatic deposit.	A535
Fragmented Annotated List	(Fragmented Annotated List) A UTC designated for deployment but annotated to show it does not require all the personnel and items designated in the standard UTC, and the list of personnel and equipment needed to satisfy the partial capability.	A212
Frustrated Cargo Status	A list of TCNs indicating which cargo elements did not pass the incheck process and are in need of additional repair.	A54 A541
HazMat Codes & Documentation Standards	(Hazardous Material Codes and Documentation Standards) The guidelines for the various types of hazardous material and the associated codes, along with the guidelines for documentation required with each type of hazardous material	A5133

Nomo	D. H. 1.	
	Definition	Reference
Increment Layout & Load Plan	The buildup design for an increment and the buildup design for the increments inside the transporting aircraft.	A51
T		A513
Increment List	A list of the contents of the increment, which provides a manifest for the increment.	A513 A5133
Increment Manifest	The list of items included in the increment.	A5133
Increment Measurement	Provides increment size information needed to develop the load plan for presentation to the Load Master.	A5132
Increment Measurement Guidelines	The rules for determining the increment's physical characteristics that is important to assure its safe transport.	A5137
Increment Movement Rqmt	(Increment Movement Requirement) The need to move an increment from one location to another at a given time and with a specified equipment.	A51 A51
Increment Requiring Buildup Check	Those increments, identified during the deployment planning, that will be processed through the CDF.	A244
Increment Requiring HazMat Check	(Increment Requiring Hazardous Materials Check) An increment identified as containing hazardous materials and thus needing processing through the CDF.	A244
Increment Requiring Mixed Cargo Check	The identification of those increments built up with items from multiple units and requiring processing through the CDF.	A244
Initial Prep Time	(Initial Preparation Time) The standard preparation time designated as needed to prepare a standard increment.	A251
Initiate Cargo Processing Time	The time defined in the DSOE at which a unit is to begin processing its cargo for deployment.	A251
Initiate Movement Time	The time defined in the DSOE at which a unit is to begin moving its cargo from the unit location to the transporting aircraft.	A251
Initiate Personnel Processing Time	The time defined in the DSOE at which a unit is to begin processing its personnel for deployment.	A251
In-Place Equip	(In-Place Equipment) A work center that is set up with the supporting equipment.	A3
Inspection Checklist	A list of the increment parameters the Incheck personnel will consider when determining if an increment is ready for placement into the marshalling area.	A54 A54
Inspection Requirements	(Inspection Requirements) The list of inspections required for an increment as it is processed for deployment	A513
Integrated Layout of Chalk	(Integrated Layout of Chalk Deployment Schedules of Events) The completed DSOE, which defines, and	A25
20052	controls the sequencing of tasks for all increments required to complete the Wing/Base level deployment effort.	
Inter Base Common Resources	A list of items, common among multiple bases, and identified for deployment to the same reception site	A214
Intra Base Common Resources	A listing of resources common among the Tucks being deployed from a single base.	A214
Invalid Certifications	Hazardous Materials documents improperly prepared.	A541

Name	Definition	Reference
Item List	The identifier of items contained in the manifest.	A244
Item to Unit Correlation	The designation of common resources to a specific unit and the responsibility of the unit to deploy the resources to the reception site for sharing with another unit.	A214
Legal Document Requirement	(Legal Document Requirement) The need for a deploying individual to complete a will or a Power of Attorney, or both at the PDF.	A245
Legal Info Update	(Legal Information Update) Information an individual would like to put in a Will and the person to be assigned the Power of Attorney.	A535
Legal Status	A requirement by the individual to have the legal documents reviewed.	A245
Level of Processing Support	The quantity of processing anticipated for each deployment work center.	A3
LIMFACS & Shortfalls	(Limiting Factors and Shortfalls) A factor store that, either temporarily or permanently, impedes a	A-I
	mission. Examples: transportation network of in-place facilities; malpositioned forces or	A-0
	- Interret; extreme cumatic conditions, distance, transit or overflight rights; and political conditions. Shortfall	A0
	requirement, that adversely affects the command's ability to accomplish its mission.	A2 A24
Load Master Approved Load Plan	The load plan for a chalk that has been reviewed by and approved by the Load Master. This approval allows for the aircraft loading to begin.	A55
Load Plan	The layout for the positioning of the personnel and increments in the transporting aircraft with respect to	A51
	factors such as weight distribution and hazardous material placement.	A513
		A5132
		A54 A541
Load Plan Identifiers	The unique identifiers that link an increment to the chalk	A513
Load Plan Increment Layout	The arrangement defined for positioning the increments of a chalk into the designated aircraft to ensure flight	AS
	safety. Also the arrangement of items within an increment.	A54
		A541 A55
Load Planning Standards	The guidelines or business rules for how to safely position personnel and cargo increments in a transporting aircraft.	A23
Loaded Increment	A rolling stock or grouping of items on a pallet or in a cargo hox packaged and prepared at the unit.	A513
		A5131
E		A5132
Local Transport	The means that exists on a base to move deploying personnel and cargo during the time of a deployment.	A0
I conf Tourset Descrided		A4
LOCAL LEADSPOIL PTOVIDED	I ne means of transportation provided in response to a planned transportation need.	A4

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Name	Definition	Reference
Location	The usual location designated in the base deployment plan for each work center.	A3
IOI	(Letter of Instruction) Deployment instructions that are specifically related to the mission to be accomplished at the reception site.	A212 A247
LOI UTC ID & Deployment Order	(Letter of Instruction, Unit Type Code Identifier and Deployment Order) The letter of instruction augments the tasking to include requirements specific to this deployment. The identifier of the unit responsible for some of the deployment requirements. The Deployment Order triggers the official start of the deployment.	A21 A212 A212
LOI UTC ID Fragmented Information	(Letter of Instruction, Unit Type Code Identifier, Fragmented Information) Deployment instructions that are specifically related to the mission to be accomplished at the reception site. The identifier of the unit responsible for some of the deployment requirements. Information that signifies whether or not the deployment requires the full UTC or just a portion of the UTC defined items.	A212
LOI, Schedule & Destination	(Letter of Instruction, Schedule, and Destination) A part of the deployment tasking. The LOI expands and refines the requirements for the deployment beyond that contained in the TPFDD. The schedule specifies when the deploying resources are to arrive at the destination and the destination names the destination noint	A2 A24 A343
Manifest	The official listing of the cargo elements and personnel placed into the transporting aircraft.	A24 A244 A55
Manifest & Shortfalls	The list of personnel and increments placed on the transporting aircraft and the list of those personnel and items that could not be provided by the tasked unit.	A242
Manifest Recording Requirements	(Manifest Recording Requirements) The guidelines for developing and presenting the final manifest of personnel and cargo loaded onto the transporting aircraft.	A5133
Manifest, Shortfalls, & Troop Cmdr	(Manifest, Shortfalls, and Troop Commander) The manifest is a list of personnel and items included in a chalk. The shortfalls are a list of personnel and items assigned to a unit for deployment but cannot be provided by the unit. The troop commander is the person responsible for all the personnel in the chalk from base departure until their reaching their units at the reception site.	A2 A24 A242
Master HazMat Item List	(Master Hazardous Materials Item List) The total list of hazardous material within a base and the codes $\&$ handling requirements associated to each item.	A5133
Measured Increment	An increment ready of consideration for inclusion into the marshalling area. The consideration will indicate how well the increment meets the aircraft load limitations.	A54
Measurement Procedure	The techniques designated to accurately measure the size of an increment.	A5132
Measurement Procedures Medically Prepared Individual	The techniques designated to accurately measure the size of an increment. An individual processing for deployment who has all the medical shots required for the deployment.	A54 A53
Medications	The supply of shots required for the deployment and available for administering as necessary to the personnel being deployed.	A535 A53

Name	Definition	Reference
Mission Shortages or Overages	Items and personnel designated in the deployment tasking that either cannot be provided by the tasked unit or are not needed to be deployed to the reception site.	A21 A214
Mobility Bag Requirement	(Mobility Bag Requirement) The specified need for deploying personnel to take along one or more of their mobility bags.	A53
Mobility Bags	The standard bags being carried by a deploying individual upon arrival at the PDF.	A53
Name of Selected Authorization Person	The identification of the person selected to sign the hazardous material documentation.	A5133
Net Resource Deployment Requirements	(Net Resource Deployment Requirements) The list of personnel and equipment to be deployed after coordination with those available at the reception site.	A214
New Tag Requirement	(New Tag Requirement) The realization that a deploying individual requires a new dog tag.	A245
Next of Kin Insurance Beneficiary Information and Delivery Information	(Next of Kin, Insurance Beneficiary Information, and Delivery Information) The emergency information designated by an individual being deproped. Also, the instructions for where the information should be provided.	A535
Non-HazMat Increment	(Non-Hazardous Materials Increment) An increment containing no hazardous materials.	A244
Non-Rolling Stock Increment	An increment consisting of more than one item, usually packaged into a pallet.	A5132
Non-Unit Mixed Increments	An increment whose included items all belong to the same unit and to the same UTC.	A244
NSN	(National Stock Number) The unique identifier for a material item.	A22
Number for Incheck	The number of increments, identified during the deployment planning, for processing through the CDF.	A251
Number of Personnel/ Station	The number of persons, identified during the deployment planning, for processing through each station in the PDF.	A251
Number, Schedule & Skills for Augmentees	Information related to the augmentees selected to support the deployment. This information includes the number of each skill required and the time period at which each individual is to arrive and perform the duties.	A31
Off-Base Transport Capabilities	The conveyances not associated with the deploying base assigned to move deploying personnel and cargo among sites or to the reception site.	A4
Old ID Card	(Old Identification Card) A personnel identification card that must be replaced before the person's deployment process can be completed.	A53
On-Base Transport Availability	The various conveyances located in and accountable to the deploying base available to support the deployment.	A4
On-Base Transport Capabilities	The various conveyances available within the deploying base.	A4
On-Site Unit Schedule	The time period during which a unit will be located at a deployed site.	A211
Operation Driven Requirements	(Operation Driven Requirements) Deployment requirements based on the type of mission assigned to the deploying unit.	A215 A2154

Reference	A-1	A-2	A25 A251	A21	A211	A211	A22	A541	A541	A54	A541	A541	A23	A53	A23	A55		A5	A53	A5	60A	A245		A51		A55		
Definition	Deployed personnel and equipment positioned at the reception site and ready to begin their assigned mission.	(Ontime) Cholle Londonment Schedule of Treased) The Construction of the Construction o	developed to the chalk level of detail.	The length of time that one or more units must share at the reception site before their deployed resources can	be considered for possible sharing.	The set of units determined to have sufficient common time at the reception site so that their resources can be considered for sharing.	(Oversized Equipment) An item requiring the use of a specific type of aircraft for its movement during a deployment.	An increment determined to be packaged correctly for safe transport.	t An increment judged not to be prepared in accordance with the pallet packing standards.	An increment judged acceptable based on fact that the increment was prepared in accordance with the packing	standards. The increment is ready for final measurements.	A summarized list of the pallet packing standards to help ensure all portions of the standards are considered.	The rules established to build a cargo increment so that it can be transported safely in an aircraft.	The packing of the mobility bags for the personnel for one chalk into one or more pallets.	A list of items contained in an increment but do not completely fill the weight/space for the increment.	(Passenger Loading Record and Annotated Load Plan) The personnel loaded onto an aircraft and the list of	their names and information relating to them. The load plan annotated to denote each increment was loaded onto the chalk.	(Personnel Deployment Function Departure Time) The time that the individuals for a chalk will be moved as a	group to the transporting aircraft.	(Personnel Deployment Function Materials) The blank forms and tags filled out as an individual processes through the DDF	(Personnel Deployment Function Processing Requirements) The stations within the DDF that a specific	deploying individual will have to take as defined during the deployment planning.		(Personnel and Equipment Manifest) The name of each individual and item loaded into the transporting	aircraft along with the number of each item.	(Personnel and Cargo Identification & Placement) The defined placement of the personnel and cargo in the	transporting aircraft.	
Name	Operations Ready Resources	Ontimal Chalk I eval DSOF		Overlap Selection Criteria		Overlay Condition For Consideration	Oversized Equipment	Package Approved Increment	Package Unapproved Increment	Packing Accepted Increment		Packing Checklist	Pallèt Packing Standards	Palletized Mobility Bags	Partial Increment List	PAX Loading Record &	Annotated Load Plan	PDF Departure Time		PDF Materials	PDF Processing Requirements	• • • •	Personal Bags	Personnel & Equip Manifest		Personnel and Cargo Id &	Placement	

Name	Definition	Reference
Derconnel Manifant	The first of memory of the factor of the Action of the factor of the fac	
	The list of names of personnel to be loaded into the transporting aircraft.	A242
Personnel Manifest & PDF	(Personnel Manifest and Personnel Deployment Function Processing Requirements) The names of the	A5
Processing Requirements	individuals contained in a chalk. The specific processing steps an individual must go through before	A51
	deproyringin processing is complete.	A53
Personnel Manifest &	(Personnel Manifest and Processing Requirements, Increment Layout, Load Plan) The names of the	A5
Processing Requirements	individuals contained in a chalk. The specific processing steps an individual must go through before	A51
Increment Layout Load Plan	deployment processing is complete. The build up design for an increment and the build up design for the	
	increments inside the transporting aircraft.	
Personnel Rank Listing	The military rank possessed by each deploying individual.	A242
Personnel Tag	The indicator that an individual's personnel tag must be checked and updated as part of preparing the person for deployment.	A245
Placard Procedures	The manner in which an increment must be denoted to effectively relay the increment related information throughout the deployment and transportation process.	A54
Planned to Actual DSOE	(Planned to Actual Deployment Schedule of Events) The difference between the planned deployment status at a noint in time and the actual status of the deployment	A25
Freparation Status	(Preparation Status) A list of processing actions needed for the designated resources to complete the deployment process.	A24 A745
Dranamtion Statuc/T.m.		1111
rieparation status i ype	(rreparation status/1) ype) the preparation status for a specific type of resource.	A24
		A241
		A244
Preparation Checklist	A list of issues that must be addressed to ensure the complete deployability status for resources.	A242
Preparation Standards	The levels of operational capability that must be achieved to successfully complete the deployment process.	A0
		A5
		A51
		A513
		A5131
		A5133
		A55
Previous Deployment List	The list of personnel and cargo items taken on a previous deployment that is similar to the current deployment conditions.	A2154
Private Discussion Requested	A request by a deploying individual to have a one-on-one meeting with a chaplain before leaving on the deployment.	A245
Private Discussion Requirement	(Private Discussion Requirement) The need for the deploying individual to meet with the Chaplain at the PDF.	A245

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Name	Definition	Reference
t Personal & Mobility	The individuals poing through the denlovment process and the equinment (chemical har str.) creatified for	A 5
	each to take for the deployment. These personnel and equipment have been transported to the PDF.	A53
g Requirements	(Processing Requirements) Those steps of the deployment process that must be performed to accomplish the current deployment. For example, the number of the cargo increment required for processing through the CDF.	ASI
g Standards	The criteria used to develop the production schedule for individual chalks.	A25 A251
g Status	A collecting of information that defines the current level of completion for a deployment.	A25
Deficiency	A shortfall identified during the planning of the on-base transportation requirements.	A4
Airlift Requirements	(Proposed Airlift Requirements) These requirements identify the type and number of transporting aircraft needed to move the resources from the Wing/Base.	A22
Assignment	The mapping of specific conveyances to fill the transportation requirements as performed by the Decision Support System.	A4
Augmentee Fill List stitutes	The list of individuals assigned to perform each of the deployment support tasks, and a secondary individual for each support task in case the primary person cannot perform the task for whatever reason.	A31
Conveyance nt Schedule	Developed by the Decision Support System, this schedule details the assignment of conveyances to satisfy the on-base transportation requirements of the deployment.	A4
Increment Layout, Load Plan	The increment layout is a three-dimensional item buildup for an increment, the association of increments to a chalk, and the arrangement of the increments within the transporting aircraft.	A23
or Final Integrated	(Proposed/ Final Integrated Deployment Schedules of Events) The schedule developed to guide and control the Wing/Level deployment effort such that it ensures the effective, coordinated preparations of all units.	A25
Personnel or it	(Proposed Personnel/ Equipment) The list of unit personnel and equipment selected by the Decision Support System to satisfy the unit's assigned deployment requirements.	A24
Unit Deploying List	The listing of individuals and equipment identified as needed by the unit to satisfy its assigned deployment requirements. This list has been tailored by previous deployment experience.	A215 A2154
ions Criteria	The business rules established to select the personnel and equipment needed to satisfy deploying requirements.	A242
Resource	An individual or equipment that meets the requirements for the planned deployment.	A242
Status	The current ability for a unit to satisfy a UTC capability.	A2 A21
		A214
cedures	The steps taken to notify an individual of his selection to act as an augmentee for a deployment effort.	A31

Name	Definition	Reference
Rejected Increment	An increment determined to have something sufficiently wrong to prevent it from being loaded into the	A51
	transporting aircraft.	A513
		A5131
		A5132
rejected hem in	(Rejected Item Identifier) The identifier of the specific cargo item with something wrong so as to be unable to be loaded on an aircraft.	A51
Rejection Cause	The reason an equipment item was not selected to be a part of the deployment.	A5131
Religious Materials	A set of religious materials that can be provided to a person being deployed.	A535
Religious Materials & Support	Religious materials that are taken by the individual being deployed.	A535
Remaining Available Chalk Space	Positions into which personnel and equipment can be placed to fill the assigned transporting aircraft.	A23
Reporting Augmentees	The individuals selected to support the deployment and who are arriving at their assigned work center.	A3
Reporting Guidelines	The business rules specifying when a report is to be sent to the DCC to updated status of the deployment progress.	A541
Reports	Documents stating the status of the deployment effort.	A-2
		A-l
Kequested Airlift	The type and number of aircraft deemed necessary by the Wing/Base to move the deploying resources from	A2
	the base.	A22 A23
Requested Deployment Resources By Unit	The complete list of resource requirements tasked to a unit.	A212
Resource Availability	The availability and scheduled commitments of resources eligible for deployment.	A242
Resource Change Rqmt	(Resource Change Requirement) Personnel or cargo changes or shortfalls that must be resolved during the deployment.	A2 A24
Resource Deployment History	The listing of when, where, and how long a specific resource has been on deployments.	A242
Resource Preparation Records	(Resource Preparation Records) The listing of information reviewed by the Troop Commander to ensure that all chalk personnel completed the necessary preparation steps.	A242
Resource Qualifications	The qualifications of personnel and equipment that is directly applicable to determining their deployability.	A242
Resource Requirements	(Resource Requirements) The list of all personnel and equipment designated to satisfy the mission requirements.	A21
Responsibility Assignment	The unit having the responsibility to prepare and process an increment. This is especially important when the increment comprises items from multiple units.	A23

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Name	Definition	Reference
Responsibility Assignment Standard	The business rules that define which unit are selected as responsible when an increment comprises items from multiple units.	A23
Responsible Unit & Chalk Contents	A list of increments and items contained in a chalk and the one or more units owning those items and increments.	A2 A23
		A24 A25
Responsible Unit	The unit identified to build and ensure the increment arrives at the transporting aircraft in accordance with the DSOE.	A244
Rolling Stock Increment	An increment, usually consisting of one item that is not placed on a pallet for deployment.	A5132
Rolling Stock with CoB Information	(Rolling Stock With Center of Balance Information) A rolling stock increment, which has the center of balance information, attached.	A5132
Schedule	The timeline developed to guide and control a deployment effort at the Wing/Base level.	A242
Schedule Adjustments	The changes made to proposed schedule produced by the Decision Support System.	A4
Selected Cargo Increment	The increment selected to be included as part of a chalk.	A24 A244
Selected HazMat Controller	(Selected Hazardous Materials Controller) The authorized individual selected to sign the shipper's document for a hazardous material.	A5133
Selected Personnel	The individual selected to fill a personnel deployment requirement.	A24 A245
Selected Resource	The resource (personnel, cargo item, or equipment) selected to fill a tasked deployment requirement.	A242
Selected Unit Overlap Times	The designated time periods at a reception site that is common among the units deploying to that reception site.	A21 A211
Selection Adjustment	User changes made to the list of resources selected to satisfy deployment requirements.	A214 A24
Selection Changes	Adjustments made to the proposed augmentee list based on information known to the person responsible for establishing the list.	A242 A31
Service Center Materials	The blank forms, dog tags, and associated materials used to process deploying resources.	A0 A5
		<u>A51</u>
Setup Status	I he current readiness of the deployment capability at a wing/base.	A0 A3

Name	Definition	Reference
Shippers Document	(Shippers Document) The document that must be signed before a hazardous material can be transported by an organization and on any aircraft type.	A5133
Shot Record	An up to date listing of the person's medical shots.	A245
Shot Requirement	(Shot Requirement) The list of medical shots required before an individual can deploy to the designated reception site.	A245 A53
Signed Shippers Document	(Signed Shippers Document) The official approval that a hazardous material can be transported by a specific organization and on a specific aircraft type.	A5133
Site Survey & Deployment	(Site Survey & Deployment History Information) A grouping of information used to facilitate the tailoring of	A-0
	resources for a deproyment. The information includes resource and capabilities information about the reception site and the usage results from previous deployments for similar missions and recention sites.	A-1
		A2 A2
Site Survey Information	(Site Survey Information) Information regarding the capabilities of the reception site used to tailor a UTC.	A21
Site Survey Request	A request to identify the resources existing at the reception site that can support the deploying resources arrival at the reception site or the performance of the mission from the reception site.	A-1
Skills & Support Magnitude	The level of training necessary to prepare an augmentee for the deployment effort and the level of work anticipated for the augmentee.	A3
Specific Deployment Requirement	(Specific Deployment Requirement) The deployment tasking to a defined point in the world.	A-1
Specific Shot Records	The listing of medical shots required for the current deployment.	A24 A245
Standard In-Check Time	The time used to estimate the time required to process an increment through the CDF.	A251
Standard Increment Contents	A defined list of equipment and supplies normally grouped into an increment and defined within the standard UTC definition.	A23
Standard Item Sizes With Special Need Designations	The predefined dimensions for each deployable item and increment, along with designations for any restrictions or special requirements for its transport.	A22
Standard Item Weights	The recorded weight for each item designated for deployment.	A22
Standard Loading Time	The predefined time for loading each increment into a specific aircraft type.	A251
Standard Preparation Time	(Standard Preparation Time) The time defined for preparing the contents of a standard UTC for deployment.	A251
Standard Station I ime	I he time, used for planning purposes that a deploying individual requires at each workstation within the PDF.	A251
Standard Unit to Aircraft Movement Time	The time, used for planning purposes, required to move a cargo increment from the preparing unit to the aircraft into which it will be loaded.	A251

	Definition	Reference
(St ide	andard Unit Type Code Contents) The number and type of personnel and cargo referenced through the ntification of a UTC.	A21 A212
(Stan	dard Unit Type Code Data) All the data that fully defines a standard UTC.	A-1
(Stand standa be pla	lard Unit Type Code Pallets) The definition for each pallet designed to carry the cargo item listed in a rd UTC. These standard pallets are uniquely identified within a UTC along with the specific items to ced on the pallet and the building structure for the pallet.	A23
A list	of conditions, quantities, and values that form the foundation for estimating all aspects of a deployment.	A-0
		A-1
		A-2 A0
		A2 A21
		A215
		A23 A75
A call-	in to the DCC regarding the status of various aspects of the deployment process, such as the current	A0
and/or	ess capability of the wing base, the requested transportation, the work centers operations, personnel cargo changes or shortfalls, the conveyance status, etc.	A2 A25
(Short	: Tons) The weight of the resources (personnel and cargo) planned for deployment from a Wing/Base.	A22
(Supp deploy	ort Resource Information) The availability of the personnel and equipment needed to perform the yment.	A2 A25
The m	umber and type of personnel and equipment used to perform a defined level of deployment.	A25
A prec	lefined list of equipment and augmentees for supporting a baseline deployment level.	A0 A3
Tailo	red Air Borne Snecialty/ Oxfe I into the list of AESOC doffered in a standard UPC editor 1 to 2 to 2 to 2	A31
requir	red All Force opecially Code List) The list of AFSCS defined in a standard UTC adjusted to satisfy the ements for a deployment tasking.	A2 A24 A242
The d	eployment assignment provided to the Wing/Base/Unit identifying the deployment requirements.	A-0
		A0
		A2
		A21

Name	Definition	Reference
Unacceptance Cause	The reason that an increment was determined unsafe to load into a transporting aircraft. This is usually referred to as a frustrated increment.	A5131
Unaccepted Cargo Increment	A cargo increment determined not to meet the inspection criteria, thus making the increment unsafe to load onto a conveyance.	A513 A5131
Unaccepted Increment & Justification	(Unaccepted Increment and Justification) The identification of an increment deemed unfit for loading onto the transporting aircraft and the reasons for the problems.	A541
Undocumented HazMat Items	(Undocumented Hazardous Material Items) HazMat items included in an increment for which the necessary transporting documentation has not been prepared.	A541
Unit Accepted Increment	One or a grouping of deploying items packaged such that the unit believes the grouping can be loading into the transporting aircraft and safely transported to the reception site.	A51 A513
Unit Completed Personnel	Personnel who are ready to depart from a base to satisfy a specific deployment requirement.	A51
Unit Deployable Resources	The personnel and equipment that have been selected to satisfy a deployment requirement.	A0 A5 A51
Unit Deploying Schedule	The timeline developed by each unit to guide their deployment preparation such that their deploying resources will be ready in the timeline defined in the DSOE.	A215
Unit Deploying Schedule, Destination, and Mission Requirement	(Unit Deploying Schedule, Destination, & Mission Requirement) The schedule defining the steps that a unit must accomplish to complete the deployment and the timeline during which the tasks must be performed. The place to which the deploying unit is heading and the mission the unit is assigned.	A21 A215
Unit Deployment History	The history of previous deployments by a unit and their successes and problems.	A24 A244
Unit Determined Properties	The dimensions, weight, and center of balance for an increment as determined by the preparing unit.	A513 A5132
Unit ID and Deploying Schedule Mission Requirement	(Unit Identifier and Deploying Schedule, Mission Requirement) The unique identifier for a deploying unit, the deployment preparation timeline for that unit, the operational assignment to the unit once the unit reaches the reception site, and the supply support capabilities at the reception site.	A215
Unit On-Site Schedules	The employment and redeployment schedules for each unit currently at the reception site.	A211
Unit Prepared Cargo Elements	The individual items identified for deployment and prepared to the point where there is a stand-alone increment or ready for integration into an increment.	A51 A513
		A5131
Unit Processed Cargo	The increments developed by the assigned units, transported to the CDF, and ready to be processed.	A5
		A54 A541

Name	Definition	Reference
Unit Status Reporting Requirements	(Unit Status Reporting Requirements) The points during the deployment at which tasks compilations are to be delivered to the controlling organization.	A241
Units Included	The identifiers of the units providing items to be included in one increment.	A244
Unit's Prioritized & Tailored AFSC & Materials List	(Unit's Prioritized & Tailored Air Force Specialty Code & Materials List) To satisfy a mission requirement, the list of resources identified to be deployed by the unit and sequenced in order of immortance with respect to	A2 A71
	the order of their use at the reception site.	A215 A22
		A23
User Adjustments	Changes to the products produced by the Decision Support System and based on information known by the user but not contained the Decision Support System rule base.	A212 A23
User Overlap Adjustment Parameter Value	Changes to the criteria used when determining the overlap of two or more units at a reception site that supports the possibility for those units to share resources.	A211
User Selected Previous Deployment	A referenced deployment used to build the details for a currently assigned deployment requirement.	A2154
UTC & Airlift Carrying	(Unit Type Code and Airlift Carrying Capacity Standards) The UTC standards identify the specific type of	A2
Capacity Standards	resources contained in the definition of a UTC. The Airlift Carrying Capacity Standards define specific	A22
	transporting capabilities of an aircraft type. I nese standards include such parameters as the maximum carrying volume, weight, item size, runway length, etc.	
UTC Annotated List	(Unit Type Code Annotated List) The letter of instruction augments the tasking to include requirement	A212
	specific to this deployment. The annotated list is the standard or fragmented UTC marked up to include the requirements from the Letter of Instruction, or any MAJCOM requested tailoring.	
UTC Content List	(Unit Type Code Content List) The list of personnel and equipment qualifications needed to provide a specific mission requirement.	A212
UTC Deployment	(Unit Type Code Deployment Requirements Assigned to Unit) The identifier for a mission capability	A21
Requirements Assigned To Unit	provided to a unit, thus telling the unit what resources (personnel and equipment) they are to prepare for deployment and to actually deploy.	A214 A215
UTC Fragmented ID	(Unit Type Code Fragmentation Identifier) An indicator within the deployment tasking that indicates a tasked UTC is for only a portion of the UTC capability rather than the full or standard UTC.	A212
UTCID	(Unit Type Code Identifier) In the strict sense, this is equivalent to the name UTC. However, since the term	A212
	UIC is used to represent the identifier for both a mission capability and the materials contents for that capability, the identifier is added here to distinctly identify a mission capability.	
Valid Certifications	The completed documents verifying that a hazardous material is approved to be transported as part of a chalk.	A541
Variation Limits	The point at which the difference between the planned and actual deployment schedules are set to trigger an adjustment to the performance of the process.	A25

An individual whose qualifications hi	Definition ave been checked to ensure they satisfy the requirements for deployment.	Reference A53
esource information acrement	(Verified Resource Information) Current maintenance and shot records for equipment and personnel eligible for deployment. A cargo increment that has been officially weighed on its way the transporting aircraft.	A241 A5132
cedure	The techniques used to accurately weigh a cargo increment.	A5132
f Attorney, & ctions	A Will and/or Power of Attorney signed by a person being deployed and the instructions for who should receive copies of these documents and the addresses of these individuals.	A535
Completion Status	A deployment function that is fully equipped, has the supporting supplies, and is ready to do its part of the deployment process.	A3
Equipment	(Work Center Equipment) The typewriters, desks, chairs, etc. used to support the operation of a work center.	A3
kesources	The materials needed to prepare and support the deployment process.	A0 A3
Supplies	The materials needed to prepare and support the deployment process within the work centers.	A3
	A specific site that has been set up and manned to perform a specific operation or step within the deployment process.	A0 A3
nment	The information received and evaluated to determine the requirements for actual and anticipated deployments.	A-2
		A-1

Role	Description
Airlift Computation Module	The software module relates the transportation needs of the deploying resources to the transporting capabilities of aircraft
	types.
Augmentee Control Module	The information system providing guidance to the augmentees as they proceed to set up the deployment work centers.
Augmentee Selection Module	A software module that tracks the capability and availability status of augments and, based on the status information, helps
	identify the specific augmentees needed to support a deployment effort.
Augmentee Training Module	The software system possessing two major capabilities. First, it tracks the training and skills level maintained by each
	augmentee. This training includes training received through classroom, exercise, and real-world deployment training. Second it movides personalized computerized training accessible within the work schedule of the individual
Augmentees	Individuals assigned to support the performance of the deployment process but not selected to deploy.
Battle Staff	The commanding personnel at the Wing/Base-level responsible for specifying how the deployment process will proceed, the
	base facilities assigned, and who will be involved in the deployment.
Cargo Buildup Team	The group of individuals responsible for placing deploying items together into an increment such that it is safe to load and transport on the designated aircraft.
CDF Personnel	(Cargo Deployment Function Personnel) The augmentee individuals who position themselves in the CDF to verify the accuracy of each increment prior to loading.
Chaplain	A augmentee responsible for providing spiritual support to those individuals processing for deployment.
Cmdr Selection Tool	(Commander Selection Tool) A software module that evaluates the personnel assigned to each chalk and identifies, based
	of rank, the individual responsible for the chalk personnel from the time of leaving the deploying base until their arrival at the recention site
Dedicate Aircraft K-Loader	Aircraft loading equipment placed against the loading door of the aircraft throughout the loading process and used to
	transfer increments from ground level to the aircraft loading level.
Deployment Control Module	An information system comprised of submodules that control the overall planning of the deployment effort.
Deployment Modules	The information system comprised of submodules that control the overall deployment execution.
Deployment Resource Module	The information system that selects a proposed list of items and personnel to fill the determined deployment requirements.
Deployment Requirements Module	(Deployment Requirements Module) The overriding module that supports the tailoring of UTCs to more effectively satisfies
	the deployment requirements.
DPViz	(Deployment Process Visibility Tool) An automated tool that compares, evaluates, and presents the current status of the
	deployment process to the planned process schedule.
DSOE Module	(Deployment Schedule of Events Module) The information system that collects and organizes the information necessary to
	develop an effective schedule for the base-level deployment process.

LOG-AID TO-BE MECHANISM GLOSSARY

IDO NUIC	Description
Increment Analysis Module	A software tool that matches items to be included in an
Increment Buildup Module	The information system that computes and presents the suggested placement of items so as to form an efficient safe pallets
1	Once approved, the module presents a 3-D picture of that design to the increment buildup team.
Increment Documentation Module	The software module that ensures all the necessary documentation, especially the hazardous materials documentation, is complete for a specific increment
Increment Measurement Module	A combination of software and hardware that measures and records the size and weight of an increment
Increment Module	That part of the passive status collection capability that records and tracks the build up effectiveness of each increment.
Installation Commander Battlestaff	The group of Base-Level personnel responsible for providing overall guidance to the deployment and interfacing with the responsible MAJCOM.
Load Master	The individual assigned to a transporting aircraft and with the responsibility to ensure his aircraft is loaded correctly with increments prepared to meet all sofety sometrizes.
Load Module	The information system that presents the aircraft load plan for final approval and onides the actual loading of the aircraft
Load Plan Module	The information support system that translates the list of resources identified for deployment into a set of efficiently packed
Load Planner	The individual who uses the I and Plan Modula to design the increment and signard heithin.
Load Team	The aroun of individuals reasonable for accise the second of the finite field and aircraft outloup.
	the group of intrividuals responsible for informing the personnel and increments into the transporting aircraft and positioning them for safe transport.
Loading Equipment	The equipment needed to move the increments and deploying personnel from the ground into the transporting aircraft.
Local Transport Assignment User Interface Module	The information system presents a proposed conveyance assignment for review and approval to the transportation controller.
Local Transport User Interface Module	The information system presenting a proposed conveyance assignment schedule to the base transportation center for review and approval.
Log Plan	(Logistics Plan) The list of all resources identified for deployment from a base and the units responsible for deploying each item.
Log Planner	(Logistics Planner) The personnel responsible for the overall tailoring of resources for the base units assigned for deployment.
Medical Personnel	Those responsible for administering the medication personnel to satisfy their deployment requirements
On-Base Transportation	The trucks, forklifts, K-Loaders, etc. available on base to support the movement of resources during a denloyment
On-Base Transportation Control	The information system establishing an operational movement schedule and controls the assignment of transportation
On Site Completion Medule	
Out-Site Correlation Module Overlan Selection/ Modification	A part of the USOE development that integrates the deployment schedules for individual units into the final DSOE.
Module	A sourware toor, which selects more units with deployment, schedules that overlap sufficiently to allow for resource sharing and the interfacing with the users for verification of those selections.

Role	Description
Pallet Dollies	A wheel vehicle on which increments are build and providing the capability to move those increments from the generating units to the transporting aircraft in and efficient manner with minimal supporting equipment.
PDF Personnel	(Personnel Deployment Function Personnel) The augmentee individuals who position themselves in the PDF to verify the accuracy of each person prior to loading.
PDF Support Team	(Personnel Deployment Function Support Team) The individual assigned to perform the PFD tasks during a deployment effort.
Personnel	Individuals responsible for preparing unit resources for deployment.
Personnel and Systems	The general terminology used to identify and the individuals, information systems, and equipment used to accomplish the base-level deployment process.
Personnel Module	The software system that records specific deployment activities requested by the deploying individual prior to deployment.
Personnel Resources & Systems	The general terminology used to identify and the individuals, information systems, and equipment used to accomplish the base-level deployment process.
Personnel Status Check Module	A software module records the actions needed to be accomplished by a specific deploying individual to be fully prepared
	for the deployment. This system also reviews all deploying personnel records to determine if all their deployment requirements are satisfied.
Resource Listing Tool	A software module that tracts all resources (personnel and equipment) associated to a UTC.
Resource Preparation Module	A information system module comprised of a set of submodules, which supports the identification of resources for
	deployment and continues to direct and control the preparation and movement of the resources throughout the base-level deployment process.
Resource Selection Module	A software module that accepts the equipment requirements for deployment and selects the specific equipment to satisfy the deployment requirements. The selection considers such factors as current maintenance status and future maintenance
Resource Tracking Module	The software module that tracks all the deployment related information for the deploying resources (both personnel and
	equipment).
Schedule Overlap Identification Module	A software module that tracks the deployment schedules by unit and UTC at reception sites. Using this insight, the module identifies those units and UTCs that could potential share deployed resources.
Status Collection Module	The software module designed to passively collect progress information related to the base-level deployment.
STEP	(Survey Tool for Employment Planning) The software tool used to facilitate the site survey process and to transfer the resulting site survey information to the units as necessary.
TMO	(Transportation Management Office) The base-level organization responsible for controlling the movement resources on the base.
Transport Coordination Module	A software module that helps organize the use of resources within a base for effectively moving deploying resources from the time of unit preparation until they are loaded into the transporting aircraft.
Transport Estimating Module	A software system capable of translating the resources identified for deployment into the number and type of aircraft required to transport those resources.

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Role	Description
Transport Schedule Module	A software system providing the capability to define the arrival and departure schedules for a base assigned deployment requirements.
Transportation	The vehicles used to move deploying resources within the base.
MQU	(Unit Deployment Manager) The individual having total authority and responsibility to deploy the appropriate unit
Unit Correlation Tool	Tesources so as to satusty the requirements of a deptoyment assignment. The overriding module that compares the deptoyment and employment schedules of units forming the basis for determining
	when deploying resources can be shared among units.
Unit Personnel	Individuals assigned to a unit and available for deployment.
Units Reception Site	The location to which deploying units will be positions through the deployment.
User Verification Module	A software system that interacts with the user so as to allow the user to review proposed decisions made by the LOG-AID
	Decision Support System and to change those proposed decisions as necessary.
UTC-DT	(Unit Type Code - Development & Tailoring) A software tool that interfaces with the individual responsible for specifying
	the items for deployment contained within a standard UTC. UTC-DT provides the user support capability to design new
	UTCs and to tailor standard UTC to effectively satisfy the requirements of an assigned deployment mission.
UTC-DT Extended	(Unit Type Code - Development & Tailoring Extended) A portion of UTC-DT that develops tailoring recommendations
	based on factors such as the reception site environmental conditions.
Work Center Personnel	Augmentees assigned to staff the various stations in the CDF and PDF as necessary
WRM Viz	(War Reserve Material Visibility) A software tool used to track the status of all WRM located at various sites.

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APPENDIX G

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LOG-AID TO-BE DATA MODEL AND GLOSSARY

LOG-AID TO-BE DATA MODEL

The LOG-AID To-Be Data Model (DM) is a logical representation of the information used by and produced by the functions within the wing-level deployment process and documents the relationship between data elements.

This appendix contains the IDEF1X graphical representation of the model. Figure G-1 contains a quick reference to IDEF1X notation. The complete model is presented in a single page. This contains all the entities with their associated attributes and the relationships between them.

entity were examined to evaluate what type of information was represented. Then entities with similar types of information were grouped. By examining the classes of In order to facilitate understanding and review of the DM, the entities are subdivided into broad classes of information types called subject areas. The attributes in each information represented, four major subject areas emerged: PLANS, CAPABILITY, RESOURCES, and ACTION.

The entities that represent the key data in the subject area and the entities that are related to these entities are displayed in each subject area. Because the entities that are related to the subject area are included on a diagram, an entity may exist in more than one subject area. Table G-1 contains a list of the subject areas diagrams on which the entities appear. A narrative that provides a general discussion of the subject area is presented on the page facing each subject area diagram.



Table G-1. Entity vs. Subject Area Matrix

Entity Name	Subject Area Name
ACTION	ACTION
ACTION-ORG-ROLE	ACTION
ACTION-PERSON-ROLE	ACTION
ACTION-PERSON-ROLE	RESOURCES
CAPABILITY	CAPABILITY
CAPABILITY	PLAN
CAPABILITY-ORG-ROLE	CAPABILITY
CAPABILITY-ORG-ROLE	PLAN
CARGO-CATEGORY	RESOURCES
CARGO-INCREMENT	RESOURCES
DIMENSIONS	RESOURCES
FORCE-RQMT	PLAN
GUIDANCE	ACTION
HAZMAT	RESOURCES
INCREMENT-CHALK	ACTION
INCREMENT-CHALK	RESOURCES
ITEM	CAPABILITY
ITEM	RESOURCES
LOAD-PLAN	ACTION
LOAD-PLAN	RESOURCES
LOC-ROLE	PLAN
LOCATION	PLAN
LOCATION	RESOURCES
LOCATION-CONDITION	PLAN
LOI	PLAN
MANIFEST	ACTION
MANIFEST	RESOURCES
MATERIEL	RESOURCES
NSN	CAPABILITY
- NSN	RESOURCES
ORG-ROLE	PLAN
ORGANIZATION	PLAN
ORGANIZATION	RESOURCES
PAX-CHALK	ACTION

Entity Name	Subject Area Name
PAX-CHALK	RESOLINCES
PERSON	RESOURCES
PERSON-ROLE	RESOURCES
PERSON-SKILL	RESOURCES
PLAN	PLAN
PLAN-LOC-ROLE	PLAN
PLAN-ORG-ROLE	PLAN
PLAN-SUPPORT-RQMT	PLAN
RESOURCE-CONDITION	RESOURCES
RESOURCE-ACTIVITY	RESOURCES
RESOURCES	RESOURCES
SCHEDULE	ACTION
SCHEDULE-ACTION	ACTION
SKILL	CAPABILITY
SKILL	RESOURCES
SPECIAL-HANDLING	RESOURCES
SUFFIX-ITEM	CAPABILITY
SUFFLX-ITEM	RESOURCES
SUPPORT-RQMT-	PLAN
RESOURCES	
SUPPORT-RQMT-	RESOURCES
RESOURCES	
TASK-ORG-ROLE	PLAN
TASKED-CARGO	CAPABILITY
TASKED-CARGO	PLAN
TASKED-PERSONNEL	CAPABILITY
TASKED-PERSONNEL	PLAN
TASKING	PLAN
TASKING-HISTORY	CAPABILITY
TASKING-HISTORY	PLAN
TASKING-LOC-ROLE	PLAN
TRANSPORT	ACTION

Table G-1. Entity vs. Subject Area Matrix (cont'd)

Entity Name	Subject Area Name
TRANSPORT	RESOURCES
UTC-CARGO	CAPABILITY
UTC-CARGO	PLAN
UTC-INCREMENTS	CAPABILITY
UTC-PERSONNEL	CAPABILITY
UTC-PERSONNEL	PLAN
UTC-SKILL	CAPABILITY

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PLANS

The PLANS subject area contains those data elements that represent the operations for deploying units to prepare for movement or increase their deployability posture.

of the theater of operation. The Letter of Instructions (LOI) details any specific instructions unique to the deployment and employment of the forces. Each unit line number (ULN) in the TASKING references a CAPABILITY. The TASKED CARGO and TASKED PERSONNEL may identify variations in the tasking from the standard UTC CAPABILITY. The variations may be due to environmental conditions idéntified in the LOCATION CONDITION, re-supply capabilities of the theater LOCATION, any fragmenting or tailoring requested by the MAJCOM, the TASKING HISTORY of previous similar deployments, or tailoring adjustments The PLAN details the conduct of military operations. The PLAN identifies the FORCE RQMTs needed to fulfill the mission objectives. The forces and supplies needed to accomplish those objectives are detailed in the TASKING. The TASKING also details the movement schedule of the forces and supplies to the LOCATION based on intra/inter-base units with TASKINGS to the same LOCATION. Each CAPABILITY contains detail about personnel and cargo needed to provide the UTC mission capability (MISCAP). Each base develops a mobility plan contained in PLAN SUPPORT RQMT, which details how the base should operate if they were tasked to support the plan. The SUPPORT RQMT RESOURCES identify all the base resources that will be available to support the deployment identified in the PLAN.

specific role the LOCATION plays within the PLAN. For example, a PLAN may identify a base as a forward operating location or a port of embarkation. The Each PLAN references many LOCATIONs in its operations. The LOC ROLE defines all the roles a location may assume. The PLAN LOC ROLE identifies the LOCATION CONDITION provides detail about each specific LOCATION, such as the information identified in a base support plan or by an ADVON team. Each PLAN also references many ORGANIZATIONs in its operations. The ORG ROLE defines all the roles an ORGANIZATION can assume. The role identified for an ORGANIZATION specified in a PLAN is depicted in the PLAN ORG ROLE. For example, the PLAN may identify a specific ORGANIZATION to play the ORG ROLE of a lead or follow-on unit. The role identified for an ORGANIZATION specified in a TASKING is depicted in the TASK ORG ROLE. For example, the TASKING may identify a specific ORGANIZATION to play the ORG ROLE of a host or tenant unit. The role identified for an ORGANIZATION assigned a specific UTC CAPABILITY is depicted in the CAPABILITY ORG ROLE. For example, the ORGANIZATION may play an ORG ROLE of pilot unit for a specific CAPABILITY.

LOC ROLE identifies the specific role the LOCATION may play in the TASKING. For example, the TASKING may identify a specific LOCATION to play the LOC Each TASKING may reference many LOCATIONS in its scheduling and sequencing. The LOC ROLE defines all the roles a location may assume. The TASKING ROLE of a port of embarkation or port of debarkation.



PLANS Subject Area

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CAPABILITY

The CAPABILITY subject area contains those data elements that represent a specific type of mission capability.

ORGANIZATIONs assume different roles for the UTC CAPABILITY, which are identified in the CAPABILITY ORG ROLE. For example, an ORGANIZATION may assume the ORG ROLE of a lead unit, follow-on-unit, pilot unit, etc. The ORGANIZATION's ability to provide all or part of the defined CAPABILITY is The CAPABILITY identifies a unit type code (UTC), with a specific mission capability (MISCAP) and is detailed by the UTC CARGO and UTC PERSONNEL. identified in the readiness level. When tasked to provide a CAPABILITY, typically the standard is tailored to mission, reception site conditions, environmental conditions, and other tasked units. This is depicted in the TASKED CARGO and TASKED PERSONNEL. The history of deployments for the CAPABILITY is depicted in the TASKING HISTORY. This contains information regarding the rationale for tailoring, if a resource is/was shortfalled, and the use of the resource during employment missions.

method for organizing material for deployment. The UTC INCREMENT provides a means to establish a sequence for movements, a reference point for tailoring, and a standardization among units with like weapon systems. The UTC INCREMENT may contain one or more ITEMS, which are identified in supply through a national stock number (NSN). An ITEM may contain SUFFIX ITEMS, which are also identified in supply through an NSN. For example, a toolbox, which has an NSN, may The equipment, supplies, and spare parts considered UTC CARGO are detailed into separate UTC INCREMENTs. The UTC INCREMENT serves as the primary be an ITEM, but it may also contain tools, which are considered SUFFIX ITEMS. The number of personnel required for a CAPABILITY is documented in the UTC PERSONNEL. This list purely consists of the number of people in the UTC CAPABILITY. The personnel requirements are then broken down by the number of people with a specific Air Force Specialty Code (AFSC) and a specific SKILL documented in UTC SKILL. CAPABILITY Subject Area

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RESOURCES

The RESOURCES subject area contains all those data elements that represent the resources that are deployed or support the deployment effort. The resources include all a many of the manual supplies, spare parts and people.

requirements, medical requirements, etc. All information regarding activities that are performed to RESOURCES is documented in RESOURCE ACTIVITY. This Every RESOURCE belongs to an ORGANIZATION, such as a unit, base supply, transportation, etc., and can be found at a specific LOCATION. Each RESOURCE has a RESOURCE CONDITION, which documents its status and requirements. This may include information such as maintenance requirements, training may include information regarding a maintenance action, a training class, a medical condition, an update to financial data, etc. Each RESOURCE also has DIMENSIONS associated with it. If the RESOURCE is identified to support the base deployment effort, then it is identified in the SUPPORT ROMT RESOURCES.

RESOURCES are categorized into MATERIEL and PERSON.

if necessary For transportation purposes in a deployment, items are grouped together into an INCREMENT CHALK. The MATERIEL contained on each INCREMENT CHALK is documented in the CARGO INCREMENT. The MANIFEST contains a list of all the CARGO INCREMENTs in the INCREMENT Each piece of MATERIEL has an NSN identified with it, A HAZMAT identifier if it is considered hazardous material, and any SPECIAL HANDLING requirements, CHALK. The LOAD PLAN details the most efficient and safest building and layout of the INCREMENT CHALK. Each INCREMENT CHALK has a CARGO CATEGORY CODE associated with it, which identifies shipping requirements such as its type, size and shipping container restrictions. Each INCREMENT CHALK may also have a HAZMAT identifier if it contains hazardous material, and any SPECIAL HANDLING requirements, if necessary.

in PERSON ROLE. For each ACTION, a PERSON may assume different PERSON ROLEs. These are documented in the ACTION PERSON ROLE. For example, a Each PERSON may have several SKILLs within their ability, which are documented in PERSON SKILL. The different roles a PERSON may perform are documented PERSON may be assigned the PERSON ROLE of NCOIC for the ACTION of CDF In-Check. The TRANSPORT could be the on-base transportation that moves the resources from one location on the base to another location. It could also be the conveyance that moves the base resources off the base to another location. When the TRANSPORT is the chalk that moves the resources off the base, the MANIFEST documents all the passengers (PAX CHALK) and cargo (INCREMENT CHALK). The LOAD PLAN documents how all the resources will be placed on the TRANSPORT.




ACTION

The ACTION subject area contains those data elements that represent the different activities, which occur throughout the deployment process.

ACTION defines the milestones and timing requirements of the activity. The ACTION ORG ROLE identifies the specific ORGANIZATION and the role they play in the ACTION of deployment. For example, a unit may be identified to perform the ORG ROLE of transportation in the ACTION. The ACTION PERSON ROLE identifies the specific PERSON and the role they must play in the ACTION. For example, a PERSON may be assigned the PERSON ROLE of UDM in an ACTION of deployment. GUIDANCE is used to regulate both ACTIONs and the development of SCHEDULES. GUIDANCE contains information on how to document something, how to pack something, how long something should take, the resource requirements that should be consumed, the conditions that must be established for implementation, the criteria for certain decision making processes, etc.

off base. When the TRANSPORT is a conveyance taking the deployed resources off the base, a LOAD PLAN and MANIFEST are developed. The LOAD PLAN details the layout for each INCREMENT CHALK on the TRANSPORT, and the MANIFEST lists all the cargo (INCREMENT CHALK) and all the passengers (PAX The SCHEDULE ACTION documents each ACTION that occurs within the SCHEDULE. A SCHEDULE is developed for each TRANSPORT whether on base or CHALK) on the transport.





LOG-AID TO-BE DATA GLOSSARY

This appendix contains the LOG-AID Data Glossary for the To-Be Data Model (DM). The glossary is divided into three columns: (1) the name, which is the DM entity or attribute name, (2) the definition of the item, and (3) the DM reference. The names of the entities are in all capitals. The names of the attributes are in all lowercase with lead caps. Definitions may include comments further explaining the item and providing examples. The names of associative entities are expanded by naming each of the entities that are being associated with an "x" between them to denote the intersection of these entities.

INALME ACTIONI	DEFINITION	REFERENCE
ACTION	All activities, both those supported by automated systems and those performed manually involved in the deallowment arrows	Entity
Action ID	The action identifier is the unique identifier for a record of a suscific action	
Action Type	The type and name of a nerformed action	
Start Time Scheduled	The time at which the action is scheduled to start	Attribute of ACIION
End Time Scheduled	The time at which the action is scheduled to be completed	Attribute of ACTION
Duration Time Scheduled	The length of time in which the entire action should come	Auribute of ACTION
Completion Time Actual	The actual time the action was completed	Attribute of ACTION
Action Status	The status of the action including any problems, and connecting including	Attribute of ACTION
ACTION-ORG-ROLE	(ACTION X ORGANIZATION V POI F) An according and	Attribute of ACTION
	the organization, and the organizational role the organization has in the action.	Fauty
Action Organizational Role ID	The unique identifier for a record of an organizational role in an action.	Attribute of ACTION-ORG-ROI F
ACTION-PERSON-ROLE	(ACTION x PERSON x ROLE) An association among an action, the person,	Entity
Action Dames B -1- UN	and the role the person has in the action.	
	The unique identifier for a record of a person, and the role the person plays in	Attribute of ACTION-PERSON-
CAPARII ITV		ROLE
	A mission capability that can be provided by a specific force package of defined technical continuities of the force package of	Entity
	equipment, with the sustainability of those forces units, weapon systems, and	
UTC Code	A five character alphanimeric decimator that with the second systems.	
	capability.	Attribute of CAPABILITY
UTC Title	The unit type code title.	
UTC MISCAP	The mission capability defines the type and amount of workhood the form is	Aurioute of CAPABILITY
	capable of accomplishing.	Auribure of CAPABILITY
UTC Description	Pertinent information such as the type of base where commanders will deploy,	Attribute of CAPABILITY
	the unit's functional activities, and other augmentation requirements, including type and amount necessary to conduct activities and another the second seco	
CAPABILITY-ORGANIZATION-ROLE	(CAPABILITY X ORGANIZATION X ROLF) An according many of	Datit.
	capability, an organization, and the role the organization plays in the	Ellury
	capability.	
,	COMMENTS: For example, this could identify an organization and a UTC,	
Canability Oroanization Role ID	The unit of Saultzation plays une role of the pilot unit in the UTC.	
opposity of guillation ivoid ID	the unique toentifier for a record of an organization and the role the organization plays in a capability.	Attribute of CAPABILITY-ORG- ROLF
Readiness Level	The ability of the forces, units, and weapon systems to deliver the designated	Attribute of CAPABILITY-ORG-
	capacituty at a specific point in time.	ROLE

NAME	DEFINITION	REFERENCE
Preparation Time	The length of time in which the organization requires to be at the readiness level they stated for the canability.	Attribute of CAPABILITY-ORG- ROLE
Capability Status Detail	Any further detail on the status of the organization and its ability to provide the capability.	Attribute of CAPABILITY-ORG- ROLE
CARGO-CATEGORY	Descriptive codes assigned to cargo according to their characteristics and properties.	Entity
Cargo Type Code (charl)	A code referencing the type of cargo, such as HazMat, chemical, ammunition, etc.	Attribute of CARGO-CATEGORY
Cargo Size Code (char2)	A code referencing the size of the cargo, such as bulk, oversized, outsized, non-air transportable, etc.	Attribute of CARGO-CATEGORY
Cargo Container Code (char3)	A code referencing the container requirements such as organic vehicles, container 20 ft and 20 STONS or less, non containerable, etc.	Attribute of CARGO-CATEGORY
Cargo Type Description	A textual description of the type of cargo, such as HazMat, chemical, ammunition, etc.	Attribute of CARGO-CATEGORY
Cargo Size Description	A textual description of the size of the cargo, such as bulk, oversized, outsized, non-air transportable, etc.	Attribute of CARGO-CATEGORY
Cargo Container Description	A textual description of the container requirements such as organic vehicles, container 20 ft and 20 STONS or less, non containerable, etc.	Attribute of CARGO-CATEGORY
CARGO-INCREMENT	The deployable material that is packaged into an increment and will be transported to the reception site on the designated chalk.	Entity
Cargo Increment ID	The unique identifier of a record of cargo that will be included in the increment.	Attribute of CARGO-INCREMENT
DIMENSIONS	Specific parameters about resources.	Entity
Dimension ID	A unique identifier for the dimension record.	Attribute of DIMENSIONS
Height	The height of the resource.	Attribute of DIMENSIONS
Weight	The weight of the resource.	Attribute of DIMENSIONS
Length	The length of the resource.	Attribute of DIMENSIONS
Width	The width of the resource.	Attribute of DIMENSIONS
Center of Balance	The center of balance of the resource.	Attribute of DIMENSIONS
Center of Gravity	The center of gravity of the resource.	Attribute of DIMENSIONS
FORCE-RQMT	The force requirement is a specific mission that must be accomplished.	Entity
Force Requirement ID	The unique identifier of a record of a force requirement.	Attribute of FORCE-RQMT
Force Requirement Name	The name of the mission that must be accomplished by the force requirement.	Attribute of FORCE-RQMT
Force Requirements Definition	A description of the force requirement and the mission that must be accomplished.	Attribute of FORCE-RQMT

NAME	N. B. B. M. F. M. B.	
GUIDANCE		REFERENCE
CULLANCE	The rules, laws, procedures, and technical assistance that govern and aid	Entity
	defense-related processes, including the deployment process. COMMENTS: For example, military regulations and instructions	
Guidance ID	The guidance identifier is the unique identifier of a record of guidance	Attribute of GUD ANCE
Guidance Name	The name of the guidance material.	Attribute of CUIDANCE
Guidance Format	The format of the guidance material.	Attribute of CULDANCE
Guidance Text	Textual information that is used in the midance material	
	COMMENT: For example, how to document Hazmat, how to compute the	Autibute of GUIDANCE
	center of balance, conditions for replacement of ID card, etc.	
Guidance Date	The date of the latest release of the guidance material.	Attribute of GUIDANCE
Guidance Duration	Estimated duration times for specific actions.	Attribute of GUIDANCE
	COMMENTS: For example, standard set-up times for a work center, time for	
1114 221 4 4 22	a unit to prepare cargo, standard ground time for an aircraft, etc.	
HAZMAI	Information regarding specific cargo that is considered hazardous material.	Entity
	COMMENT: For example, flammable liquids and solids, oxidizing materials,	
Ures Mat ID	COLTOSIVE Materials, radioactive material, etc.	
	The unique identifier for a record of hazardous material type information.	Attribute of HAZMAT
Haziyiat Code	The specific code that correlates the material with the type of hazard it contains or is consisted of	Attribute of HAZMAT
HazMat Description	A description of the kind of hazardone metaniot	
HarMat Radiirements		Attribute of HAZMAT
	A description of the requirements for handling the hazardous material and the cautions associated with its relationshins to other materials	Attribute of HAZMAT
INCREMENT-CHALK	The association between CAPGO INCOENTER - a scrimmer -	
	contains a list of the increments that are identified in the scrittery in	Entity
	shipped on the chalk.	
TCN	The Transportation Control Number is assigned to a specific increment to be	Attribute of INCREMENT-CHALK
	used in tracking by the transportation community.	
Inc Chalk Status	The status of the increment in its building, processing, and transporting,	Attribute of INCREMENT-CHALK
Inc Chalk Comments	More detailed information about the status including rationale for a shortfall,	Attribute of INCREMENT-CHALK
• • • • •	rejection, frustration, etc.	
In-Check Requirement Code	Codes that identify how that cargo should be processed through the work centers.	Attribute of INCREMENT-CHALK
ITEM	An item is the next level of breakdown of what is stored on an increment For	Ratity
	instance, an increment may contain 10 items. A piece of rolling stock can be	
	considered an increment and an item. Therefore, that increment contains one item.	
Item ID	The unique identifier for a record of an item	A theilente of TTFA 6
		AUTIONIC OF LEAN

NAME	DEFINITION	REFERENCE
Item Nomenclature	Textual information about the item.	Attribute of ITEM
Item Ouantity	The number of the same items that are in the same increment.	Attribute of ITEM
LOAD-PLAN	A detailed description of the layout of the conveyance or an increment, where	Entity
	each increment should be positioned on the conveyance, and where each item	
	should be positioned on an increment	
Load Plan ID	The unique identifier of a record of a load plan.	Attribute of LOAD-PLAN
Load Plan Version #	The version number of the specific load plan.	Attribute of LOAD-PLAN
Layout	The textual and graphic description of the packaging, building, and loading of the increment or chalk.	Attribute of LOAD-PLAN
LOC-ROLE	(LOCATION × ROLE) The association between a location and the roles that location may play	Entity
Loc Role ID	The location role identifier is the unique identifier for a record of location role	Attribute of LOC-ROLE
Loc Role Detail	Textual information recording the role the location may assume.	Attribute of LOC-ROLE
LOCATION	A specific physical site at which organizations reside and assets are stored.	Entity
Area	The area on the complex in which the location can be found.	Attribute of LOCATION
Building	The building number or name of the location.	Attribute of LOCATION
Room-Facility	The room number or facility name of the location.	Attribute of LOCATION
Country Code	The code identifying the country in which the location can be found.	Attribute of LOCATION
LOCATION-CONDITION	Information regarding the status of the location. This is where information from the BSP and ADVON team could be found.	Entity
Condition Type	The type of condition for the report. COMMENTS: For example, maps, civil engineering information, services available, medical capabilities, WRM, munitions, security, contracting, weather etc.	Attribute of LOCATION CONDITION
Condition Description	Detailed data about the condition type.	Attribute of LOCATION CONDITION
Condition Status	Any status relevant to the condition type.	Attribute of LOCATION CONDITION
	The Letter of Instruction provides deployment instructions that are specifically related to the mission to be accomplished at the reception site. COMMENTS: For example, the LOI may require the personnel to carry their weapons at their side during transport, so they are immediately available upon arrival at the recention location.	Entity
LOID	The unique identifier of a record of a LOI.	Attribute of LOI
LOI Detail	Detailed information about the instructions.	Attribute of LOI

NAME	DEFINITION	DEEDENCE
MANIFEST	The manifest contains a list of the increments and passengers on the chalk, along with the load plan of the chalk or a list of items on an increment	Entity
Manifest ID	The unique identifier of a record of a manifest.	Attribute of MANIFEST
Manifest Version #	The version number of the manifest for identifying changes and maintaining configuration management.	Attribute of MANIFEST
MATERIEL	Every piece of equipment, supplies, and spare parts.	Category Entity of RESOURCES
Materiel Type	The category of material. COMMENTS: For example rolling stock	Attribute of MATERIEL
NSN	The National Stock Number is the catalogued identifier for an item of	Entity
NGN NG	The marked matical start and starts.	
NCN TURE	The time or original stock number,	Attribute of NSN
NSN Nomenclature	The name assigned to the specific national stock number	Auribute 01 NSN Attribute of NEN
Sumbly Class Code	The much also and for the MENT of the Ment	
Supply Class Code Supply Subclass Code	The supply class code for the NSN in the supply system. The sumply subclass code for the NSN in the sumply system	Attribute of NSN Attribute of NSN
ORGANIZATION-ROLE	The roles an organization can assume.	Entity
Organization Role ID	The organization role identifier is the unique identifier for a record.	Attribute of ORG-ROLE
Organization Role Name	The textual name of the organizational role.	Attribute of ORG-ROLE
Organization Role Description	A description of the role an organization can assume.	Attribute of ORG-ROLE
ORGANIZATION	An administrative structure with a mission, both government and non-	Entity
	government. COMMENTS: Organizations may contain suborganizations Ecr avounds a	
	base may contain wings, a wing may contain proup a group may contain	
	squadrons, and a squadron may contain flights.	
Organization ID	The organization identifier is the unique identifier for a record of an organization.	Attribute of ORGANIZATION
Organization Name	The unique name of the organization.	Attribute of ORGANIZATION
MAJCOM	The Major Command in which the organization is assigned.	Attribute of ORGANIZATION
GLOC Code	The geographic location of the organization.	Attribute of ORGANIZATION
Organization Address	The specific address of the organization.	Attribute of ORGANIZATION
PAX-CHALK	The passengers that are assigned to a specific chalk and will be documented in	Entity
	the manifest.	
Pax Chalk ID	The unique identifier of a record of a passenger on a chalk.	Attribute of PAX-CHALK
Pax Chalk Status	The status of the preparation and processing of each passenger.	Attribute of PAX-CHALK
Pax Chalk Comments	Any additional details regarding the status of the processing person. This can	Attribute of PAX-CHALK
	include justification for delays, no-shows, shortfalls, etc.	

NAME	DEFINITION	DEEDBACE
DDE Domission Codo		KEFEKENCE
r Dr. Neddulenien Cone	the cours identifying the work centers in which the person must process in the PDF.	Attribute of PAX-CHALK
PERSON	A human being for whom information is maintained.	Category Entity of RESOURCES
Date of Birth	The date of birth of the person.	Attribute of PERSON
Birthplace	The place of birth of the person.	Attribute of PERSON
Eye Color	The eye color of a person.	Attribute of PERSON
Hair Color	The hair color of a person.	Attribute of PERSON
Gender	The sex of a person.	Attribute of PERSON
Blood Type	The blood type of a person.	Attribute of PERSON
Security Clearance	The security clearance of a person.	Attribute of PERSON
Rank	The military or civilian rank of the person.	Attribute of PERSON
PERSON ROLE	The various roles a person can assume throughout different phases of the	Entity
	process.	
Person Role ID	The unique identifier for the record of the type of role a person can assume.	Attribute of PERSON ROLE
Role Name	The name of the role a person can assume.	Attribute of PERSON ROLE
Role Description	A textual description of the role a person assumes.	Attribute of PERSON ROLE
PERSON-SKILL	(PERSON x SKILL) The associative entity relating a person to the types of	Entity
	skills the person may have.	
Person Skill ID	The unique identifier of a record of a skill of a person.	Attribute of PERSON-SKILL
Level	The skill level of the person.	Attribute of PERSON-SKILL
Training	The training completed to achieve the skill level and the time interval for which a skill qualification is valid.	Attribute of PERSON-SKILL
PLAN	A scheme for achieving an end over time.	Entity
	COMMENTS: For example, an OPLAN, designed for the conduct of military	
	operations, identifies one or more operations that units carry out	
	simultaneously or in a series of connected stages.	
Plan ID Number	The plan identifier number is the unique identifier for the record of the	Attribute of PLAN
	particular plan.	
Plan Name	The name of the plan.	Attribute of PLAN
PLAN-LOCATION-ROLE	(PLAN x LOCATION x ROLE) This is the associative entity between the	Entity
	plan, a location identified in the plan, and the role the location will assume for the plan.	
PI AN-ORGANIZATION-ROI F	(PI AN & OPGANITATION & DOJE) This is the association with the	P
	(r LAIN X UNUAINIZATION X NULE) TIIS IS THE ASSOCIATIVE ENTITY DETWEEN the rear and an orrestion identified in the rear and the real that	Entity
	or prair and an organization residentiation in the plan and the role that organization will assume for the plan.	
Plan Organization Role ID	The unique identifier of a record of an organizational role in a plan.	Attribute of PLAN-ORG-ROLE

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NAME	DEFINITION	REFERENCE
PLAN-SUPPORT-REQUIREMENT	This is the document that identifies how an organization would support a plan. COMMENTS: For example, a base deployment plan would fall into this entity.	Entity
Plan Requirement ID	The unique identifier of a record of a support requirement of a plan.	Attribute of PLAN-SUPPORT-RQMT
Support Requirement Status	Any details on the development of the support requirements.	Attribute of PLAN-SUPPORT-RQMT
RESOURCE CONDITION	Information regarding the condition, availability, status, and requirements of a resource.	Entity
Condition ID	The unique identifier of a record of a condition description for a resource.	Attribute of RESOURCE CONDITION
Condition/Eligibility Type	The criteria for measuring eligibility.	Attribute of RESOURCE CONDITION
Condition/Eligibility Status	The ability to meet the eligibility criteria.	Attribute of RESOURCE CONDITION
Condition/Eligible Start Date	The beginning data necessary for the resource to meet the criteria.	Attribute of RESOURCE CONDITION
Condition/Eligible End Date	The end data necessary for the resource to meet the criteria.	Attribute of RESOURCE CONDITION
RESOURCE-ACTIVITY	The various functions that are performed on resources to keep records current.	Entity
Activity ID	The unique identifier of a record of an activity performed on a resource.	Attribute of RESOURCE-ACTIVITY
Activity Type	The type of activity that is performed on a resource and results in an update to their records.	Attribute of RESOURCE-ACTIVITY
Activity Name	The name of the activity that is performed. COMMENTS: For example, this could be a maintenance activity on material, or a dental activity on personnel. etc.	Attribute of RESOURCE-ACTIVITY
Activity Description	A textual description of the activity.	Attribute of RESOURCE-ACTIVITY
Activity Date	The date on which the activity is performed.	Attribute of RESOURCE-ACTIVITY
Activity Location	The location at which the activity is performed.	Attribute of RESOURCE-ACTIVITY
Activity Urgency	The priority or urgency of the requirement for the activity.	Attribute of RESOURCE-ACTIVITY
	COMMENTS: If a piece of equipment is targeted for deployment and a	
	maintenance activity is due in the near future, the urgency of performing that	
	iuncuon would be high to get the equipment fully operational for the deployment.	
Activity Frequency	The time duration between consecutive performances of this activity.	Attribute of RESOURCE-ACTIVITY
Activity Status	The status of the performance of this activity.	Attribute of RESOURCE-ACTIVITY
Activity Detail	Details of the status of the performance of this activity and any rationale for delays or problems.	Attribute of RESOURCE-ACTIVITY

NAME.	DEFINITION	REFERENCE
RESOURCES	Every resource, which belongs to an organization in which information is	Entity
	maintained. COMMENTS: For example neonle equipment cumilies cross more	
	conversion of the second second supplication appression parts, parts, conversion second secon	
Resource ID	The unique identifier of a record of a resource.	Attribute of RESOURCES
Resource Number	The identifier of a resource.	Attribute of RESOURCES
Resource Name	The name of the resulting.	
SCHEDULE	A prioritized set of actions that must be completed	Futitive of ALSOCIACES
	COMMENTS: For example, the on-base transportation schedule to move	
	resources around the work centers, the deployment schedule of events DSOE)	
	to identify the resource movements for a specific chalk, etc.	
Schedule ID	The unique identifier of a record of a schedule.	Attribute of SCHEDULE
Schedule Action Name	The name of the specific schedule.	Attribute of SCHEDULE
Schedule Type	The type of schedule.	Attribute of SCHEDULE
Schedule Description	A description of what the schedule defines will be accomplished.	Attribute of SCHEDULE
Schedule Version Number	The version number of the schedule for identifying changes and maintaining	Attribute of SCHEDULE
SCHEDIII E-ACTION	(SCUEDIIIE & ACTION) The constitution between AL	
	the deployment process and those identified in the schedule.	Entity
Schedule Action ID	The unique identifier for a record of an action in a schedule.	Attribute of SCHEDULE-ACTION
SKILL	Basic proficiencies required to accomplish defense-related workloads.	Entity
	Includes both proficiency in a trade or at following a given method.	
Skill ID	The unique identifier for a record of skill.	Attribute of SKILL
Skill Type	The name used to identify the various personnel skills.	Attribute of SKILL
Skill Description	A detailed description of the skill.	Attribute of SKILL
SPECIAL-HANDLING	The various special handling requirements that may be attached to certain	Entity
Consist Handline ID	T. 1. 11	
special nanuling ID	I ne handling identifier is the unique identifier code that is assigned to the cargo when it requires special handling.	Attribute of SPECIAL-HANDLING
Special Handling Description	The description of the special handling that must be performed.	Attribute of SPECIAL-HANDLING
Special Handling Requirements	The name and definition of the special handling requirement.	Attribute of SPECIAL-HANDLING
SUFFIX-ITEM	A lower level detail of pieces of equipment, supplies or spare parts that may	Entity
	be gathered together and considered terms may be joined together	
	and considered an increment. This is used in the detailed decomposition of cargo in a UTC capability.	
SubItem ID	The unique identifier for a record of a suffix item.	Attribute of SUFFIX-ITEM
		TAUTINE OF SOLUTION TO STRAIN

NAME	DEFINITION	REFERENCE
SubItem Quantity	The number of subitems that are joined together into the item.	Attribute of SUFFIX-ITEM
SUPPORT-REQUIREMENT- RESOURCES	Resources that are identified to support the base deployment effort.	Entity
Support Requirement Resource ID	The unique identifier of a record of a resource identified to support the base deployment.	Attribute of SUPPORT-RQMT- RESOURCES
Support Resource Role	The role the resource must support in the deployment.	Attribute of SUPPORT-RQMT- RESOURCES
TASK-ORGANIZATION-ROLE	(TASK x ORGANIZATION x ROLE) This is the associative entity between the tasking and the organization identified in the tasking and the role the organization assumes in the tasking. COMMENTS: For example, the organization may be identified as the unit to	Entity
Task Organization Role ID	deploy. The unique identifier of a record of a role an organization plays in the tasking.	Attribute of TASK-ORG-ROLE
TASKED-CARGO	The tasked cargo is the tailored cargo requirements of the UTC. Rather than deploy a standard UTC. the cargo may be tailored due to environmental	Entity
	reasons, mission requirements, reception site capabilities, a fragmented order, etc.	
Tasked Cargo ID	The unique identifier of a record of tasked cargo.	Attribute of TASKED-CARGO
MTONS	The total measured tons of the cargo tasked to deploy.	Attribute of TASKED-CARGO
STONS	The total number of short tons of the cargo tasked to deploy.	Attribute of TASKED-CARGO
TASKED-PERSONNEL	The tasked personnel are the tailored personnel requirements of the UTC.	Entity
	Rather than deploy a standard UTC, the number of personnel may be adjusted due to mission requirements, reception site capabilities, a fragmented order, etc.	
Tasked Personnel ID	The unique identifier of a record of tasked personnel.	Attribute of TASKED-PERSONNEL
Number of Personnel	The number of people that are needed to deploy with the UTC.	Attribute of TASKED-PERSONNEL
TASKING	The time-phased force deployment data contains the time-phased force data,	Entity
	the non-unit related cargo and personnel data, and movement data for the plan.	•
FRN	The Force Requirement Number is a five character alphanumeric code used to	Attribute of TASKING
	the theater of operation. The five characters make up the first five of seven	
	characters in the unit line number (ULN).	
Fragment ID	A single character used to identify elements of a force deploying in more than one increment. Makes up the sixth position of the ULN.	Attribute of TASKING

NAME	DEFINITION	KEFEKENCE
Insert ID	A single character code used to further identify elements of a force deploying	Attribute of TASKING
	in two or more increments. Makes up the seventh (and last) character of the ULN.	
Deployment Date	The date the unit identified in the TPFDD is scheduled to start deploying their forces off the home station.	Attribute of TASKING
Authorized Per Number	The Authorized personnel number is the number of passengers to be deployed plus the number of crewmembers of the aircraft.	Attribute of TASKING
EAD	The earliest arrival date on which the deployed forces or replacement personnel can be accepted at a port of debarkation during a deployment. Used in conjunction with the LAD to define a delivery window for transportation planning.	Attribute of TASKING
LAD	The latest arrival date on which the deployed forces should arrive at the port of debarkation and support the concept of operations.	Attribute of TASKING
ALD	The available load date is the date in the TPFDD when equipment and forces can begin loading on an aircraft or ship at the port of embarkation.	Attribute of TASKING
RLD	The ready to load date is when the forces should be prepared to depart their origin on organic transportation or are prepared to begin loading on USTRANSCOM furnished transportation.	Attribute of TASKING
Mode	The type of conveyance that will be used to transport the forces from the home station.	Attribute of TASKING
Source to POD	The source of the transportation for the unit resources to the port of debarkation, which may be a seaport or aerial port. The POD may or may not coincide with the final destination.	Attribute of TASKING
TASKING-HISTORY	All the information about the progress, status, and history of a deployment.	Entity
Tasking History ID	The unique identifier of a record of tasking history.	Attribute of TASKING-HISTORY
Tailoring Reason	The rationale for the tailoring of a requirement. COMMENTS: For example, environmental, deployment duration, supply capabilities at reception site, resource availability at reception site, fragmented, MAJCOM tailored, sharing with another unit, use in previous deployments, etc.	Attribute of TASKING-HISTORY
Employment Use	Information regarding the use of resources at the employment site.	Attribute of TASKING-HISTORY
Shortfall	Information regarding the shortfall of a specific requirement.	Attribute of TASKING-HISTORY
TASKING-LOCATION-ROLE	(TASKING x LOCATION x ROLE) This is the associative entity between the tasking, the location, and the role the location assumes in the tasking. COMMENTS: For example, the location may be identified as a port of embarkation.	Entity
Tasking Location Role ID	The unique identifier of a record of a role a location plays in a tasking.	Attribute of TASKING-LOC-ROLE

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NAME	DEFINITION	· D D D D D J C D
		KEFEKENCE
IKANSPUKI	A specific conveyance that has been assigned to transport resources.	Entity
	COMMENTS: For example, On-base transportation trucks and busses, airlift	
	provided to transport resources off the base, etc.	
	Chalk may be an Alias for TRANSPORT.	
Transport ID	The unique identifier of a record of a transport.	Attribute of TRANSPORT
Transport Number	The identifier for the transport in the deployment.	Attribute of TRANSPORT
	COMMENTS: For example, the first chalk scheduled to the base is	
	considered chalk 1.	
Conveyance Serial Number	The serial number of the specific conveyance.	Attribute of TRANSPORT
Conveyance Type	The type of conveyance.	Attribute of TRANSPORT
	COMMENTS: For example, truck, bus, aircraft, ship, etc.	
Configuration	The unique configuration of the specific conveyance.	Attribute of TRANSPORT
Load Characteristics	Any special loading requirements for the conveyance.	Attribute of TRANSPORT
Departure Location	The location from which the conveyance is to depart.	Attribute of TRANSPORT
Destination Location	The final destination for the conveyance.	Attribute of TRANSPORT
UTC-CARGO	Equipment, supplies, and spare parts identified in a UTC.	Category Entity of CAPABILITY
UTC-INCREMENTS	The Unit Type Code increment identifies the arrangement of equipment,	Entity
	supplies, and spare parts to support the cargo side of the deployment	•
	capability. The increments are used for planning purposes.	
Increment Number	The number of the increment assigned to the UTC capability.	Attribute of UTC-INCREMENTS
Increment Name	The name of the UTC increment.	Attribute of UTC-INCREMENTS
Increment Description	A description of the increment of the UTC capability	Attribute of UTC-INCREMENTS
Increment STONS	The total short tons that comprise the increment.	Attribute of UTC-INCREMENTS
Increment MTONS	The total measurement tons that comprise the increment.	Attribute of UTC-INCREMENTS
Deploy Echelon Code	The deployment echelon codes are used to establish priorities and sequencing	Attribute of UTC-INCREMENTS
	of movement of an increment.	
Increment Square Footage	The total square footage of the increment of the UTC capability.	Attribute of UTC-INCREMENTS
UTC-PERSONNEL	The number of personnel identified in the UTC.	Category Entity of CAPABILITY
UTC-SKILL	The further level of detail of the personnel requirements of a UTC capability.	Entity
UTC Skill ID	The UTC skill identifier is the unique identifier of the record of UTC skill	Attribute of UTC-SKILL
	requirements.	
Num of People per AFSC	This identifies the number of passengers by Air Force specialty code.	Attribute of UTC-SKILL
Grade	This identifies whether a rank requirement must be assigned to an AFSC	Attribute of UTC-SKILL
	requirement.	

APPENDIX H

LOG-AID TO-BE PROCESS MODEL

Node Number	Process Name	Output/Product	Description	Time to Complete (in minutes)	Frequency of Occurrence	Exceptions/ Rules Variation Factors	Resource
A0.1	Plan Site Operations	COA	The battle staff analyzes the deployment tasking and adjusts the current operational characteristics of the base to support the deployment operational requirements.	min 15 mean 30 max 60			Base Commander Rattlestaff
A0.2	Execute Activation Process	Airlift Requirements	Once the equipment and personnel requirements are tailored, the actual airlift requirements are computed to meet those tailored requirements.	See Decomposition			Deployment Control Module, UDM,
		DSOE	The Deployment Schedule of Events is computed to identify all no later than times for internal base milestones in order to accomplish the deployment and meet the designated scheduled airflow.				Deployment Control Module, UDM, DO
A0.3	Set Up Deployment Machine	Work Centers	Using the milestones in the DSOE as the guidelines, the augmentees are prepared and the work centers are made operational for the deployment.	See Decomposition			Augmentee Control Module, Status Collection Module, DO
A0.4	Arrange for Transportation	Assigned Transport	Using the DSOE as the guideline, the on-base transportation requirements are scheduled and contracted if necessary.	See Decomposition			Dn Base fransportation Control
A0.5	Deploy Resources	Transport Request	Throughout the preparation and processing of deployment resources, requests may be sent [to transportation to move resources from one location to another.	See Decomposition			Deployment Modules, Personnel
		Deployed Resources	Once all the resources are prepared at their unit and processed through the work centers, they are transported off the base to their designated location and are now considered deployed resources.				Jeployment Aodules, ersonnel



A0: Deploy for Contingency

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Node Number	Process Name	OutputProduct	Description	Time to Complete (in	Frequency of	Exceptions/ Rules	Resource
				minutes	Occurrence	Variation Factors	
A2.1	Compute	Tailored List	Knowing the standards specified for a UTC, the resources available at the reception site,	See			Deployment
	Deployment		the environmental conditions at the reception site, and the requirement insights gained from	Decomposition			Requirements
	Kequirements		previous deployments, the deployment requirements are computed based on the mission				Modules,
			requirements.				UDM,
			-				DO
A2.2	Translate to	Requested Airlift	Knowing the tailored requirements, the most appropriate airlift is computed and a request is	See			Airlift
	Airlift		generated.	Decomposition			Computation
							Module,
							Log Planner
A2.3	Define Chalks	Load Plan	Knowing either the requested airlift, or the official airflow, a load plan is generated for each	See .			Increment
			chalk, based on the tailored deployment requirements and the priority of the resource	Decomposition			Analysis
			movements.				Module,
							Load Plan
						_	Module,
							Load Planner
A2.4	Evaluate	Processing	Once the specific equipment and personnel are assigned to meet the deployment	See		_	Deployment
	Personnel &	Requirements	requirements, the CDF and PDF processing requirements are computed based on the status	Decomposition			Resource
	Equip		of the resources.				Module,
	Qualifications					_	MON
A2.5	Develop	DSOE	Knowing the specific resources assigned to the deployment and the processing	See			DSOE
	Deployment		requirements, a deployment schedule of events is computed to ensure all milestones are	Decomposition		_	Module,
	Schedule		met and the chalk departs the base in a timely manner and according to the airlift schedule.			_	Personnel





Resource	Unit Correlation Tool, IDO	Resource Listing Tool, UDM	STEP, WRM Viz	UTC-DT, IDO, UDM	UTC-DT Extended, UDM
Exceptions/ Rules Variation Factors					
Frequency of Occurrence					
Time to Complete (in minutes)	See Decomposition	See Decomposition	min 3 mean 4 max 6	See Decomposition	See Decomposition
Description	The various units' deployment schedules are overlaid on each other to identify any units that have a common time at the same location.	The standard UTC is modified for any fragmenting requirements or LOIs from the MAJCOM.	A mission analysis is performed based on those resources at the reception site and those scheduled for deployment to identify any mission shortages or overages that must be compensated for in the deployed resources.	For any resources that will be shared among units, one unit must be assigned primary responsibility for that resource.	All final tailoring is performed to adjust to re-supply capabilities, environmental conditions, and historical usage of the deployed UTC.
Output/Product	Unit Overlap Times	Total List of Resources	Mission Shortages/Overages	UTC Requirements Assigned to Unit	Unit's Prioritized & Tailored List
Process Name	Identify Unit Overlaps at Site	List Requested Resources	Perform Reception Site Analysis	Correlate Deploying Resources	Perform Unit Tailoring
Node Number	A21.1	A212	A213	A21.4	A21.5

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A21: Compute Deployment Requirements

Node	Process Name	Output/Product	Description	Time to	Frequency	Exceptions/	Resource
Number			-	Complete (in	of	Rules	
				minutes)	Occurrence	Variation	
						Factors	
VZ11.1	Compare	Deploying Unit	An analysis is performed to identify any correlation with the tasked unit's deployment	min 0.0			Schedule
	Deploying Unit	Schedules & Overlaps	schedule and those units currently at the deployed location.	mean 0.1			Overlap
	Cn-site			max 0.25			Identification
0,10,	Schedules						Module
A2112	Compare On-	On-Site Unit Schedule	An analysis is performed to identify a correlation with all the units tasked to deploy to the	min 0.01			On-Site
	Site Unit		same location.	mean 0.1			Correlation
	Schedules			max 0.25			Module
A2113	Identify	Overlay Condition for	The system identifies whether there are any conditions in which the units overlan times	min 0.01			Otterlan
	Overlaps for	Consideration	could be used to tailor the deployment requirements.	mean 0.1			Selection/
	Consideration			max 0.25			Modification
							Module
AZ11.4	Prompt User	User Overlap	The user evaluates the recommendation for potential sharing among the units and adjusts	min 1			User
	IOF Validation	Adjustment Parameter	the annotation.	mean 2			Verification
				max 3			Module
		Selected Unit Overlap	The user approves the selected unit overlap times that can be used to identify where				User
		limes	resources may be shared and where resources can be tailored.				Verification
							Module



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A211: ID Unit Overlaps at Site

ss Name	Output/Product	Description	Time to	Frequency	Exceptions/	Resource
			Complete (in minutes)	of Occurrence	Rules Variation	
					Factors	
5	IC Content List	The full list of resources in the standard UTC is identified.	min 0.01			Resource
			mean 0.1			Listing Tool
- 1	-		max 0.25)
н.	ragment Annotated	The full UTC is tailored according to any tasking fragmentation requirements.	min 0.01			Resource
-	ist	•	mean 0.1			Listing Tool
1			max 0.25)
~~	unnotated List	The list of resources in the UTC is further tailored according to LOI requirements and any	min 0.01			Resource
		tailoring required by the MAJCOM.	mean 0.1			Listing Tool
			max 0.25			0
1		-				
	Jser Adjustments	The user reviews the annotated list and makes adjustments as necessary to reflect decision	min 1			Resource
		logic not incorporated in the decision support system.	mean 2			Listing Tool
			max 3			0
_	Requested Deployment	The user approves the final list of resources required by his unit for the deployment tasking.				Resource
	Resources By Unit					Listing Tool,
- 1						MON
<u> </u>	fotal List of Requested	All the individual units' tailored lists are combined into a base list of resources for the	min 0.01			Resource
_	Deployment Resources	deployment taskings.	mean 0.1			Listing Tool.
			max 0.25	·		UDM

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A212: List Requested Resources

Resource	UTC-DT	UTC-DT	UTC-DT	UTC-DT	UTC-DT UDM IDO	UTC-DT UDM IDO
Exceptions/ Rules Variation Factors						
Frequency of Occurrence						
Time to Complete (in minutes)	min 0.01 mean 0.1 max 0.25	min 0.01 mean 0.1 max 0.25	min 0.01 mean 0.1 max 0.25	min 0.01 mean 0.1 max 0.25	min 1 mean 2 max 3	
Description	A comparison is performed with those resources at the reception site that are available for use during the deployment.	A comparison is performed among the UTCs from this base that are deploying to the same location.	A comparison is performed among UTCs from different bases that are deploying to the same location.	The system identifies a unit of responsibility for coordination among UTCs with common resources. The system provides phone numbers and POCs for each unit.	The responsible organization contacts the other designated units and coordinates any possibility of sharing resources.	The list of resources needed for deployment by each unit, based on coordination and sharing at the deployed location, is generated.
Output/Product	Net Resources Deployment Requirements	Intra Base Common Resources	Inter Base Common Resources	Prioritized Unit By Item	Allocation Adjustment	UTC Deployment Requirements Assigned to Unit
Process Name	Correlate with Reception Site	Compare Items Among Base UTCs	Compare Items Across Bases	Assign Item Responsibility to Unit	Verify By User	
Node Number	A214.1	A2142	A214.3	A214.4	A214.5	



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A214: Correlate Deploy Resources

Description Time to Frequence Using the list of resources coordinated among the units deploying, the standard list of 30 min 0.01 mean 0.1 mean 0.025 Occurr The list of resources for a 30-day supply is adjusted based on the deployment schedule, if min 0.01 mean 0.1 less than 30 days, and the re-supply capabilities at the reception site. mean 0.1 less than 30 days, and the re-supply capabilities at the reception site. mean 0.1 mean	onch Eventions/ Recource	rence Variation	Factors	UIC-DI Evtended	Transing		IITC-DT	Extended		LITC-DT	Extended				Extended	Extended	UTC-UI Extended UDM UTC-DT	UTC-DI UDM UTC-DT Extended	UDM UDM UTC-DT Extended UDM	UDM UDM UTC-DT Extended UDM UDM	UDM UDM UTC-DT UTC-DT Extended UDM Extended Extended	ULTU1 Extended UDM Extended UDM UTC-DT Extended UDM
Description Time to Complete (it Complete (it Using the list of resources coordinated among the units deploying, the standard list of 30 min 0.01 days of supply for the resources is generated. minutes) The list of resources for a 30-day supply is adjusted based on the deployment schedule, if min 0.01 less than 30 days, and the re-supply capabilities at the reception site. max 0.25 The list of resources to deploy is adjusted based on the environment of the reception site. max 0.25 Reset on nest history of deploy is adjusted based on the environment of the reception site. max 0.25	From	of Occur															5					
Description Using the list of resources coordinated among the units deploying, the standard list of 30 days of supply for the resources is generated. The list of resources for a 30-day supply is adjusted based on the deployment schedule, if less than 30 days, and the re-supply capabilities at the reception site. The list of resources to deploy is adjusted based on the environment of the reception site. Based on past history of deploying the UTC to similar environmental conditions with a	Time to	Complete (in minutes)	.00.	mean 01	max 0.25		min 0.01	mean 0.1	max 0.25	min 0.01	mean 01	max 0.25	See		Decomnositi	Decompositi	Decomposition min 3	Decomposition min 3 mean 4	Decompositit min 3 mean 4 max 13	Decompositic min 3 mean 4 max 13 min 0.01	Decompositic min 3 mean 4 max 13 min 0.01 mean 0.1	Decompositic min 3 mean 4 min 0.01 mean 0.1
	Description		Tear the list of recommendation of an one of the second second second second second second second second second	days of supply for the resources is generated.			The list of resources for a 30-day supply is adjusted based on the deployment schedule.	less than 30 days, and the re-supply capabilities at the reception site.		The list of resources to deploy is adjusted based on the environment of the reception site.	-		Based on past history of deploying the UTC to similar environmental conditions with		similar mission requirement, the U IC is turther tailored by the unit.	similar mission requirement, the 0.1 C is turther tailored by the unit.	similar mission requirement, the ULC is turther tailored by the unit. The unit deployment manager reviews the tailored list and makes some final adjustments to	similar mission requirement, the U LC is turther tailored by the unit. The unit deployment manager reviews the tailored list and makes some final adjustments to the deployment requirements.	similar mission requirement, the U LC is turther tailored by the unit. The unit deployment manager reviews the tailored list and makes some final adjustments to the deployment requirements.	The unit mission requirement, the UIC is turther tailored by the unit. The unit deployment manager reviews the tailored list and makes some final adjustments to the deployment requirements. An integration of all the units' resource lists within a base is performed and ordered by	The unit mission requirement, the UIC is turther tailored by the unit. The unit deployment manager reviews the tailored list and makes some final adjustments to the deployment requirements. An integration of all the units' resource lists within a base is performed and ordered by deployment priority.	Similar mission requirement, me UIC is turther tailored by the unit. The unit deployment manager reviews the tailored list and makes some final adjustments to the deployment requirements. An integration of all the units' resource lists within a base is performed and ordered by deployment priority.
	Process Name		Determine	Standard	Support	Requirement	Adjust to	Deployment	Duration	Adjust to	Environmental	Conditions	Adjust to	Historical Use			Verify	Verify Tailoring	Verify Tailoring	Verify Tailoring Integrate	Verify Tailoring Integrate Across	Verify Tailoring Integrate Across Assiened Units
Process Name Determine Standard Support Requirement Adjust to Deployment Duration Adjust to Environmental Conditions Adjust to Historical Use	Node	Number	A2151				A2152			A215.3	-		A215.4				A215.5	A215.5	A215.5	A215.5 A215.6	A215.5 A215.6	A215.5 A215.6





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A2154: Adjust to Historical Use

Node	Process Name	Output/Product	Description	Time to	Frequency	Exceptions/	Resource
Number	_			Complete (in	of	Rules	
				minutes)	Occurrence	Variation	
			-			Factors	
A22.1	Compute	STONS	Based on the tailored list of resources, the total number of short tons is computed for the	min 0.01			Airlift
	Quantity		UTC.	mean 0.1			Computation
				max 0.25			Module
A22.2	Identify	Oversized Equipment	Any equipment that has special transportation requirements is identified.	min 0.01			Airlift
	Special Needs			mean 0.1			Computation
				max 0.25			Module
A22.3	Compute	Airlift Requirements	Once the user has approved the proposed airlift, a request is sent to TRANSOM.	min 0.01			Airlift
	Airlift			mean 0.1		·····	Computation
				max 0.25			Module
		Proposed Airlift	Knowing the weight of the resources, the unique transportation requirements, and the				Airlift
		Kequirements	priority, a recommendation is created for the required airlift.				Computation
							Module
A22.4	Verify Airlift	Airlift Requirement	The user reviews the system recommendation for the airlift and makes some adjustments.	min 0.5			Airlift
	Kequirements	Adjustments		mean 1.5			Computation
				max 3			Module
							Log Planner

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A22: Translate to Airlift

			1	1		T	T	
Resource	Increment Analysis Module	Increment Analysis Module	Increment Analysis Module	Increment Analysis Module	Load Plan Module	Load Plan Module	Increment Analysis Module, Load Plan Module, Load Planner	Increment Analysis Module, Load Plan Module, Load Planner
Exceptions/ Rules Variation Factors								
Frequency of Occurrence								
Time to Complete (in minutes)	min 0.01 mean 0.1 max 0.25		min 0.01 mean 0.1 max 0.25	min 0.01 mean 0.1 max 0.25	min 0.01 mean 0.1 max 0.25		min 0.5 mean 1.5 max 3	
Description	A review of the resource list identifies those increments that still have full increments.	A review of the resource list identifies those increments that have been tailored and are not completely full.	A review of the partial increments identifies those that can be consolidated into complete increments.	When the recommendation to consolidate increments is created for increments from different units, the system identifies a unit to maintain responsibility for combining and packing. The responsibility for developing and processing the increment is with the unit owning those highest priority elements.	Sequencing the increments by priority, a load plan is generated in accordance with the loading standards of the assigned aircraft.	During the load planning generation, some space may remain on the aircraft that is not totally utilized. This will trigger a search for an increment that could be used to fully utilize the aircraft space.	The user reviews the load plans and may adjust it based on his skill and understanding.	The user reviews the pallet combination recommendation and may adjust it based on his knowledge and skill of the situation.
Output/Product	Standard Increment	Partial Increment List	Blended Increment Layout	Blended Increment Definition	Load Plan	Remaining Available Chalk Space	User Adjustments by Chalk	User Adjustments by Increment
Process Name	Identify Partial Pallets		Blend Items Into Increment	Identify Responsible Unit	Compute Load Plan		Adjust and Verify	
Node Number	A23.I		A23.2'	A23.3	A22.4	ł	A22.5	




Node	Process Name	Output/Product	Description .	Time to	Frequency	Exceptions/	Resource
Number				Complete (in	of	Rules	
				minutes)	Occurrence	Variation Factors	
A24.1	Track	Current Resource	The status of maintenance and personnel records for deployable resources is tracked and	See			Resource
	Resource	Information	updated as changes occur.	Decomposition			Tracking
	Status						Module
A24.2	Assign	Selected Cargo	After a review of the current status and maintenance of resources and the current	See			Resource
	Resources to	Increment	deployment requirements, specific pieces of equipment are identified to satisfy those cargo	Decomposition			Selection
	Requirements		requirements and the user adjustments finalize the list.				Module
		Selected Personnel	After a review of the current status of the personnel, the specific names are identified to				Resource
			satisty the personnel requirements, and the user adjustments finalize the list.				Selection
			-				Module
		Proposed Personnel/	A selection is made by the system of the specific people and equipment to satisfy the				Resource
	-	Equipment &	resource requirements.				Selection
		Alternates					Module
A24.3	Venity/Adjust	Selection Adjustment	The user reviews the selection of equipment and personnel and makes some adjustments to	min 2			Resource
	Selection		the selections.	mean 8			Selection
				max 12			Module,
							MDM
A24.4	Identify	In-check Requirements	A review is performed for each increment to decide whether it should be processed through	See			Increment
	Increments	Summary	the in-check work center.	Decomposition			Analysis
,	Requiring In-						Module, Log
	Check						Planner
A24.5	Identity .	PDF Processing	The personal information for each person is reviewed to identify whether the individual	See			ersonnel
	Personnel	Keduirements	must be processed through the PDF.	Decomposition			Status Check
	Kequiring PDF					[Module

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A24: Evaluate Personnel/Equipment Qualifications

Node	Process Name	Output/Product	Description	Time to	Frequency	Exceptions/	Resource
Number				Complete (in	of	Rules	
				minutes)	Occurrence	Variation	
						Factors	
A241.1	Receive	Verified Resource	The database is searched for all current information about the resource.	min 0.01			Resource
_	Resource	Information		mean 0.1			Tracking
_	Status			max 0.25			Module,
	Information						MQN
A2412	Update the	Current Personnel &	Any changes are documented about the resource, and the system is considered current.	min 0.01			Resource
	Maintenance &	Equip Information		mean 0.1			Tracking
	Status Records			max 0.25			Module
A2413	Identify	Preparation Status/Type	Any processing requirements such as HazMat material, personnel records, and shot records	min 0.5			Resource
	Resources		that are not current are identified.	mean 1			Tracking
	Requiring			max 1.5			Module
	Deployment						
	Processing						
A241.4	Generate Unit	Current Resource	All current information about a resource is consolidated.	min 0.01			Resource
	Status Reports	Information		mean 0.1			Tracking
				max 0.25			Module



A241: Track Resource Status

Node	Process Name	Output/Product	Description	Time to	Frequency	Exceptions/	Resource
Number				Complete (in	of	Rules	
				minutes)	Occurrence	Variation	
	•					Factors	
A242.1	Check	Qualified Resources	The qualifications for each resource are compared against those stated in the deployment	min 0.01			Resource
	Qualifications		requirements.	mean 0.1		-	Selection
				max 0.25			Module
A242.2	Check	Available Resources	The availability of each resource during the deployment requirements time frame is	min 0.01			Resource
	Availability		analyzed.	mean 0.1			Selection
				max 0.25			Module
A242.3	Check	Manifest & Shortfalls	The deployment history for each resource is analyzed to ensure it is not deployed too close	min 0.5			Resource
	Deployment		to the previous deployment, if possible. The manifest of those selected for deployment is	mean I			Selection
	History		generated. If any of this analysis results in the exclusion of a resource that cannot be	max 1.5			Module
			replaced by another within the base, a shortfall is generated.			· ,	Personnel
		Selected Resources	The identification of each resource selected for the deployment is documented.				Resource
			~				Selection
							Module
A242.4	Compare	Troop Commander	A troop commander is selected among the personnel selected for the deployment.	min 0.01			Commander
	Personnel			mean 0.1			Selection Tool
	Ranks			max 0.25			
A242.5	Check	Assignment Status	The assignment of each resource to the deployment is used to update their	min 0.01			Resource
	Preparation		status/maintenance records.	mean 0.1			Selection
	Status			max 0.25			Module



A242: Assign Resources to Requirements

Node	Process Name	Output/Product	Description	Time to	Frequency	Exceptions/	Resource
Number				Complete (in	of	Rules	
				minutes)	Occurrence	Variation	
LVVCV	101-F					r actors	
A244.1	Check lor	Increment Kequiring	All the selected cargo increments are analyzed to identify those that contain HazMat.	min 0.01	HazMat must		Increment
	HazMat &	HazMat Check		mean 0.1	process		Analysis
	Special			max 0.25	through in-		Module
	Handling			•	check		
		Non-HazMat Increment	The increments are analyzed to identify those that do not contain HazMat.				Increment
							Analysis
							Module
A244.2	Check for Unit	Increment Requiring	The increments that do not contain HazMat are analyzed to determine if two or more units	min 0.01	Mixed cargo	-	ncrement
	Cargo MIX	MIXed Cargo Check	contain cargo on the increment.	mean 0.1	must process		Analysis
				max 0.25	through in-		Module
				•	check		
		Non-Unit Mixed	The non-HazMat increments are analyzed for those that have cargo from only one unit.			1	ncrement
		Increment					Analysis
0							Module
A244.3	Check Unit	Increment Requiring	For non-mixed unit cargo and non- HazMat increments, the preparation history of the unit	min 0.01	10% must	I	ncrement
	rrcparation	Buildup Check	is analyzed.	mean 0.1	process	1	Analysis
	Qualifications		•	max 0.25	through in- check	<u>~</u>	Aodule
A244.4	Identify for In-	In-check Requirements	Increments are marked as those requiring in-check through the CDF, such as those with	mìn 1		1	ncrement
	cneck	Summary	HazMat, those with cargo from multiple units, those with unit preparation history not at	mean 3		+	Analysis
			100%, and random checks on units.	max 5		<u>~</u>	Aodule
							og Planners





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Node	Process Name	Output/Product	Description	Time to	Frequency	Exceptions/	Resource
Number				Complete (in	of	Rules	
				minutes)	Occurrence	Variation	
						Factors	
A245.1	Check Tag	New Tag Requirement	Each personnel file is reviewed to determine if the individual needs a new ID tag at the	min I			Status Check
	Status		PDF.	mean 2			Module,
				max 3			Personnel
A245.2	Check Shot	Shot Requirement	Each person's medical file is reviewed to determine if any shots are required at the PDF,	min 1			Status Check
	Status		whether normal frequency or those required by the deployment.	mean 2			Module,
				max 3			Personnel
A245.3	Check Finance	Finance Changed	The financial information for each individual is evaluated to determine if financial support	min 1			Status Check
	Status	Requirement	is required at the PDF.	mean 2			Module,
				max 3			Personnel
A245.4	Check Legal	Legal Document	The legal information for each person is reviewed to determine if any legal actions are	min 1 -			Status Check
	Status	Requirement	required at the PDF.	mean 2			Module,
				max 3			Personnel
A245.5	Check Ministry	Private Discussion	When the person is notified of the deployment, he indicates if he needs to consult with a	min I			Status Check
	Support Need	Required	chaplain at the PDF.	mean 2			Module,
				max 3			Personnel



A245: Identify Personnel Requiring PDF

Node	Process Name	Output/Product	Description	Time to	Frequency	Exceptions/	Resource
Jagunna				Complete (in	of	Rules	
				minutes)	Occurrence	Variation	
, <u>-</u> <u>-</u> .						Factors	
A25.1	Develop	Optimal Chalk Level	A DSOE is created for each chalk, using duration times for each task.	See			DSOE
	Generic Chalk	DSOE		Decomposition			Module
	Generation		-	minodulooo			Perconnel
	Times						
A25.2	Coordinate	Integrated Layout of	The different DSOEs for each chalk are analyzed to ensure no conflicts with base resources	min 0.01			DSOF
	Production	Chalk DSOFs	among the chalks				
	Amon Challer			mean v.1			Module,
	AITKING CINAIKS			max 0.25			Personnel
A25.3	Translate to	Proposed/Final	Knowing the actual times for the airlifts, the DSOEs for each chalk are converted from	min 0.01			DSOF
	Actual Times	Integrated DSOEs	durations to actual times.	mean 0.1			Module.
				max 0.25			Personnel
A25.4	Maintain	Planned to Actual	As the deployment progresses, actual times are recorded by the system.	min 0.01			DPViz
	Deployment	DSOE		mean 0.1		_	1
	Status			max 0.25			
A25.5	Verify the	DSOE	The IDO and UDM monitor the deployment progress. A mapping identifies any variations	min 1			DSOE
	DSGE		between planned and processing times. As variations exceed pre-established limits, the	mean 3			Module
			variations are highlighted and presented to the user for analysis/adjustment.	max 5			DO
							Log Plans





Nodo	Duance Manua	Distant/Dundered	Davadad				
Number	TINCS MINE	Outputround	Description .	Time to	Frequency	Exceptions/	Resource
I THREEVER				Complete (in	of	Rules	
				minutes)	Occurrence	Variation	
						Factors	
A251.1	Include	Initial Preparation Time	The preparation time for each resource at the unit is computed.	min 0.01			DSOE
	Preparation			mean 0.1	-		Module.
	Time			max 0.25			Personnel
A2512	Compute	Initiate Personnel	The time required to process the required personnel through the PDF is computed.	mîn 0.01			DSOF
	Personnel	Processing Time		mean 0.1			Module
	Processing			30			
	Time			CT'O YEIII			rersonnet
A2513	Compute	Initiate Cargo	The time required to processes the selected cargo through the CDF is computed.	min 0.01			DSOF
	Cargo	Processing Time		mean 01		-	Modula
	Processing			may 0.25			Parronnal Darronnal
	Time						
A251.4	Include	Initiate Movement	The cargo and personnel movement times are computed based on the location and length of	min 0.01			DSOF
	Movement	Time	the moves.	mean 0.1			Module
	Time			max 0.25			Personnel
A251.5	Include	Initiate Load Time	The length of the time to load the aircraft is computed.	min 0.01			DSOF
	Loading time			mean 01			Madula
				max 0.25			Perconnel Perconnel
							DINOCIO





Resource	Augmentee Selection Module,	Augmentee Training Module	Augmentees	Augmentees	Status Collection
Exceptions/ Rules Variation	X MCIOIS				
Frequency of Occurrence					
Time to Complete (in minutes)	See Decomposition	min 2 mean 5 max 10	min 25 mean 40 max 50	min 2 mean 5 max 10	min 0.01 mean 0.1
Description	The level and type of support is computed according to the DSOE and the resource processing requirements. The augmentees are notified to report for duty.	As the augmentess arrive for duty, a review of their deployment experience identifies the training needed. They are provided the training and prepared for the deployment support task.	The augmentees set up the deployment work centers.	The augmentees obtain the materials needed to make the work centers operational.	The status of the work centers is recorded.
Output/Product	Augmentee Recall	Assigned Augmentee	In-Place Equipment	Work Center Completion Status	Setup Status
Process Name	Select Augmentee	Prepare Augmentee	Set Up The Work Center	Access the Work Center Materials	Capure Status
Number Number	A3.1	A3.2	A3.3	A3.4	C.A.



A3: Set Up Deployment Machine

Nada	Decord Name						
Number	LIVESS Mune	Outputroauct	Description	Time to Comulete (in	Frequency of	Exceptions/ Pulse	Resource
				minutes)	Occurrence	Variation	
						Factors	
ייזֹר	Leternine	Number, Schedule &	An analysis of the DSOE and the deployment process defines the number of augmentees	min 0.01			Ausmentee
	Support	Skills for Augmentees	required, their requirements schedule, and the skills required.	mean 0.1			Selection
	Requirements			max 0.25			Module
A31.2	Assign	Proposed Augmentee	Mapping the requirements to the listing of augmentees identifies one or more individuals	min 0.01			Augmentee
	Augnentee	Fill List with	available to satisfy each requirement.	mean 01			Colorion
	Nanes	Substitutes		may 0.35			SCICULOII Mardal-
				(7.0 YEIII			Module
		Approved Augmentee	I he user makes tinal acceptance of the selection of the augmentee.				Augmentee
		LISI					Selection
	, ., ,						Module
515	venty	Selection Changes	The list is presented to the user who makes adjustments based on user known information.	min 0.5			Augmentee
			•	mean 1			Selection
			-	max 1.5			Module,
	5						OQ
A31.4	Notity	Augmentee Recall	A notification is sent to the augmentee to inform them of when and where to report along	min 0.01			Augmentee
	Augnentee		with a minimal description of their planned responsibilities.	mean 0.1			Selection
				max 0.25			Module





Node	Process Name	Output/Product	Description	Time to	Frequency	Exceptions/	Resource
Number				Complete (in	of	Rules	
				minutes)	Occurrence	Variation	
A4.1	Estimate	Transport Equipment	The amount and type of cargo and personnel requiring transporting, the time frame in	min 0.01			Transnort
	Transport Load	Requirement	which the transportation occurs, and the beginning and ending points for each transporting	mean 0.1			Estimating
			leg are computed.	max 0.25			Module
A4.2	Map	Projected Deficiency	Mapping the transporting requirements to the on-base transportation capabilities identifies	min 0.01			Transport
	Requirements		the type of transportation capabilities required for deployment. Comparing the	mean 0.1			Schedule
	to Availability		requirements with the available transport resources identifies any transporting deficiencies.	max 0.25			Module
		Proposed Conveyance	Comparing the transport capabilities requirements, the availability of on-base				Fransport
		Assignment Schedule	transportation, and the transporting time and paths produces a proposed assignment				Schedule
			schedule for on-base conveyances			. 7	Module
A4.3	Arrange	Contracted	The deficiencies are matched to available contracting resources, and one or more	min 10			IMO
	Contact	Conveyances	contracting potentials are identified.	mean 20. *			
	Support			max 30			
A4.4	Verity Local	Approved On-Base	The approved on-base schedule becomes available to support the deployment effort.	min 0.01			Local
		I ransport Schedule		mean 0.1			Fransport
	Schelule			max 0.25 .		-	User Interface
							Module
		Schedule Adjustments	The user adjusts the transporting schedule, which is fed back to update the on-base				ocal
			transportation database.				Fransport
							Jser Interface
245						_	vlodule
A4.0	Coorinate	Proposed Assignment	As the transportation requests arrive, the assignment of a conveyance is proposed.	min 0.01			Transport
	Registement			mean 0.1			Coordination
ĺ,				CZ.U XBIII		1	Vlodule
A4.0	Venty Local	Assigned I ransport	The proposed assignment is presented to the user who adjusts it as necessary and makes the	min 5		Ι	ocal
	1 ransport		necessary communication to initiate the availability of that conveyance.	mean 10		¥	ransport
	Assignment		-	max 15			Assignment
	<u> </u>					· •	Jser Interface
			· ·				Aodule, MO
						*	

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A4: Arrange for Transportation

Nade	Process Name	Outnut/Product	Docreintion	Time to	Francisco.	Evandines/	Decouras
Number				Complete (in	of	Rules	The second contract
				minutes)	Óccurrence	Variation Factors	
A5.1	Prepare Resources	Transport Ready Resources	Both personnel and cargo are prepared at the unit and are ready to be transported to a chalk holding area or to the work centers.	See Decomposition			UDM, Unit
							Personnel
A5.2	Transport	Deployment Ready	The resources are transported from the holding areas to the chalk.	min 1			On-Base
		Resources		mean 1.5			Transportation
				max 2			
		Unit Processed Cargo	The cargo is transported from the unit to the CDF or cargo holding area.	min 20			On-Base
				mean 25			Transportation
		Droceccing Demonrel B.	The according are transmisted from the middle of the DDE according to 11, 111.	04 100 .			
		Mobility Bags	The personner are manyored from the unit to the PDF of personnel holding area.	min 20 . mean 25			On-Base Transnortation
				max 40			nonm nodermark
A5.3	Process Thrmach PDF	Transport Ready	The personnel are processed through the PDF and ready to be transported to the chalk.	See	2%		Work Center,
1 2 4	T T T T T T T T T T T T T T T T T T T			Decomposition	passengers		Personnel
4.CA	Through CDF	Accepted CUF Cargo	I he cargo is processed and ready to be transported to the chalk.	See	10% cargo		Increment
				Decomposition			Measurement
					·		Module,
							Increment
							Measurement
							System,
							Personnel
		Rejected CDF Cargo	The cargo is processed and ready to be transnorted back to the unit to be fixed or reallaged	See			torement
		Increment		Decomposition			Measurement
							Module.
							ncrement
							Measurement
						•1	System,
				·		<u> </u>	CDF
	, i					-	ersonnel
C.CA	Prepare tor	Deployed Resources &	The cargo and personnel are loaded on the aircraft, the manifest is an accurate	See			oad Module,
	nausport	Manucst	representation of the resources on the aircraft, and the aircraft is ready to depart the base.	Decomposition			oad
							squipment,
							ersonnel





Node Number	Process Name	Output/Product	Description	Time to Complete (in	Frequency of	Exceptions/ Rules	Resource
				minutes)	Occurrence	Variation Factors	
A51.1	Notfy Resources	Arriving Resources	Using the list of identified personnel and equipment, notifications are transmitted to the individuals to inform them when to report to their unit, and the equipment is made	min 0.5 mean 1.5			Resource Preparation
			accessible.	max 2.5			Module
A51.2	Upcate	Unit Prepared Cargo	The necessary maintenance and packaging requirements are updated.	min 0.5			Resource
	Status	Elements		mean 1.5			Preparation
				max 2.5			Module Personnel
		Unit Completed	The personnel's medical records are checked with respect to the deployment medical		2% need		Resource
		Labound	requirements. Many of the other records are updated as possible within the unit, and any introessing requirements to be done during the actual dealowment according as identified.		PDF .		Preparation
			בייייייייש בייאייביייין אינייייש אינייש אינייש אינייש אינייש אינייש אינייש איניייש אינייש אינייש אינייש אינייש		processing		Module Personnel
A513	Buid	Unit Accepted	The unit aggregates the cargo elements into increments as specified through the load plan	See			Resource
	Increments	Increment	and increment layout. They perform a check to ensure the accuracy of the increment.	Decomposition			Preparation
							Module
		Deitorial War					Personnel
4		welected item	The checking of the increment may identify specific equipment items that need				Resource
			Ichiaceilieil.				Preparation
							Module .
A514	Move to Unit	Completion Statue &	The service and increments are accorded to the field of the service of the servic				rersonnei
	Holding Area	Personnel Movement	the personned and inclements are moved to a noiging area in preparation for further processing.	min 2	4.0	<u></u>	Resource
)	Requirements		may 5			reparation
				2 V 10			Personnel
A51.5	Determine	Increment Movement	The on base movement requirements for the increment are determined, along with each	min 0.01			
	Increment	Kequirement	location, time and specific equipment required for each movement.	mean 0.1			
	Needs			max 0.25			
A51.6	Notfy	Transport Request	A notification is sent to on-base transportation identifying the amount of resources ready	min 1			Resource
	CONTRACTO		ion utatisport.	mean 2			reparation
				max 3			Module
1							ersonnel





Node	Process Name	Output/Product	Description	Time to	Frequency	Excentions/	Resource
Number		•	-	Complete (in	of	Rules	
				minutes)	Occurrence	Variation Factors	
A513.1	Position	Loaded Increment	The unit prepares the individual cargo items or elements. As they build the	See			Increment Buildup
	Elements		increment, they place the items onto a pallet or into a cargo box, as illustrated in the	Decomposition			Module
	-		increment layout.				Cargo Buildup Team
		Increment List	As each item is loaded onto the pallet, it is verified against the list identified in the				Increment Buildup
			increment layout.				Module,
							Cargo Buildup Team
A5132	Determine	Unit Determined	It is determined whether or not the increment satisfies the limitations specified in the	See			Increment Measurement
	Increment Pronerties	Properties	load plan.	Decomposition			Module, Cargo Buildum Team
		Rejected Increment	If the increment does not satisfy the limitations specified adjustments are performed		1 50%		Increment Measurement
			to the increment packing to correct any problems.				Module Module
			-				Cargo Buildup Team
A513.3	Document	Documented Increment	As the increment build occurs, a listing of the contents provides a manifest for the	See			Increment
	Increment		increment.	Decomposition			Documentation Module,
	Content						UDM
A513.4	Produce &	Identified Increment	The computed properties are documented along with the increment manifest, both of	min 0.5			Increment
	Place Placard		which are attached to the increment for immediate reference.	mean 1		-	Documentation Module,
				max 1.5			Cargo Buildup Team
A513.5	Inspect	Increment & Unit IDs	A unit inspection ensures the increment meets all the necessary guidelines.	min 1.5			Increment
	Increment			mean 2			Documentation Module,
				max 3			Cargo Buildup Team
		Rejected Item	If the increment does not pass the inspection it must be torn down and rebuilt	6% fixed here	6% fixed		Increment
			properly.	min 7.5	here		Documentation Module,
				mean 9	1.5% sent		Cargo Buildup Team
				max 30	back to unit		
				1.5% sent back			
				to unit			
				min 1.5		•	
				mean 2			
10121				c XBIII			
0.EICA	Designate Transport Path	Unit Accepted Increment	A reference made to the increment's subsequent inspection requirements determines in the path taken by the increment from the unit to the transporting aircraft.	min 0.01 mean 0.1			Increment Documentation Module
				max 0.25			





Node	Process Name	Output/Product	Description .	Time to	Frantanci	Evandane/	Decision
Number				Complete (in	of	Rules	Vesture
				minutes)	Occurrence	Variation	
						Factors	
A5131.1	Deternine	Adjustment	When a problem occurs with an increment, and it is declared frustrated, corrective actions	min 0.5			Increment
	Problem For	Requirement	must be identified to repair the problem and get the increment back into the deployment	mean 1			Buildup
	Rejection		process, so as to not impact the schedule.	max 1.5			Module,
							Cargo
							Buildup Team
A51312	Repace/	Increment Buildup	The items within the increment are placed in accordance with the increment layout. If the	min 7			Increment
	Adjust Items		increment was frustrated, the increment will be torn apart and rebuilt according to the	mean 10	-		Buildup
			adjusted requirement.	max 12.5			Module,
			•				Cargo
							Buildup Team
A51313	Place	Loaded Increment	The netting is placed around the increment.	min 1			Cargo
	Constraints			mean 1.5			Buildup Team
				max 2			





Node Number	Process Name	Output/Product	Description	Time to Complete (in	Frequency of	Exceptions/ Rules	Resource
				minutes)	Occurrence	Variation Factors	
A5132.1	Determine	Measured Increment	The unit identifies the measurements of the increment.	min 1			Increment
	Increment Size			mean 2			Measurement
				max 3			Module,
							Cargo Duildun Taam
A51322	Place On Scale	Rolling Stock	The unit weighs the increment and annotates if it is rolling stock for further computations.	min 1	25%		Increment
		Increment		mean 2			Measurement
				max 3			Module,
							Cargo Buildun Team
		Non-Rolling Stock	The unit weighs the increment and annotates that it is not rolling stock.				Increment
		Increment					Measurement
							Module,
				-		<u> </u>	Cargo
6 CC13 V		D - (15					buildup I cam
C76ICA	Conpute	Kolling Stock with	The unit computes the center of balance for each increment that is rolling stock.	min 1			Increment
	Cartyling		-	mean 2			Measurement
	LUSHIOI			max 3			Module,
_							Cargo
		• • • • • •					Juildup Leam
477152.4	Conpare	Unit Determined	All the specifications of the increment are compared against the load plan to ensure they	min 0.01			ncrement
	ACUAIS 10	Properties	are within the limits defined in the load plan.	mean 0.1			Measurement
	Liming			max 0.25			Module,
,	Factors					-	Cargo
							Buildup Team
		Rejected Increment	If the specifications of the increment are not within the limits defined in the load plan, the		1.5%		ncrement
			increment is considered trustrated and will have to be rebuilt.				Measurement
							Module,
							Cargo
							man danner



A5132: Determine Increment Properties

Node	Process Name	Output/Product	Description	Time to	Frequency	Evcontions/	Recourse
Number		1		Complete (in	of the second	Rules	an and an
				minutes)	Occurrence	Variation	
						Factors	
A5133.1	Document	Increment Manifest	The list of all items on the increment is generated.	min 0.01			Increment
	Increment List			mean 0.1			Documentation
				max 0.25			Module
A51332	Select HazMat	Increment HazMat List	A master list of hazardous materials is used to identify materials on the increment that are	min 0.04			Increment
	Items		considered hazardous.	mean 0.1			Documentation
				max 0.25			Module
A51333	Prepare	Shippers Declaration	For each hazardous material a shipper's declaration is generated.	min 0.01			Increment
	Shippers			mean 0.1			Documentation
	Authorization			max 0.25			Module
A51334	Identify	Selected HazMat	A list of authorized individuals within the unit to sign the shipper declaration is generated.	min 0.01			Increment
	Shippers Dec	Controller		mean 0.1 ·			Documentation
	Authorization			max 0.25			Module
A5133.5	Select One	Name of Selected	Of the list of authorized individuals, the UDM selects a person easily accessible for their	min 0.5			Increment
	Person For	Authorization Person	signature.	mean 1	·		Documentation
	Signature			max 1.5			Module.
							MON
A5133.6	Access	Signed Shippers Dec	A notification is transmitted to the selected individual to facilitate their signing of the	min 0.01			Increment
	suppers Dec		document(s).	mean 0.1			Documentation
	Autrorization			max 0.25			Module



A5133: Document Increment Content

Node Number	Process Name	Output/Product	Description	Time to Complete (in	Frequency of	Exceptions/ Rules	Resource
				minutes)	Occurrence	Variation Factors	
A53.1	Verify	Verified Deploying	Each person is verified for their place on the chalk by reviewing the personnel manifest.	min 0.25			PDF
	Individual	Individual		mean 0.5			Personnel
				max 1			
A53.2	Collect	Palletized Mobility	As the personnel enter the PDF, they drop their mobility bags on a pallet for transportation.	Min 0.1			PDF
	Moblity Bags	Bags	-	mean 0.15			Personnel
				max 0.25			
A53.3	Replace/	ID Card	If the person requires a new ID card, they will process through this workstation.	min 1	0.1%		PDF
	Update Id Card			mean 2			Personnel
				max 6			
A53.4	Update	Medically Prepared	If the person requires any shots, they will process through the medical workstation. The	min 1 ·			Medical
	Medical	Individual	records will automatically be updated.	mean 2			Personnel
				max 6			
A53.5	Provde	Consulted Person	If the person requires any special consultation, they will process through the appropriate	See	2%		Personnel
	Consultation		workstation.	Decomposition			Module,
							PDF Support
							Team
A53.6	HoldFor	Transport Ready	The personnel are placed in a holding area awaiting transport to the aircraft.	min 0.25			Status Check
	Transport	Resources	-	mean 0.5			Module
				max 1			Personnel





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Node	Process Name	Output/Product	Description	Time to	Frequency	Exceptions/	Resource
Number				Complete (in minutes)	of Occurrence	Rules Variation	
			-	(0000000	our multiple	Factors	
A535.1	Updite	Next of Kin Insurance	If the person requires any updates to their emergency information, they will process	min 1			Personnel
	Emegency	Beneficiary	through this workstation and provide the appropriate updates.	mean 2			Module,
	Data	Information & Delivery	-	max 6			PDF
		Information					Personnel
A535.2	Provide Legal	Will, Power of	If the person requires any legal assistance, they will process through this workstation and	min 1			Personnel
_	Assistance	Attorney & Delivery	provide the appropriate updates.	mean 2			Module,
_		Directions		max 6			PDF
							Personnel
A535.3	Provide	Religious Materials &	If the person requires consultation with a chaptain, they will stop at this workstation and	min I			Personnel
	Religious	Support	have the necessary discussions and possibly receive some religious information for future	mean 2			Module,
	Support		use.	max 6			Chaplain
A535.4	Provide	Financial Arrangements	If the person requires any financial support, they will stop at this station and make the	min 1			Personnel
	Financial		necessary arrangements.	mean 2			Module,
	Support			max 6			PDF
							Personnel



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A535: Provide Consultation
Node Number	Process Name	Output/Product	Description	Time to Complete (in	Frequency of	Exceptions/ Rules	Resource
				minutes)	Occurrence	Variation Factors	
A54.1	Inspect	Packing Accepted	An inspection of the increment is performed at the CDF to ensure the increment meets all				Increment
	Increment	Increment	tlight safety requirements.				Documentation
					,		Module,
							UDF Personnel
		Frustrated Cargo Status	If the inspection of the increment reveals the increment does not pass, the information is				Increment
			relayed to the appropriate organizations, and the cargo is considered frustrated.				Documentation
							Module,
A54.2	Determine	Measured Increment	The increment is processed through a very accurate measuring device.	min 2			LOUT T COUNCIL
	Increment		9 •	mean 4			Measurement
	Paraneters			max 5.5			Module.
			•				Increment
							Measurement
							System
A54.3	Compare	Accepted Increment ID	A review of the increment measurements is compared to the load plan to ensure the	min 0.01			Increment
	Actuals 10		increment fits correctly into the designated airlift.	mean 0.1			Measurement
	Conveyance Limitations			max 0.25			Module
		CDF Rejected Cargo	If the increment is determined to not fit correctly on the airlift, the increment is rejected.		1%		ncrement
,		Increment					Measurement
		Frustrated Cargo status	The status of the frustration of the increment is relayed to the appropriate organizations.				ncrement
						I	Measurement
						1	Module
A54.4	Adjıst	Transport Ready	When the increment fits correctly on the airlift, adjustments are made to the placard and the	min 0.5		I	ncrement
	Increment	Increment	increment is ready for transport.	mean 1		I	Documentation
	Information			max 1.5		-	Aodule
A54.5	Kelay	Deployment Status	The status of the CDF processing is available to those needing the information.	min 0.01		I	ncrement
	Increment			mean 0.1			Documentation
						1	Sinnor



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Resource	Increment Documentation Module,	Documentation Module,	Increment Documentation Module	Increment Documentation Module	Increment Documentation Module,	Increment Documentation Module,	CDF resound Increment Documentation Module, CDF Personnel	Increment Documentation Module,	Increment Documentation Module
Exceptions/ Rules Variation	1 4700								
Frequency of Occurrence				%		%		%	
Time to Complete (in minutes)	min 1 mean 2 max 3		min 001 mean 0.1 max 0.25		min 1.5 mean 6 max 50		min 0.01 mean 0.1 max 0.25		min 0.01 mean 0.1 max 0.25
Description	The HazMat documents accompanying the increment are reviewed.	As the increment arrives at the CDF, the increment number is validated against the loan plan ensuring the increment is designated to the correct chalk.	Using the HazMat certification documents accompanying the increment, a comparison between the certification and the HazMat items confirms that each HazMat item is documented.	If fan item on the increment is determined to be HazMat and no appropriate documentation accompanies the increment, the increment is considered frustrated.	An inspection of the increment is performed to correlate between the pallet layout and the increment layout to ensure correct positioning of the items, sspecially the HazMat items. It a minor problem is discovered, it is corrected here at the CDF.	If the packing of the total increment is considered unacceptable, the increment is considered frustrated.	The HazMat certification documents are reviewed for appropriate content and authorized signatures.	If the HazMat certification is wrong or missing, the cargo is considered flustrated.	The status of all the information about the cargo is available to those who need the information.
Output Product	Certification Documents	Assigned Increment	HazMat Documented Increment	Undocumented HazM Items	Package Approved Increment	Package Unapproved Increment	Valid Certifications	Invalid Certifications	CDF Rejected Cargo Increment & Accepted Increment ID
r Process Name	Veriy Chalk Assignment		Veriỳ HazMat Item:		Visually Inspect		Veriỳ HazMat Certfication Doc:		Report CDF Results
Node Numbe.	A541.1		A541.2		A5413	i	A5414		A541.5

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Node Number	Process Name	Output/Product	Description	Time to Complete (in	Frequency of	Exceptions/ Rules	Resource
				minutes)	Öccurrence	Variation	
						Factors	
A55.1	Revew Load	Load Master Approved	The Load Master reviews the load plan with respect to the loading standards for the aircraft	min 1			Load Plan
	Plan	Load Plan	to ensure the safety of the chalk. The Load Master and the base load planner coordinate on	mean 2			Module,
			adjustments to the load plan.	max 3		-	Load Master
A552	Position	Deployed Increment &	The cargo and personnel are loaded on the aircraft in accordance with the load plan.	Increments:			Pallet Dolly,
	Increments &	Personnel		min 3			Transportation
	Personnel		-	mean 5			Loading
				max 8			Equipment,
				Passengers:			Load Master
				1 minutes			Load Team
A55.3	Record	PAX Loading Record	As positioning of each increment and individual occurs, an annotation to the load plan	min 0.1			Load Plan
_	Increments &	& Annotated Load Plan	indicates their presence.	mean 0.2			Module,
	Personnel			max 0.5			Load Master,
			\$				Load Team
A55.4	Adjust &	Manifest	At loading completion, the finalizing, review and approval of the load plan by the Load	20 minutes to			Load Plan
	Present Final		Master produces the load manifest for the aircraft. The aircraft is ready for take-off.	takeoff	-		Module
	Documents					***	



