

**BY ORDER OF THE COMMANDER
AIR FORCE MATERIEL COMMAND**

**AIR FORCE MATERIEL COMMAND
INSTRUCTION 23-120**

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Materiel Management

***EXECUTION AND PRIORITIZATION REPAIR
SUPPORT SYSTEM (EXPRESS)***



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This instruction establishes policies and procedures and assigns responsibilities to the Materiel Management Functional Area at the Air Logistics Centers (ALCs) for the implementation and operation of the EXecution and Prioritization of REpair Support System (EXPRESS) under the Depot Repair Enhancement Process (DREP) within the AFMC.

Chapter 1

MATERIEL MANAGEMENT PHILOSOPHY AND POLICY

1.1. Purpose. The intent of this instruction is to provide guidance and direction to the ALC Inventory Management Specialist (IMS)/Materiel Manager (MM) personnel. This document highlights the management philosophy and other significant areas of policy formulation behind EXPRESS under DREP. Within the ALCs, there are three (3) groups of users who rely on EXPRESS output for their daily activities as directed by DREP. These three groups are the Fixer, Exchangeable Production Support Center (EPSC) and still referred to as the SSC in some OIs, as the Exchangeable Production Support Center (EPSC) “SSC/EPSC” and the IMS/MMs. The objective of this instruction is to provide guidance and direction for the Materiel Management/Inventory Management functional areas. There will be references to the Fixer and SSC when they are working closely with the IMS/MMs as a Materiel Management Team (MMT) or are providing data to one another. For specific details of the responsibilities of the Fixer and SSC personnel refer to AFMCI 21-129, *Depot Maintenance Management, DREP*, 9 March 2001.

1.2. Management Philosophy. EXPRESS supports a number of critical functions identified as components of DREP. These include repair prioritization/execution and distribution prioritization. The management philosophy underlying EXPRESS covers three main areas – policy, functional system operation, and configuration management process. In each of these areas, the management philosophy corresponds to the business rules for DREP identified by the AFMC/CC. The EXPRESS system can be changed in response to changes in corporate Air Force business rules or functional system operations. In addition, configuration management of EXPRESS conforms to the standard process utilized by the Electronics Systems Group (ELSG), formerly known as the OSSG. The major focus of EXPRESS is client support (HQ U.S. Air Force, HQ AFMC, Major Commands [MAJCOMs], and ALCs), with the management philosophy of EXPRESS directed toward the achievement of that goal.

1.3. Policy. This instruction contains policy that governs the Materiel Management functions relative to EXPRESS within DREP. Implementation and compliance to this policy is mandatory. The HQ AFMC EXPRESS Functional Manager will provide clarification of policy. Policy will be enforced until receipt of an instruction change or approved waiver. This instruction will be reviewed annually during the anniversary month of publication. The HQ AFMC EXPRESS Functional Manager, with the ALC EXPRESS Functional OPRs, will accomplish the annual review and ensure the instruction is current, accurate, and relevant.

1.3.1. Policy Changes. Only those policy change requests related to the Inventory Management Specialist/Materiel Management functions in EXPRESS will be submitted to this instruction.

1.3.2. Waiver and Capability Requests (CRs).

1.3.2.1. HQ AFMC Directorate of Logistics (A4) is the approval authority for all waiver requests and proposed changes to this instruction. The ALC/CC will sign all waiver requests/proposed changes prior to submission to HQ AFMC/A4. The Product Director (PD) will approve all waiver requests/proposed changes before submission to the ALC/CC. Waivers and changes will be effective on the date HQ AFMC/A4 approves them. Approved changes will be accomplished in accordance with Air Force Instruction (AFI) 37-160, Volume 1, *The Air Force Publications and Forms Management Programs*. Requests for waiver must contain:

- 1.3.2.1.1. Specific reference to paragraph(s) that will be waived.
- 1.3.2.1.2. Reason for the waiver (i.e., why organization cannot comply with existing guidance).
- 1.3.2.1.3. Actions taken to achieve compliance.
- 1.3.2.1.4. Cost/savings of non-compliance.
- 1.3.2.1.5. Expected date of compliance.

1.3.2.2. When requesting a software change to EXPRESS, the individual identifying the potential modification must submit a Capability Request (CR) to HQ AFMC/A4N. After submission of the CR, the requested modification follows the standard configuration management process. The HQ Office of Primary Responsibility (OPR) Board, which includes representatives of HQ AFMC/A4/A8/A6X, will review the proposed software change. ALC representatives will also review the proposed modification. If the request for the proposed modification is approved at this level, it will be forwarded to HQ division chiefs (A4/A8/A6X), with a recommendation for approval. After approval at that level, the submitter of the proposed modification will develop a Computer Systems Requirements Document (CSR) to outline the technical solution and a Requirements Exit/Acceptance Criteria (RE/AC) form to identify the criteria for accepting the software after development. For more definitive information on the CR process, refer to the HQ AFMC/A4 Requirements Management Plan for the Depot Maintenance Activity Group/Supply Management Activity Group (DMAG/SMAG) Logistics Process, dated April 20, 2001. An electronic copy of the CR is accessible on the web at: <https://afkm.wpafb.af.mil/ASPs/docman/DOC-Main.asp?Tab=0&FolderID=OO-LG-MC-01-10-11&Filter=OO-LG-MC-01>, in the folder titled "Revised RM Plan." Use of this process as outlined in this plan is mandatory.

1.3.2.3. Test or trial programs affecting EXPRESS or the policies governing EXPRESS use are not authorized without an approved waiver. Waiver requests for test/trial programs will contain the following information:

- 1.3.2.3.1. Impact on client support, workload, data systems, money, manpower, supply, and equipment.
- 1.3.2.3.2. Why test/trial is necessary and what its duration will be.
- 1.3.2.3.3. Cost of trial/test and method of funding (include payback period for investment).
- 1.3.2.3.4. How the test/trial will be measured.
- 1.3.2.3.5. Expected benefits.

1.3.3. Operating Instructions (OIs). OIs are directive publications that assign responsibilities, direct actions, and prescribe procedures. The ALCs will have the responsibility to prepare and publish OIs. OIs must refer to a parent instruction and will be reviewed at least annually. An operating instruction may add to instruction requirements, but will not detract, relax standards, or give permission to deviate from the parent instruction. OIs that have long-term, command-wide impact should be considered as an instruction change. Develop and manage OIs according to AFI 33-360, Volume 1 and this instruction.

1.3.4. Policy Letters. Policy letters may be issued as supplementary documents but will not be issued to waive any part of this instruction. Policy letters will be valid for one year and will not be extended.

Policy letters will be reviewed prior to the end of the one-year period and will either be submitted as a change to this instruction, or automatically rescinded. All HQ AFMC policy letters will be coordinated with all affected directorates and offices. Informational copies will be provided to all directorates listed in this instruction.

1.4. Terms and Abbreviations. [Attachment 1](#), Glossary of References and Supporting Information, includes a list of terms used in this instruction and their definitions, and a list of abbreviations/acronyms and their meaning.

Chapter 2

MATERIEL MANAGEMENT.

2.1. Purpose. This chapter provides guidance on the use of EXPRESS within the context of DREP at the ALCs. In addition, it provides a description of the modules included in EXPRESS and a detailed explanation of the functions underlying the Supportability process within EXPRESS.

2.2. Data Services Module. The Data Services Module provides the data services necessary to support the other EXPRESS functional modules. Functional processes within this module control the data flow in and out of EXPRESS. Data input interfaces provide (1) daily updates of worldwide asset status, backordered requisitions, and depot repair resources; (2) weekly updates of changes to operational tempo and scenario data; (3) monthly updates of item interchangeability and substitutability data; and (4) semiannual updates of item-unique data, such as item descriptions, item demand data, and contract repair data. Daily output interfaces provide (1) a priority list of repair requirements for funding certification and building project orders via the J025A Automated Project Order (APO) system; (2) a priority list of reparable assets for movement to depot repair via the D035K Stock Control and Distribution – Wholesale and Retail Receiving and Shipping system. Functionality within this module also includes features for data editing and report viewing by means of client terminals and the World Wide Web (WWW).

2.3. Prioritization Module. This module includes the functional processes that determine what should be repaired next, i.e., the Net Repair Objective (NRO). Using data provided by the Data Services Module, the prioritization and requirements determination processes are accomplished using a combination of the Prioritization of All Reparable Spares (PARS) Model and the EXPRESS Prioritization Processor (EPP). An initial priority sequence is generated, by item, for Air Force systems. Priorities for aircraft-indentured items are based on a mathematical optimization that provides the most improvement in meeting weapon system availability goals. These computations use operational tempo and scenario data provided by the MAJCOMs, in conjunction with relevant item demand and repair rates. Priorities for non-aircraft items are computed using base-reported daily demand rate data. An integrated priority sequence is created using the Single Prioritization Across Weapon Systems (SPAWS) logic, which reorders initial priorities based on target weapon system percents. The priority sequence is then further adjusted using the Spares Priority Release Sequence (SPRS), which reorders priorities based on Air Force-directed priorities for specific types of requisitions. The final priority sequence assigns a priority to each item needed in the total worldwide requirement. Depot serviceable and in-work assets are allocated to the highest priority needs, and the remaining needs become the prioritized NRO.

2.4. Supportability Module. The EXPRESS Supportability Module includes the functional processes that determine what can be repaired next. Using the prioritized NRO determined by the prioritization and requirement module, the processes in this module determine how much of the NRO can be repaired with available depot resources. Each prioritized repair requirement is evaluated as to whether the repair can be supported with available carcasses (reparable assets); shop capacity (trained personnel, equipment, and facilities); repair funds (financial burn rates) and replacement parts (recoverable sub-components). Thus, Supportability is measured in terms of carcass, capacity, funds and parts. Each of these four resource categories affects a shop's ability to perform the repair. In EXPRESS, the IMS/MMs have the responsibility to see if carcasses can be made available where the EXPRESS Supportability Module indicates there is a shortage of carcasses. The IMS/MMs will manage supportability for repair requirements by using the

EXPRESS Supportability Report and the Supportability Summary which are both accessible from the EXPRESS Web Toolkit (EWT) “Drop-down Menu.”

2.4.1. IMS/MMs Vehicle. The IMS/MMs will evaluate resource supportability by using the Supportability Module. Supportability is an automated function in EXPRESS that is updated daily to check for carcasses, shop capacity, funds, and parts, to see if the requirements being driven by EXPRESS are supportable. The supportability functions are not totally automatic. Repair shop personnel can override EXPRESS by using various switch settings in the Supportability Module. The Workload Managers/Fixers are responsible for setting the switches at the ALCs. The IMS/MMs and the ALC Functional Managers will provide assistance. The most accurate information available on capacity and parts will be used when setting the switches in the EXPRESS Supportability Module. These parameters will not be manipulated so that a greater or lesser number of repair actions would be depicted as supportable with repair resources. The parameters will be set with the best available data and input to the system so the EXPRESS Supportability Module can accurately determine the number of supportable repairs, based on the availability of carcasses, capacity, funds, and parts. Daily and numerous changes in switches reflect routine file maintenance by the Workload Manager and provide assurance that they are evaluating the shop floor capacity and constrains within their area. Changes to the switches must be done in EWT. EWT requires a USER ID number to do any file maintenance and provides the Administrator or others with auditable information which shows adjustments to EXPRESS. The auditable information will be kept available for one year. Personnel using this data will be able to determine who made the changes and when the changes were made, however “why” the changes were made will not be available.

2.4.1.1. Carcass availability, which is the first check made during the Supportability Module, checks for carcasses to drive in for repair. EXPRESS checks the condition of carcasses in warehouses at source of repair (SOR) ALC, other ALC’s, contractor locations, and other off-base storage sites. It also checks for reparable assets that are in transit to SOR ALC, other ALC’s, contractor locations, and other off-base storage sites. EXPRESS considers selected carcass constraint parameters by NSN, to determine source(s) for obtaining the quantity of reparables available for repair. EXPRESS adds the number of assets in the selected asset condition to determine the total number of carcasses available to support the repair requirement. This portion of the repair requirement represents the NRO. EXPRESS evaluates carcasses on a “go,” “no-go” basis. The IMS/MMs also have the responsibility to see if carcasses can be made available where the EXPRESS Supportability Module considers repair carcass constraints. When directed by the IMS/MMs, the shops will evaluate carcasses for potential cannibalization (bits, pieces, or components) to satisfy other valid requirements with a funded AFMC Form 206.

2.4.1.2. Capacity is the second check during the Supportability Module in EXPRESS. Capacity will be checked against the man-hours available, as well as item specific constraint criteria. The maintenance personnel manually input the capacity constraints into EXPRESS. The workload manager must ensure shop capacity is correctly loaded. Data on shop capacity will not be manipulated to circumvent the normal operations of the EXPRESS system. Doing so prevents the system logic embedded in EXPRESS from generating objective results on supportable repair actions and degrades weapon system support. EXPRESS cumulates the quantity of repair requirements remaining after repair requirements pass the carcass portion of the module. It identifies repair requirements exceeding the maximum item constraint as unsupportable. EXPRESS cumulates the standard repair hours for repair requirements remaining after repair requirements pass the carcass, and maximum item constraint portion of the module. It identifies repair requirements exceeding

the input shop hour capacity as unsupportable. This is accomplished through the use of the “Supportability Capacity” Switch.

2.4.1.2.1. Using the “Supportability Capacity” Switch the user can select one of two methods, either “Additive Hrs” or “Total Hrs Pipe,” for determining an hourly capacity constraint for a given shop. It offers the capability to account for repair shop capacity, defined as the amount of workload that can be brought into the shop on a given day or the total amount of workload that can be in the shop at any given time.

2.4.1.2.2. The next step is for the Workload Manager to determine “Supportability Hours,” the maximum number of daily repair hours available for a particular shop. This quantity is dependent upon the setting for the “Supportability Capacity” Switch. This number is a starting point for determining the capacity for new work remaining in a repair facility and can be used to manage shop capacity. This field is very important, because if there are not enough hours listed here, the item will fail due to lack of shop support. The shop hour capacity is input prior to the daily run of EXPRESS. Under the View selection, the capacity is input under the “Supportability Hours” field on the Repair Resource Screen. Before setting the hours constraint, the Fixer must determine the desired approach to the constraint.

2.4.1.3. Funds availability is the third check in the Supportability Module. After passing the checks for carcasses, and capacity, the repair requirements are entered onto the Stock Control System Express Table and sent to the J025A for funds application. Under EXPRESS, funds are evaluated on a “go,” “no-go” basis.

2.4.1.4. Parts are the last check in the Supportability Module. Parts are checked against the Bill of Materials (BOM) to determine the parts required to support repair of the reparable asset based upon EXPRESS’s prioritized repair requirements. EXPRESS obtains the quantity of each part required to support the reparable assets by checking the asset availability utilizing asset balances in the D035K. Then, EXPRESS determines the probability of available parts supporting each repair requirement by recognizing parts balances and applying G005M repair replacement percents. It checks the probability of parts supporting the repair requirement against the Predetermined Acceptance Probability (PAP), to determine if the repair requirement is considered supportable. Workload Manager/Fixer personnel are barred from inducting assets (exceeding the NRO) to rob or cannibalize as a source of supply for repair parts not available through normal supply channels. As such, the parts availability functions in the EXPRESS Supportability Module will not be used to enable this type of behavior. The supply system will requisition parts needed to affect repairs. If repair parts are not received in a timely manner, the Fixer will seek relief by asking the IMS/MMs to fund carcass cannibalization with an AFMC Form 206.

2.4.1.4.1. The PAP is a managerial threshold determined, user defined, numeric field between 0.0 and 1.0. The Workload Manager/Fixer will manually input the PAP, via the EWT before the daily EXPRESS run. The Workload Manager/Fixer will set these constraints based on accurate data and will not manipulate the settings to artificially constrain or expand the number of item inductions. A PAP setting of 0.0 indicates that EXPRESS will consider all repair requirements as supportable based on parts. A PAP setting of 1.0 indicates that EXPRESS will consider only repair requirements that have a 100 percent probability of being supportable, based on parts. When the PAP “DFLT Sw” is “ON” that indicates that the selected NSN is using the PAP setting in the “Repair Resource” screen. The “DFLT” setting is set at .5000 for every item in the shop. Individual item PAPs may be set on the “Item” screen by setting

the PAP “DFLT Sw” to “OFF” and inserting the desired setting. Representatives of the supply and maintenance communities will review PAP switch settings monthly, to ensure this information is accurate.

2.5. Distribution Module. The EXPRESS Distribution Module uses the output of the prioritization process to determine where items should be distributed. The distribution prioritization logic is based on SPRS and improvement in weapon system availability. Under this process, backorders are matched to priorities generated by EXPRESS (again, using SPRS and improvement in weapon system availability). EXPRESS generates a file containing these priorities and sends it to the Stock Control System (SCS) each day. For the NSNs included on this file (and turned on in EXPRESS), SCS releases assets, based on the priorities developed by EXPRESS.

2.6. Repair/Overhaul Decision Process. EXPRESS supports the Air Force “Repair on Demand” philosophy. Repair on Demand is defined as the ability to quickly and individually induct and repair a range of different repairable assets, rather than repairing batches of like assets, to achieve efficiencies in shop workloading. EXPRESS is the only system (either standard or non-standard) that will be used to generate Air Force repairable priorities and develop longer horizon forecasts, thereby eliminating the use of any other priority generating or forecasting tool. Requests to deviate from the standard definition of Repair on Demand (daily repair execution) will have the coordination /approval of the ALC EXPRESS Functional POC before the request is sent to HQ AFMC/A4 for review and approval. EXPRESS logic determines which programmed demands to repair first and whether an asset will be inducted that day. When developing repair and distribution recommendations, EXPRESS first supports corporate Air Force priorities (as embodied in SPRS) and then uses an optimization technique to achieve weapon system readiness goals. EXPRESS, which is used for all programmed repair requirements, accesses information from multiple systems to generate repair and distribution priorities. An applied rule is that once an asset is moved into the repair shop, that repair is accomplished regardless of changing conditions and therefore will continue to completion unless the asset goes Awaiting Parts (AWP) or is stopped by exception. Programmed repair requirements are defined as those having four or more stable repair requirements per year. Permanent Production Control Numbers (PCNs) must be established on all programmed repairs having four or more repair requirements per year. This guidance does not preclude local ALC initiatives to define programmed repair requirements for those having fewer than four repair requirements per year. Non-programmed workload requirements will be handled on an exception basis, using the Form 206, Temporary Work Order (T-Job) process.

2.6.1. Repairable Item Movement Control System (RIMCS) Coding. RIMCS is a code that identifies priority/movement of unserviceable material to repair, storage, or disposal. After an item is established in RIMCS, D035A will pass send a transaction to D035C to update the RIMCS priority code. The transaction updates RIMCS with the proper disposition instructions. For Multiple Source of Repair (MSOR) items, the IMS/MMs will file maintain all appropriate repair locations.

2.6.2. Organic Repair. EXPRESS identifies repairs for programmed DREP workload. Programmed DREP workload is assigned a permanent control number and maintained in accordance with the Management of Items Subject to Repair (MISTR). Refer to AFMCM 65-293, *Management of Item Subject to Repair (MISTR)*. The MISTR instruction is currently being revised and will be published as AFMCI 23-112. For situations in which necessary information is unavailable, resulting in the creation of an impediment to successful implementation of items for repair (for example, if SOR information is blank), EXPRESS functional and system administration personnel should use all local

means at their disposal to mitigate the impact of information being unavailable. These means should include the use of local programs to generate information on missing data and provision of that information to the appropriate OPR for the information, so it can be maintained in the source system.

2.6.2.1. Supportability. EXPRESS automatically determines which items can be repaired by using the Supportability Module. Funding shortfalls will be identified to the Materiel Management Team (MRTL) who will coordinate with the Product Directorate Funds Manager for resolution. High-priority supportability failures should receive special management emphasis within the SMAG. Status of resolving skipovers (those assets for various reasons i.e. lack of funds, priority of the need, etc that could not be put into the shop for work) should be reviewed at DREP meetings.

2.6.2.2. Manual Intervention of the EXPRESS Table. There may be times when it is necessary for the Fixer or Workload Manager to manually intervene with the automated process of developing the daily EXPRESS Table. This will be done in the EXPRESS Table Quantities Output, immediately following the Supportability Module run. Each ALC will establish their own manual intervention window. The IMS/MMs will review the EXPRESS Table Quantities Output on a daily basis and make recommended changes to the Fixer during this time period. Changes will not be accepted after this period. All file maintenance changes to EXPRESS data during intervention should be made with caution. Incorrect input will result in serious operational problems, data problems, funding problems, and possible erroneous repair drives. During intervention, there are no specific restrictions governing deletion of stock numbers or quantities for which the Fixer/Workload Manager is responsible. Refer to AFMCI 21-129, Chapter 4, Maintenance (FIXER) for further information on intervention.

2.6.2.3. System (J025A) for organic repaired items. J025A will generate an on-line Project Order for each SOS/SOR combination, with data from EXPRESS and G004L. After Project Order build, funds certification and maintenance acceptance, J025A returns the funded file back to EXPRESS to begin the EXPRESS/D035K Express Table load process. If funds certification or maintenance acceptance is not completed within the time allowed, J025A will notify EXPRESS the daily inductions requirements were not funded. The EXPRESS/D035K Express Table load process will not be activated for that unfunded daily EXPRESS list.

2.6.2.4. Loading the D035K MISTR Maintenance Express System. EXPRESS (D087X) passes the funded supportable prioritized list to the D035K MISTR Maintenance Express System. Functionality resident in EXPRESS (EXPRESS Table Items) is used to view and edit items included in the feed from (D087X) EXPRESS to the D035K MISTR Maintenance Express System. Quantities can be increased or decreased for the interface between EXPRESS and the D035K MISTR Maintenance Express system by changing the quantity field on either the EXPRESS Table Items or EXPRESS Table Quantities functions in D087X (EXPRESS). When changes are made and saved to the quantity and/or change switch fields in the EXPRESS Table Items function will be updated automatically on the EXPRESS Table Quantities view in D087X (EXPRESS). Loading this list of supportable repair actions from D087X (EXPRESS) into the D035K MISTR Maintenance Express System expedites the movement of unserviceable assets into the applicable maintenance facility for repair.

2.6.2.5. Non-programmed Workload Support. Workload such as Insurance/Numerical Stockage Objective, low demand items, items that are not Cooperative Logistics Supply Support Agreement (non-CLSSA) Foreign Military Sales (FMS) items, and modification/Time Compliance Technical

Order (TCTO) items, are classified as non-programmed workloads. Because requirements for repair of these items occur irregularly or infrequently, these actions are arranged through the AFMC Form 206, T-Job rather than through EXPRESS.

2.6.3. Contract Repair Process. Contract repair can be used to supplement organic capability. The repair process for contract repair items will vary depending upon the CREP tenets applied during contract origination by the Contract Repair Team. The goal is to use EXPRESS to prioritize repair and distribution of contractually repaired items, when the necessary data system capabilities and processes become available to support this. In the intervening period, ALCs will have the option of using EXPRESS for contractually repaired items in the most advantageous manner possible. This involves using EXPRESS in tandem with legacy systems, to generate a prioritized list for repair and distribution of contractually repaired items.

2.6.4. Multiple Sources Of Repair (MSOR). MSOR items use a combination of organic and/or contract repair such as organic/organic, organic/contract, or contract/contract. The MSOR item quantity split is based on historical/estimated percentages. Once the repair split has been determined and quantities have been calculated, the items are routed to the appropriate organic and/or contract repair sites. Once an item is identified for repair and is known to have more than one source of repair, it will be prioritized through EXPRESS based on a specific quantity through the appropriate module (i.e. organic or contractor).

2.6.5. Planning Process. EXPRESS contains functionality which supports the planning process for repair resources. This functionality, which is called the EXPRESS Planning Module (EPM), generates forecasts of end-item repair requirements, along with forecasts of the repair resources necessary to support those requirements, over various forecasting horizons. EPM functions can be used not only for longer term repair forecasting, but for other functions, such as use of EXPRESS logic for computing quantities for contractually repaired items.

Chapter 3

SELF-INSPECTION REVIEW

3.1. Frequently asked questions. The following is a self-inspection review for the IMS/MMs identifying some of the most frequently asked questions about EXPRESS within the ALC, Materiel Management arena. These questions were compiled during various staff visits/inspections to the ALCs. To go to the appropriate paragraph in this instruction that relates to each question, simply do a “CTRL + left” click on the mouse on the “Para number” at the end of the question.

- 3.1.1. Are all waiver requests and process change requests (CRs) submitted in accordance with Air Force Instruction (AFI) 37-160, Volume 1, The Air Force Publications and Forms Management Programs? **Para 1.3.2.1.**
- 3.1.2. Are policy letters being reviewed annually and either being submitted as a change to this instruction, or being rescinded? **Para 1.3.4.**
- 3.1.3. When the EXPRESS Supportability Module identifies a carcass constraint for a repair requirement, do the IMS/MMs attempt to find a source for carcasses? **Para 2.4.**
- 3.1.4. Do the IMS/MMs manage supportability for repair requirements on the EXPRESS Supportability Report and Supportability Summary? **Para 2.4.**
- 3.1.5. Do the IMS/MMs use the Supportability Module in EXPRESS as the vehicle to evaluate resource supportability (i.e. lack of carcasses, capacity, funds, and parts)? **Para 2.4.1.**
- 3.1.6. Are the IMS/MMs and the ALC Functional Managers providing assistance to the Workload Manager/Fixer in the setting of the various switches? **Para 2.4.1.**
- 3.1.7. Are the Workload Managers/Fixers using the most accurate information on capacity and parts in the EXPRESS Supportability Module? **Para 2.4.1.**
- 3.1.8. Do the IMS/MMs see if carcasses can be made available where the EXPRESS Supportability module considers repair to be constrained based on carcasses not being available? **Para 2.4.1.1.**
- 3.1.9. Do the IMS/MMs direct shops to evaluate carcasses for potential cannibalization to satisfy valid requirements? **Para 2.4.1.1.**
- 3.1.10. After passing the checks for carcasses and capacity, are repair requirements entered onto the Stock Control System Express Table (MISTR Maintenance EXPRESS System) and sent to J025A for funds application? **Para 2.4.1.3.**
- 3.1.11. If repair parts are not received in a timely manner does the Fixer seek relief by asking the IMS/MMs to fund carcass cannibalization with an AFMC Form 206? **Para 2.4.1.4.**
- 3.1.12. Are the Workload Managers/Fixers setting the Predetermined Acceptance Probability (PAP) switch based on accurate data and not manipulating the settings to artificially constrain and/or expand the number of inductions? **Para 2.4.1.4.1.**
- 3.1.13. Are permanent Production Control Numbers (PCNs) established on those items having four or more programmed repair requirements per year? **Para 2.6.**
- 3.1.14. Are non-programmed workload requirements handled on an exception basis with an AFMC Form 206? **Para 2.6.**

3.1.15. Does the MM file maintain all appropriate repair locations for all Multiple Source of Repair (MSOR) items? **Para 2.6.1.**

3.1.16. Does the MMTL coordinate funding shortfalls with the Product Directorate Funds Manager for resolution? **Para 2.6.2.1.**

3.1.17. Do the IMS/MMs review on a daily basis the EXPRESS Table Quantities Output during the intervention window and provide recommended changes to the Fixer? **Para 2.6.2.2.**

WILLIAM R. MAYNOR,
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Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****Abbreviations and Acronyms***

AFMC—Air Force Materiel Command
AFMC/A4—Directorate of Logistics
AFMC/A4Y—Supply and Engineering Division
ALC—Air Logistics Center
APO—Automated Project Order
BOM—Bill of Material
CLSSA—Cooperative Logistics Supply Support Agreement
CR—Capability Request (*previously Process Change Request [PCR]*)
CSRD—Computer Systems Requirements Document
DMAG—Depot Maintenance Activity Group (formerly DMBA)
DREP—Depot Repair Enhancement Program
EPM—EXPRESS Planning Module
EPP—EXPRESS Prioritization Processor
EWT—EXPRESS Web Toolkit
EXPRESS—EXecution and Prioritization of REpair Support System
FMS—Foreign Military Sales
ICP—Inventory Control Point
IMS—Inventory Management Specialist
IMWRP—Item Manager Wholesale Requisition Process (*D035A*)
MAJCOM—Major Command
MISTR—Management of Items Subject To Repair
MM—Materiel Manager
MRO—Materiel Release Order
MSOR—Multiple Source of Repair
NRO—Net Repair Objective
NSN—National Stock Number
OSSG—Operations and Sustainment Systems Group (Formerly MSG)
PAP—Predetermined Acceptance Probability
PARS—Prioritization of All Repairable Spares

PCN—Production Control Number

RE/AC—Requirement Exit/Acceptance Criteria

RIMCS—Reparable Item Movement Control System

SCS—Stock Control System

SMAG—Supply Management Activity Group

SOR—Source of Repair

SOS—Source of Supply

SPAWS—Single Prioritization Across Weapon Systems

Supportability—Supportability

SPRS—Spares Priority Release Sequence

SSC—Shop Service Center

TCTO—Time Compliance Technical Order

Terms

Bill of Material (BOM)—A descriptive and quantitative listing of material, supplies, parts, and components required to produce a designated complete end item, assembly, or subassembly, to overhaul/repair such an item, or to construct/repair a structure or facility item. It may also show estimated costs.

Capability Request/Process Change Request (CR/PCR)—An administrative mechanism that allows the user to identify a required change to a current or planned process and then to document that recommended change for review and implementation by AFMC. A CR (PCR) may result in a policy change and/or a CSRD. A CR (PCR) may also be used to identify architecture and system wide problems that impact the functional process or could identify a change to the Logistics Process Model. These changes are used to add/change system functionality. *(New requirements are documented by CRs, and previous requirements by PCRs.)*

Daily Demand Rate (DDR) Prioritization—A methodology based on forecasting demands with daily demand rates. Only PARS can generate this priority.

Depot Maintenance Activity Group (DMAG)—A working capital account (fund) used to finance the costs of depot-level maintenance by:

-Providing working capital

-Allowing for the recovery of operating costs through the sales of goods and services

-Establishing a buyer-seller relationship to facilitate these sales. DMAG is part of the Air Force Working Capital Fund (AFWCF).

Depot Repair Enhancement Program (DREP)—The management philosophy that holds the Fixer responsible for everything necessary to accomplish repair actions. Informal DREP meetings are held weekly, and formal meetings are held monthly, to provide direction and oversight of repair-cycle management. All members of the Fixer team participate in these meetings.

D035K Maintenance Express Table (MISTR)—A capability that is currently in D035K. The system provides the needed information to the Express Table electronically. This includes information on National Stock Numbers, condition code, production number, asset quantity, location, and some additional information.

EXecution and Prioritization of REpair Support System (EXPRESS)—The tool that provides the capability to implement critical initiatives for the Requirements, Distribution, Workload Management, and Supply Reengineering efforts. Key processes in EXPRESS include repair requirements identification; prioritization method employing aircraft availability and deepest-hole methodologies; supportability analysis or repair resources; and output interfaces to automated distribution, workload management decision support tools and the D035 EXPRESS Table.

EXPRESS Prioritization Processor (EPP)—Provides the requirements identification and the deepest-hole prioritization methodologies to the systems and integrates DRIVE model priorities with the W/L concept.

Express Table—A look-up file in the SCS System (D035) that identifies items to be issued to maintenance upon receipt in central receiving and/or in the warehouse. The Express Table is loaded when a requirement to induct exists.

EXPRESS Web Toolkit (EWT)—A server-based, web-enabled application that provides a single point of access to EXPRESS data. Users in the .mil domain or users with approved IP addresses may review and print reports of EXPRESS processing. EWT will provide users with a single point of access to EXPRESS data at which they will be able to view EXPRESS results and perform data maintenance functions.

Fixer—A designated individual accountable and responsible for assets in the production shop and the assigned resources to accomplish depot repair. Using the standard DREP process, the Fixer is responsible for production output for his or her shop. The Fixer has overall responsibility for the workload, planning, scheduling, quality control, and materiel support functions in support of repair, production, overhaul, and manufacturing processes. This responsibility includes determining capacity parameters in EXPRESS to uphold the supportability function of the automated repair execution process.

Item—A part that can be repaired or used in the repair of an exchangeable item. These are items that have a designated NSN and are involved in depot maintenance.

Item Management Specialist (IMS)—Refer to description listed under Materiel Manager (MM) for a list of their basic responsibilities.

Management of Items Subject to Repair (MISTR) (G019C)—A collection of logistics management systems dealing with depot repair; a bridge between the requirement computation and the actual induction/production of an exchangeable item. MISTR involves five primary processes: depot repair requirements determination, repair workload negotiation, component parts requirements determination, repair performance reporting, and financial management.

Material Support Unit (MSU)—Responsible for direct supply and related support to the Fixer. MSU personnel provide the Fixer with parts necessary to perform repair and monitor and correct supply and contracting shortfalls that prohibit the Fixer from performing necessary repairs. They manage the consolidated reparable inventory, including all AWP assets. The workload manager is part of the MSU Team. **NOTE:** OC-ALC and WR-ALC use the term SSC in place of MSU.

Materiel Manager (MM)—A key player in day-to-day operations of client-driven repair activities at the depots. Responsibilities include, but are not limited to, stock control and distribution; monitoring field, Consolidated Serviceable Inventory (CSI), and pipeline requirements; knowing current inventory status and location; setting parameters to distribute serviceable inventory in the correct priority; assisting field units with item-related issues; assisting the Fixer and MSU with limitations to repair beyond their capabilities; and providing “big picture” item assessment to DREP meetings as required.

Materiel Management Team (MMT)—A team made up of the Fixer, the IMS/MMs, the Shop Chiefs and others that the group would consider helpful on any given project.

Multiple Source of Repair (MSOR)—Items use a combination of organic and/or contract repair such as organic/organic, organic/contract, or contract/contract. The MSOR item quantity split is based on historical/estimated percentages. Once the repair split has been determined and quantities have been calculated, the items are routed to the appropriate organic and/or contract repair sites.

National Stock Number (NSN)—A 13-position alpha/numeric field assigned to each item of supply under the federal catalog system. The NSN is composed of the applicable four-position Federal Supply Classification (FSC) plus the applicable nine-position NIIN. The NIIN consists of a two-position National Codification Bureau code and a seven-position serially assigned number. *NOTE:* Frequently, the 13-position NSN is associated with an additional element, the two-position MMAC. The MMAC is not a part of the NSN.

Net Repair Objective (NRO)—The number of assets that should be repaired.

Organic—Repair takes place when EXPRESS identifies repairs for programmed DREP workload. Programmed DREP workload is defined as workload assigned a permanent control number, assigned and maintained in accordance with AFMCM 65-293, MISTR. Currently being revised and will be published as AFMCI 23-112.

Predetermined Acceptance Probability (PAP)—A managerial threshold used in the supportability process. This threshold governs the amount of certainty desired that the available (i.e., on-hand) level of component parts will support the repair of an end item. PAP is a managerial-determined, user-defined, numeric field between 0.0 and 1.0 used in the parts supportability process. This threshold governs user confidence that the desired component parts will be on hand to support the repair of an end item. The higher the PAP, the greater the confidence demanded that the parts needed for repair will be available.

Prioritization of Aircraft Repairable Spares (PARS)—A mathematical methodology that uses marginal analysis to prioritize repair and distribution of assets to the end users. The distribution is executed either from the CSI or directly from the repair source. The PARS logic considers base flying activity, asset position, and AA goals as established by Air Staff.

Repair on Demand—The ability to quickly and individually induct and repair a range of different repairable assets, rather than repairing batches of like assets to achieve efficiencies in shop workloading.

Repair/Overhaul Decision Process—The EXPRESS logic that determines which programmed demands to repair first and whether an asset will be inducted that day. EXPRESS uses multiple systems to obtain item specific data including the Daily Demand Rates and specific WSMIS MAJCOM Scenario Subsystem (WMSS) data. EXPRESS will generate a complete list of all programmed repair actions on a daily basis for organic items and for CREP. Non-programmed workload requirements will be handled on an exception basis.

Reparable Item Movement Control System (RIMCS) Code—Identifies priority/movement of unserviceable material to repair, storage, or disposal sites.

Scenario Data—A general term that encompasses information about aircraft and their locations. Included is the Mission Design Series (MDS) identification, number of aircraft, flying hours, base name, and base maintenance and supply concepts. These data include peacetime and wartime operations.

Shop Service Center (SSC)—The entity that is responsible for direct supply and related support to the Fixer. SSC personnel will provide the Fixer with parts necessary to perform repair and will monitor and correct supply and contracting shortfalls that prohibit the Fixer from performing necessary repairs. They will manage the consolidated reparable inventory, including all AWP assets. The workload manager is part of the SSC Team. **NOTE:** OO-ALC may sometimes use MSU in place of SSC.

Single Prioritization Across Weapon Systems (SPAWS)—The prioritization method within EXPRESS that merges each of the weapon system priority lists into a single prioritized list across all weapon systems (indicated by rank and support indicator). The Fixer uses this rank to make repair induction decisions for a specific NSN to support field-level requirements.

Source of Repair (SOR)—Any facility that repairs something. In this context, repair has a very broad interpretation. These facilities do other work that is not strictly repair, including work like inspections, testing, modification installation, manufacture, and calibration. The purpose of this work is usually to keep systems and equipment operational, so this work is sometimes described as maintenance services.

Source of Supply (SOS)—The designated inventory control point (ICP) that processes requisitions from users.

Spares Priority Release Sequence (SPRS)—A methodology used for both repair and distribution on how the most important Air Force needs should be prioritized. SPRS was defined at a February 2000 Corona meeting by the MAJCOM/CCs.

Supportability Dollars—Are the dollars available daily for repair.

Supportability Hours—Are the daily repair hours.

Supply Management Activity Group (SMAG)—A funding method used by the Air Force to identify all costs associated with Air Force stock fund inventory, such as buying and repairing component parts for the various weapon systems maintained and modified by the ALC. The Air Force also uses the stock fund to pay for the ICP operations at the ALCs.

Supportability Module—A major component of the EXPRESS system that examines the likelihood of a reparable item being successfully repaired, based on the availability of primary repair resources.

Unserviceable (Reparable)—An item in a condition unfit for use but can be restored to a serviceable condition after repair, rework, or overhaul. This condition includes items requiring calibration, test, modification, assembly, or the acquisition of components.

Workload Manager—Manages the shop workload (i.e., repair, overhaul, and modification) of commodities in worldwide support of weapon systems. Monitors and manages shop capacity for both the input and output of assets. Also, works/corrects capacity information discrepancies in EXPRESS related to available shop capacity (e.g., available test stands, available skills.) The workload manager also monitors all workload in repair to include EXPRESS driven items brought into maintenance and items sold after repair.