

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

AIR FORCE MANUAL 20-118

27 OCTOBER 2015



Logistics

**REPAIR NETWORK INTEGRATION
PROCEDURES**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at www.e-Publishing.af.mil

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: AF/A4LM

Certified by: AF/A4L
(Maj Gen Kathryn Johnson)

Pages: 34

This Air Force Manual (AFMAN) provides direction for procedures and processes required to manage the Repair Network (RN) enterprise in accordance with (IAW) AFI 20-117, *Repair Network Integration*. This manual applies to Major Commands (MAJCOMs), the Air National Guard (ANG), and their subordinates. This AFMAN applies to maintenance activity on aircraft and associated support equipment, commodities, and special tools (e.g., Test, Measurement, and Diagnostic Equipment (TMDE), Depot Level Repairables (DLRs), and other major end items). Supplements and addendums must be written IAW AFI 33-360, *Publication and Forms Management*. Supplements must identify required deviations (applicability, variance, and/or differences in organizational placement of responsibilities/processes) on the supplement with the abbreviation “(DEV)” directly preceding the affected paragraph number. Only supplements and addendums containing deviations must be submitted to AF/A4L for approval. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*. Route AF Forms 847 from the field through the appropriate functional chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See AFI 33-360, Table 1.1 for a description of the authorities associated with the tier numbers. Submit requests for waivers through the chain of command to the appropriate tier waiver approval authority IAW AFI 33-360. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW the Air Force Records Disposition Schedule (RDS) in the Air Force Records Information Management System (AFRIMS).

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Chapter 1

REPAIR NETWORK INTEGRATION

1.1. Overview. This manual prescribes the standardized procedures for implementing and executing Repair Networks (RN) across the Total Force and organizations must use it in conjunction with AFI 20-117, *Repair Network Integration*. Currently, RNs only accomplish intermediate level inspection, maintenance, repair, and overhaul of reparable assets to fulfill the needs of the Mission Generation Network (MGN). The core concept of Repair Network Integration (RNI) is to optimize intermediate level maintenance to operate as a single, seamless repair operation that spans the AF Enterprise.

1.2. Process Ownership. The Chief of Staff of the Air Force (CSAF) has designated Air Force Materiel Command (AFMC) as the single process owner for the repair enterprise. As outlined in AFI 20-117, the AFMC Commander (AFMC/CC) has designated the Directorate of Logistics, Civil Engineering and Force Protection, AFMC (AFMC/A4), as the responsible authority for executing RNI responsibilities.

1.2.1. The single process owner for the AF Repair Enterprise is responsible for planning, operations, and strategy and examines the core processes that impact weapon system availability, including product flow, funding, repair requirements, repair capability and capacity, and associated information technology (IT) products.

1.2.2. Repair network management is a process-focused effort designed to improve repair efficiency, effectiveness, and weapon system availability.

1.3. Scope of Applicability. This publication establishes the requirement to pursue an optimized Total Force repair enterprise. Within this AFMAN and the RNI concept, Precision Measurement Equipment Laboratory (PMEL) calibration is equivalent to repair. RN concepts apply to all organic repair actions under AF management.

1.4. Governance. RNI utilizes a collaborative approach under the concept of Direct Liaison Authorized. Under this concept, MAJCOMs authorize Product Repair Managers (PRMs) and Repair Network Managers (RNM)s to directly consult and coordinate with Node Managers (NMs) to accomplish RNI actions. PRMs, RNM)s, MAJCOMs, and NMs use this collaborative relationship to streamline RNI communications and operations; it does not circumvent the traditional chain of command.

1.4.1. PRMs and RNM)s must coordinate and gain MAJCOM approval for any operational adjustments requiring the movement of network resources (personnel, equipment, funding, etc.). **(T-2).**

1.4.2. RNM)s are authorized to temporarily shift workload IAW this AFMAN, MAJCOM or AFMC Center supplements, and/or Memorandums of Agreement/Memorandums of Understanding (MOAs/MOU)s established IAW AFI 25-201, *Intra-service, Intra-agency, and Inter-agency Support Agreement Procedures*.

1.4.3. For each RN, MOAs/MOU)s between MAJCOMs will delegate authority to RNM)s to coordinate the temporary reallocation of workload. MOAs/MOU)s will detail how RN personnel execute changes in allocation of maintenance repairs. If existing policies and

processes sufficiently outline network requirements, a MOA/MOU is not required. MOAs/MOUs must be in place no later than 30 days prior to Product Repair Group (PRG) initial operational capability (IOC). **Note:** Permanent reallocation of workload is a function of detailed manpower analysis and requires coordination with MAJCOM and the HQ USAF Directorate of Manpower, Personnel and Services (AF/A1).

1.4.3.1. RNMs will not permanently shift workload unless it is an integral part of an approved network redesign recommendation IAW Chapter 5 of this AFMAN.

Chapter 2

COMPUTE RNI CAPABILITY AND CAPACITY (RNI CAP2)

2.1. RNI CAP2 Overview. RNI CAP2 measures the workforce capability and physical capacity to conduct repairs at the node and is aggregated to the AF repair enterprise. Repair nodes own and maintain RNI CAP2 data within Logistics Installations and Mission Support-Enterprise View/Repair Network View (LIMS-EV/RNV). RNI CAP2 is a required input to workload planning and the assessment of network performance. Key elements of RNI CAP2 include:

2.1.1. Capability. The number of direct-touch man-hours that node personnel are available to complete repairs. Capability may decrease due to non-direct touch task commitments.

2.1.2. Capacity. Equipment, physical infrastructure, or facilities available to complete repairs. Capacity may decrease due to equipment malfunctions, cross-utilization of equipment by another network, etc.

2.1.3. Potential Throughput. The normal day-to-day ability of a repair node to complete repairs. For rules governing how RNI CAP2/Potential Throughput is calculated see Attachment 2 of this manual.

2.2. RNM CAP2 Responsibilities. RNMs will:

2.2.1. Develop standard business rules for their respective network(s) for reporting RNI CAP2 (e.g., identify whether administrative tasks will be consolidated as one task or separated individually within LIMS-EV/RNV). **(T-3)**.

2.2.1.1. Air Force Metrology and Calibration (AFMETCAL) Program Office defines the standard business for the PMEL network.

2.2.2. Initiate data call for RNI CAP2 from each repair node IAW AFI 20-117. **(T-2)**.

2.2.3. Compile, aggregate, and analyze RNI CAP2 data to determine the total repair requirement the network can effectively support. **(T-2)**.

2.2.4. Ensure RNI CAP2 data integrity and completeness. **(T-2)**.

2.2.5. Monitor RNI CAP2 for changes in available man-hours and constraining assets that may require the reallocation of workload. **(T-2)**.

2.2.5.1. Ensure NMs complete training requirements IAW Chapter 7 of this manual. **(T-3)**.

2.3. NM CAP2 Responsibilities. NMs will:

2.3.1. Input RNI CAP2 data into LIMS-EV/RNV after initial data call by RNM and update RNI CAP2 every 90 days or as changes occur. **(T-2)**.

2.3.2. Contact the AFMC RNI Program Office Division (AFMC/A4L) if RNI CAP2 cannot be entered into LIMS-EV/RNV. **(T-2)**.

2.3.3. Enter PMEL RNI CAP2 data into Metrology Web (METWEB). **(T-2)**.

2.3.4. Coordinate RNI CAP2 changes with their respective MAJCOM/A4, Maintenance Group (MXG) leadership, and RNM as required. **(T-2)**.

2.3.5. Validate RNI CAP2 integrity and completeness IAW AFI 20-117. **(T-2)**.

2.3.6. Complete all required training IAW Chapter 7 of this manual. **(T-3)**.

2.4. Organizations without Backshop Repair Capability. In some cases, centralized repair will result in removal of backshop repair capability from some units. In those cases, units are not required to update LIMS-EV/RNV capability data. However, the unit commander must appoint a responsible agent to verify and update LIMS-EV/RNV capacity data. **(T-3)**.

Chapter 3

WORKLOAD PLANNING

3.1. Workload Planning Overview. Workload planning involves forecasting repair requirements into projected workloads and allocating the projected work across repair nodes based on RNI CAP2. MAJCOMs, RNMs and NMs complete this proactive process prior to the execution year to ensure efficient and effective repair execution. The degree to which workload can be forecasted and allocated will vary between networks.

3.2. Collaboration Meetings. All networks should integrate stakeholder collaboration meetings into existing supply chain forums/current workload planning processes.

3.2.1. Applicable MAJCOM Functional Managers (MFMs) will participate in network collaboration meetings, inform MAJCOM/A4s of workload concerns, and provide MAJCOM approval on workload plans when necessary.

3.2.2. PRMs will support RNMs by determining key stakeholders, participating in collaboration meetings; monitoring PRG performance, force projection changes and budget constraints; and providing strategic-level guidance. **(T-3).**

3.3. RNM Workload Planning Responsibilities. RNMs will:

3.3.1. Establish and lead collaboration meetings. **(T-2).**

3.3.2. Forecast and allocate workload as applicable to their network. **(T-2).**

3.3.3. Monitor the network by comparing planned production against actual production and consider/identify RNI CAP2 excess or shortfalls. **(T-2).**

3.3.4. Input workload plans in LIMS-EV/RNV for Propulsion networks. **(T-2).**

3.4. NM Workload Planning Responsibilities. NMs will:

3.4.1. Participate in collaboration meetings to identify and communicate issues that may affect repair execution with MFMs, RNMs, and other repair network stakeholders. **(T-2).**

3.4.2. Communicate repair enterprise issues that may affect node repair execution to local chain-of-command. **(T-2).**

3.4.3. Develop prioritized production schedules to execute workload planning and implement production changes agreed upon by the MFMs and RNMs. **(T-2).**

3.4.3.1. NMs for commodity Centralized Repair Facility (CRF) locations will use the Execution and Prioritization of Repairs Support System (EXPRESS) Web Toolkit. **(T-2).**

3.4.4. Communicate with host Logistics Readiness Squadron (LRS) to identify supply supportability issues and elevate to MFMs/RNMs. **(T-2).**

3.4.5. Elevate awaiting parts (AWP) issues to MFMs/RNMs IAW AFI 23-101, *Air Force Materiel Management*. **(T-2).**

3.5. Repair Aggregation and Prioritization. Aggregation requires the use of available IT systems/databases and stakeholder input to obtain current reparable requirements within the network. Prioritization requires the use of business rules to repair intermediate level assets in

order of precedence to meet changing enterprise needs. RNM involvement in aggregating and prioritizing repairs will vary between PRGs.

3.5.1. RNMs for commodity networks will use stakeholder input, LIMS-EV, and/or available IT systems/databases. **(T-2)**.

3.5.2. RNMs for PMEL networks will use PMEL Automated Management System (PAMS)/Facilities and Equipment Maintenance (FEM) and METWEB. **(T-2)**.

3.5.3. RNMs for propulsion networks will use a combination of actuarial data and coordination with the MAJCOMs and RNs. **(T-2)**.

3.6. Temporary Workload Reallocation. RNMs are the focal point for facilitating an agile network response when repair nodes are unable to accommodate current repair requirements or if standard prioritization processes do not adequately meet the needs of the dynamic repair environment. RNMs are authorized to shift workload as outlined in Chapter 1. RNMs will:

3.6.1. Communicate and collaborate with appropriate stakeholders and work to resolve gaps between required workload and RNI CAP2 through the reallocation of work or the movement of additional resources. **(T-2)**.

3.6.2. Coordinate with Air Force Life Cycle Management Center (AFLCMC) or Air Force Sustainment Center (AFSC) as applicable, MFMs, and repair nodes IAW established MOAs, MAJCOM supplements, and this manual. **(T-2)**. MAJCOMs must approve all reallocation plans/actions.

3.6.3. Reallocate workload within existing budget appropriations and address funding requirements introduced in Chapter 4 of this manual. **(T-2)**. This may include but is not limited to overtime, funding for Air Reserve Component (ARC) resources, Temporary Duty (TDY) travel, and/or transportation.

3.6.4. Weigh the cost of additional time and transportation against the benefit of reallocating workload. **(T-2)**.

3.6.5. Focus reallocation decisions on network efficiency; however, always consider the impact to the network's ability to meet wartime requirements. **(T-2)**.

Chapter 4

PROGRAMMING AND FINANCIAL MANAGEMENT

4.1. Overview. The following chapter outlines RNI transportation funding guidance that RNMs and MAJCOMs must consider during workload reallocation planning. MAJCOMs must use the guidance in this chapter in conjunction with AFI 25-201 to determine funding and general reimbursement requirements during temporary workload reallocation planning. This chapter is not all-inclusive and MAJCOMs/units must contact their respective Financial Management staff for questions related to transfer of funds between different appropriations.

4.2. Second Destination Transportation (SDT). AFMC will fund reparable shipments to Centralized Repair Facilities (CRFs) IAW AFI 65-601, Volume 1, *Budget Guidance and Procedures*.

4.2.1. RNMs, NMs, and LRS organizations must use Transportation Account Codes (TAC) for RNI shipments IAW AFI 24-203, *Preparation and Movement of Air Force Cargo*. **(T-2)**. See the SDT Centrally Managed Account TAC Memorandum at <https://cs3.eis.af.mil/sites/OO-LG-TR-A7/OO-LG-TR-A2/default.aspx> for a listing of RNI TACs.

4.2.2. The RNM will submit a consolidated RNI SDT forecast, using prior year(s) TAC data as a baseline, through AFMC/A4L to the Air Force SDT Centrally Managed Account (CMA) Program Manager in the 635 Supply Chain Operations Wing (SCOW). **(T-2)**.

4.2.3. PRMs must make requests for new TACs (if required for existing or new PRGs) via the TAC Request function in Tracker Lite (<https://trackerlite.wpafb.af.mil/LTS/>) in coordination with the SDT CMA Program Office. **(T-2)**.

4.3. Manpower Appropriation. RNI workload reallocation decisions may affect multiple manpower and funding appropriations. These appropriations include ANG Operation and Maintenance (O&M), ANG Personnel, AFRC O&M, AFRC Reserve Personnel Account, Air Force Special Operations Command (AFSOC) Major Force Program 11, Federal Research & Development (R&D), and Active Duty. Using personnel in different appropriation codes requires preplanning and is restricted after Congress appropriates funding in a fiscal year. Using resources in one appropriation when another appropriation is funded for that purpose may create an Anti-Deficiency Act Violation. Moving appropriation funding is not possible if it contradicts the purpose of the appropriation.

4.3.1. Moving unplanned and nonrecurring workload between different appropriated workforces in the execution year generally does not require reimbursement for manpower. Network managers generally cannot use ARC-funded workforce. ARC personnel may perform unplanned, non-recurring, and non-routine work as long as they volunteer and it is incidental to, or part of, the ARC mission.

4.3.1.1. PRMs/RNMs requiring the use of ARC personnel must consult and comply with AFI 36-2619, *Military Personnel Appropriation (MPA) Man-Day Program*. **(T-2)**.

4.3.1.2. When an ARC member is provided MPA man-days in support of workload reallocation or other RNI support, the associated travel and per diem fund cite must be provided by the requesting MAJCOM or the unit being supported.

4.3.2. Repair node support from AFSOC or R&D locations requires appropriate authorization and coordination with fund holders.

4.4. Repair Costs and Rates. For the purposes of RNI repair costs and rates, efficiencies refer to costs involving operating expenses and capital investment.

4.4.1. Current and projected repair costs must be estimated, but are based on labor, infrastructure, transportation costs, and operating stock usage.

4.4.1.1. Labor costs are based on labor dedicated to the RN and any direct overhead. Use RNI CAP2 to determine available hours for the RN and determine labor rates in AFI 65-503, *US Air Force Cost and Planning Factors*.

4.4.1.2. Infrastructure costs are based on the size and energy requirements for the repair node. NMs should contact local Civil Engineering Squadron for assistance.

4.4.1.3. Transportation costs are based on the Joint Transportation Requirements Tool (JTRT), which is part of the Logistics Tool Suite. This tool is used primarily by USAF Transportation Managers to manage USAF logistics, transportation, and financial functions.

4.4.1.4. Current and projected contract costs depend on contract negotiations.

4.4.1.5. One-time requirements and costs for additional spares will be determined by the AFMC Directorate of Strategic Plans, Programs, Requirements and Analyses (AFMC/A5/8/9).

4.4.1.6. One-time requirements and costs for new construction or equipment transfers are dependent of needs.

4.5. Reimbursement for Workload. When a source of repair (SOR) or repair node requires reimbursement, special business rules may apply. MAJCOMs must consider the initial Congressional appropriation when a node/network exhausts RNI CAP2 and needs to send repairs to other nodes/networks. Typically, shifting SORs for assets supporting activities funded by different appropriations requires reimbursement or a funding source. MAJCOMs must outline cross-appropriation reimbursement requirements in MOAs/MOUs, Depot Maintenance Inter-service Support Agreement (DMISA), or other contract form as required.

Chapter 5

NETWORK PERFORMANCE ASSESSMENT (NPA) AND NETWORK REDESIGN

5.1. Process Overview. NPA is an evaluative process that focuses on developing performance standards, tracking and assessing network performance against those standards, implementing corrective actions when necessary, and optimizing the network to improve efficiency (optimum performance) and effectiveness (optimum reliability, responsiveness, and agility). NPA requires managers to evaluate whether the network is fulfilling MGN requirements; analyze network performance against future requirements; implement corrective action plans if network performance falls below identified standards; and when necessary, formulate network redesign options. Network redesign focuses on optimization of the network and is normally a result of NPA, a DoD/Service initiative, or a strategic issue (described below) affecting network performance.

5.2. PRM Performance Assessment Responsibilities. Metrics are critical to assessing network performance, form the baseline for improving operations, and provide a key data point for establishing network redesign recommendations. PRMs will:

5.2.1. Evaluate RNs in terms of availability and performance. **(T-2).** Availability metrics measure a network's ability to meet repair and warfighter requirements. Performance metrics measure the performance of serviceable assets upon exiting the RN or how the RN responds to a serviceable requirement.

5.2.2. Establish network performance goals and limits (upper and lower) in collaboration with RNMs and MAJCOMs. **(T-2).**

5.2.3. Ensure commodity RNMs and NMs collect, aggregate (repair node, RN, and weapon system), analyze, and distribute metrics identified in this AFMAN to MAJCOM/A4s and AFMC/A4L quarterly. **(T-2).**

5.2.3.1. Cannibalizations (CANNs). CANN definition and procedures are outlined in AFI 21-101, *Aircraft and Equipment Maintenance Management*. Users may access CANN metrics in LIMS-EV/WSV (Weapons Systems View).

5.2.3.2. Issue Effectiveness (IE). Issue Effectiveness is the percentage of orders that units actually issue. IE is computed by dividing items issued, plus items backordered, into items issued. Users can locate IE metrics in LIMS-EV Ad Hoc Reporting - Business Objects (BOBJ) within the "Standard Base Supply System-D002A_301M" Universe.

5.2.3.3. Stockage Effectiveness (SE). SE measures the percentage of time the supply system has those items required to be maintained at base and deploy level supply locations available for immediate sale. Users can locate SE metrics in LIMS-EV Ad Hoc Reporting - BOBJ within the "Standard Base Supply System-D002A_301M" Universe.

5.2.3.4. Requisitioning Objective (RO). RO is the maximum quantity of material to be maintained on-hand and on order to sustain current operations and core war reserves. It consists of the sum of stocks represented by the operating level, safety level, and repair cycle, if applicable; the order and ship time level; and authorized additive levels IAW AFI 23-101. RO fill rate is the expression of how much RO is available at a given time.

Users can locate RO metrics in LIMS-EV Ad Hoc Reporting - BOBJ within the "Standard Base Supply System-D002A_301M" Universe.

5.2.3.5. Order Response Time (ORT). ORT is defined, per DoDM 4140.01, Volume 10, DoD *Supply Chain Materiel Management Procedures: Metrics and Inventory Stratification Reporting*, as the percent of all organizational maintenance orders (i.e., open and completed orders) falling within predesignated wait time buckets.

5.2.3.6. Customer Wait Time (CWT). CWT is defined, per DoDM 4140.01, Volume 10, as the measurement of the total elapsed time in days between the issuance of a customer order and satisfaction of that order.

5.2.4. Ensure RNMs and NMs for propulsion networks track, assess, and report the following availability metrics by Type Model Series (TMS)/network and repair node:

5.2.4.1. Engine Non-mission Capable for Supply Rate. **(T-2).**

5.2.4.2. War Readiness Engines (WRE). **(T-2).** WRE is the quantity of net serviceable engines required to support the Air Force war tasking and to sustain operational units' war efforts until pipelines are filled and repair capabilities are available. These engines are to be available to support a weapon system from the start of the war until re-supply (via base, intermediate and/or depot repair) is established IAW AFMAN 20-116, *Propulsion Life Cycle Management for Aerial Vehicles*. Users can find WRE data in LIMS-EV, Engines View.

5.2.4.3. Additional metrics required by the Propulsion Sustainment Division, Propulsion Directorate, AFLCMC. **(T-2).**

5.2.5. Ensure PMEL RNMs and NMs report metrics as defined by the AFMETCAL Program Office. **(T-2).**

5.3. Continuous Process Improvement (CPI). NMs, in conjunction with RNMs and PRMs (as necessary), must use CPI and root cause analysis methodologies established IAW Air Force Guidance Memorandum 2014-38-02, *Air Force Smart Operations*, to improve network efficiency and performance. **(T-2).**

5.4. Strategic Issues. Strategic issues are events, developments, trends, or initiatives that have the potential to affect network performance or design. The identification of strategic issues requires PRMs to collaborate with HQ USAF and MAJCOM logistics and manpower directorates, AFLCMC, AFSC, and other key stakeholders.

5.4.1. In conjunction with MAJCOMs and RNMs, PRMs must determine if and how strategic issues affect network performance, design, and support strategies. **(T-2).** PRMs may gain valuable strategic information from HQ USAF, MAJCOM and ANG logistics directorates, Career Field Managers, MFMs, and Enterprise Logistics Governance (ELG) minutes. **Note:** ELG minutes are located at <https://cs1.eis.af.mil/sites/elg/default.aspx>.

5.4.2. Strategic issues that may affect network performance include (not all-inclusive):

5.4.2.1. Projected force structure changes (e.g., force-shaping).

5.4.2.2. Funding shifts.

5.4.2.3. Operational plan changes.

5.4.2.4. Projected manpower changes (shortfalls, accessions, specialty realignments, etc.).

5.4.2.5. New MDS/weapons system fielding.

5.4.2.6. Significant repair costs/time changes.

5.4.2.7. Depot workload levels/costs.

5.4.2.8. Cannot duplicate (CND) costs.

5.4.2.9. Shifts in maintenance and deployment concepts.

5.4.3. PRMs must communicate strategic issues to RNMs NLT 1 Sep of each year. In addition, PRMs must include their assessment of the issues impact on network performance, supplemental areas RNMs must consider, and any supplemental guidance for completing the NPA. **(T-2)**.

5.5. Network Performance Assessment (NPA). The NPA is a fiscal year assessment of network performance. RNMs must submit to PRMs NLT 1 December. **(T-2)**. The initial NPA is due the first December after a minimum of one full year of full operational capability (FOC) (e.g., if FOC is declared 1 Jun 15, the initial NPA is due 1 Dec 16).

5.5.1. As a minimum, RNMs must include elements identified in Attachment 3 in NPA reports. **(T-2)**.

5.5.2. As necessary, RNMs must coordinate with the PRM to request network analysis support from the Air Force Directorate of Logistics (AF/A4L), MAJCOMs, AFMC/A4L, AFLCMC, AFSC, Defense Logistics Agency (DLA), and other key stakeholders. **(T-3)**.

5.5.3. Data analysis should seek to determine whether the network would meet existing and future MGN requirements.

5.5.4. PRMs must summarize NPA results into a PRG Summary and submit to AFMC/A4L annually (NLT 15 January) using the executive summary format in Attachment 4. **(T-3)**.

5.5.4.1. AFMC/A4L will coordinate PRG Summaries with the applicable MAJCOMs.

5.6. Network Redesign Recommendations. In some cases, NPAs may lead to network or PRG redesign recommendations to resolve negative trends, meet future requirements, improve performance, or mitigate strategic issues. PRMs must include redesign options for further analysis in the PRG Summary.

5.6.1. AFMC/A4L will review redesign options to determine potential costs and performance improvements. Considerations should include (not all-inclusive):

5.6.1.1. Manpower savings. The potential realignment and/or reduction of personnel using RNI processes.

5.6.1.2. Unit cost. The comparison of the actual unit cost of the reparable to the planned cost.

5.6.1.3. Cost per flying hour. The comparison of the changes to the repair cost per flying hour over a specified period time.

5.6.2. AFMC/A4L will present viable redesign recommendations to the RNI Core Team for review.

5.6.3. The RNI Core Team will determine a champion for network redesign recommendations. The network redesign champion will:

- 5.6.3.1. Coordinate with MAJCOMS, ANG, AFLCMC, AFSC, DLA, MFMs, AF Directorates, etc.
- 5.6.3.2. Develop ELG briefings and secure ELG approval IAW AFI 20-119, *Enterprise Logistics Governance*.
- 5.6.3.3. Lead data collection and request Business Case Analysis (BCA) support as required.
- 5.6.3.4. Lead development of all execution plans.
- 5.6.3.5. Work with HQ USAF and MAJCOMs to ensure approved RNI initiatives are incorporated into the applicable strategic plans; create appropriate Program Objective Memorandum (POM) submissions; and establish planning and implementation actions, timelines, and milestones.
- 5.6.3.6. Include financial, manpower, facilities, equipment, tools, training, and organizational changes in the execution plan. Note: It is essential that all implementing agencies baseline/track the cost of implementation as well as any identified savings of network redesign initiatives.
- 5.6.3.7. Include disposition and/or acquisition of equipment.
- 5.6.3.8. Establish Office of Primary Responsibility (OPRs) and Offices of Collateral Responsibility (OCRs) for execution of network redesign.
- 5.6.3.9. Assess implementation status and progress.
- 5.6.3.10. Capture best practices, lessons learned, and/or improvements.

Chapter 6

PRODUCT REPAIR GROUP IMPLEMENTATION PROCESS (PRGIP)

6.1. PRGIP Overview. This chapter outlines the process used to establish a PRG and its RNs. The PRGIP is a highly collaborative process that requires significant engagement with and between key stakeholders. The PRGIP may result from recommendations included in NPAs (see **Chapter 5**), and/or a BCA completed IAW AFI 65-509, *Business Case Analysis*, for larger RNI or supply chain reengineering initiatives. PRGIP focuses on implementation of approved strategies and PRGs within the scope of RNI initiatives (see **Figure 6.1**). The PRM leads development and implementation of PRGs in collaboration/conjunction with affected MAJCOMs.

6.1.1. The primary output of this element of the PRGIP is a MAJCOM coordinated and approved network design.

6.1.2. To complete PRG analysis, support from PSMs, AFLCMC, AFSC, MAJCOMs and DLA is essential. It is also essential that the appropriate PRM identifies an acting or permanent RNM prior to initiating PRG analysis. **Note:** IAW AFI 20-117, AFMC/A4 must execute analysis and implementation requirements until a permanent PRM/RNM is assigned.

6.2. AFMC/A4 Responsibilities. AFMC/A4 will:

6.2.1. In collaboration with MAJCOMs, identify items/commodities for inclusion in a PRG.

6.2.2. Coordinate with AFLCMC/CC and AFSC/CC to assign proposed PRG(s) to the appropriate center and appoint a PRM (see **Figure 6.2**).

6.2.3. Request applicable Product Support Manager (PSM) support/feedback during PRG implementation, as necessary.

6.2.4. Collaborate with the Directorate of Logistics, Civil Engineering, and Force Protection, HQ USAF (AF/A4), the Directorate of Manpower, Personnel and Services, AFMC (AFMC/A1), and assigned AFMC Center Commander to identify additional manpower requirements necessary to support enterprise management of proposed PRGs/networks.

6.3. PRM/RNM Responsibilities. PRMs, in coordination and conjunction with RNMs, will:

6.3.1. Develop and evaluate a proposed list of national stock numbers (NSNs) to be included in the PRG. **(T-2).** Considerations include (data list is not all-inclusive and may be part of previously conducted BCA):

6.3.1.1. The items that are authorized intermediate repair (e.g., review Source Maintenance, and Recoverability (SMR) codes) IAW T.O. 00-25-195, *AF Technical Order System Source, Maintenance, and Recoverability Coding of Weapons, Systems, and Equipment*, and T.O. 00-20-3, *Maintenance Processing of Repairable Property and the Repair Cycle Asset Control System*.

6.3.1.2. The functional area(s) (Air Force Specialty (AFS) or civilian work series) responsible for repair of proposed assets. **Note:** If the end item/commodity spans multiple functional areas or existing PRGs, whichever PRG performs the majority of repairs will manage the product/item.

- 6.3.1.3. The size of the AFS or civilian workforce responsible for the asset repair.
- 6.3.1.4. Using MAJCOMs for the products/items. Once identified, request analysis and implementation support from affected MFMs.
- 6.3.1.5. Worldwide repair nodes for the proposed PRG.
- 6.3.2. Identify the proposed PRG stakeholders and wing, group, squadron, and work center leadership (NMs) for the field and depot nodes. **(T-2)**.
- 6.3.3. Analyze the proposed end items/commodities to determine network design(s). **(T-2)**.
 - 6.3.3.1. The PRM and RNM must ensure the proposed network design does not degrade MGN support. **(T-2)**.
 - 6.3.3.2. PRMs may base the final network design on functional area(s) responsible for the repair, regional repair concepts, weapon system, or other supply chain and organizational factors that provide enterprise repair management, improved supply chain efficiency, and/or costs savings.
- 6.3.4. Capture baseline performance metrics (see **Chapter 5**) NLT 30 days prior to IOC. **(T-2)**.

Figure 6.1. RNI PRG Decision Tree Analysis Tool

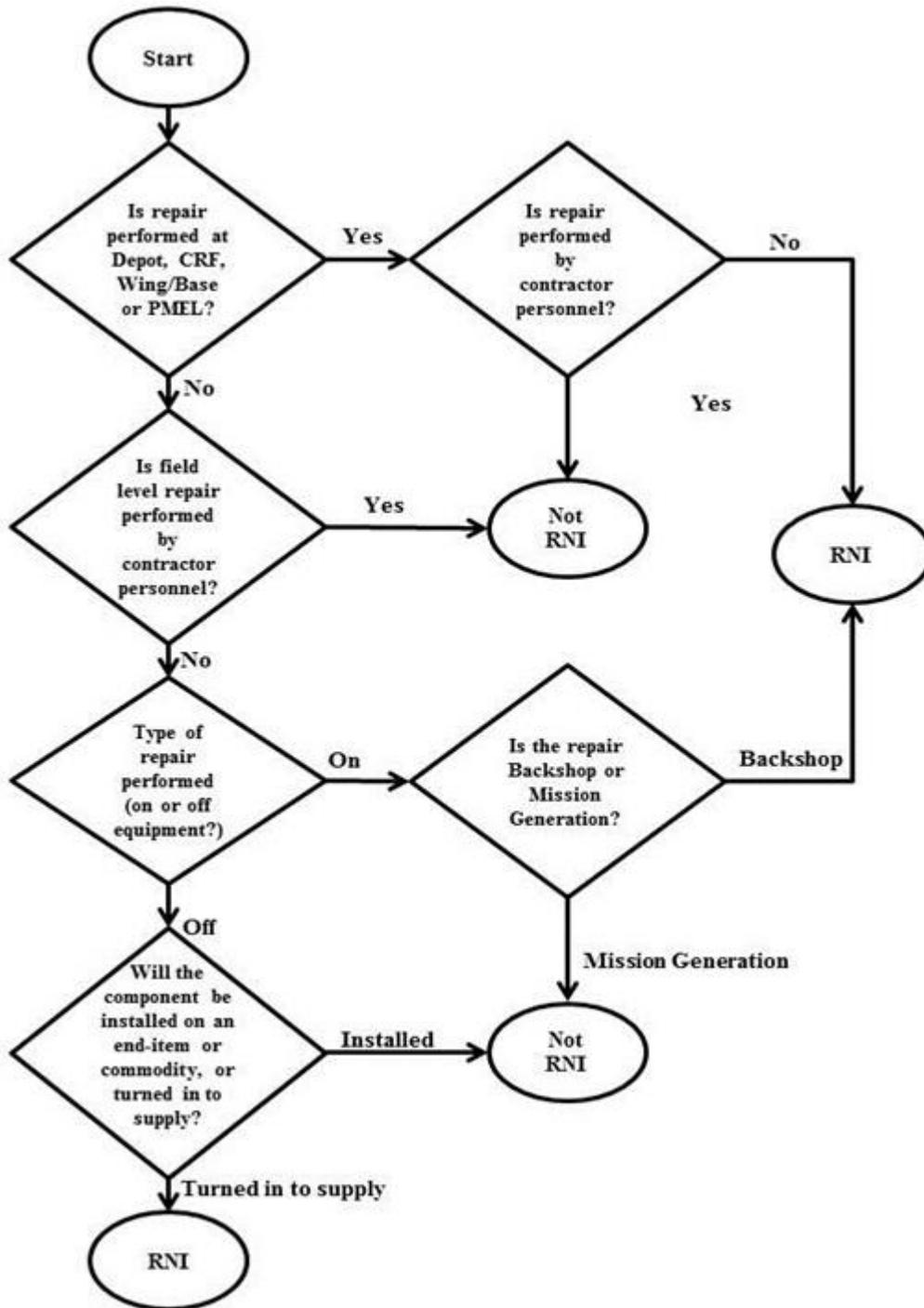
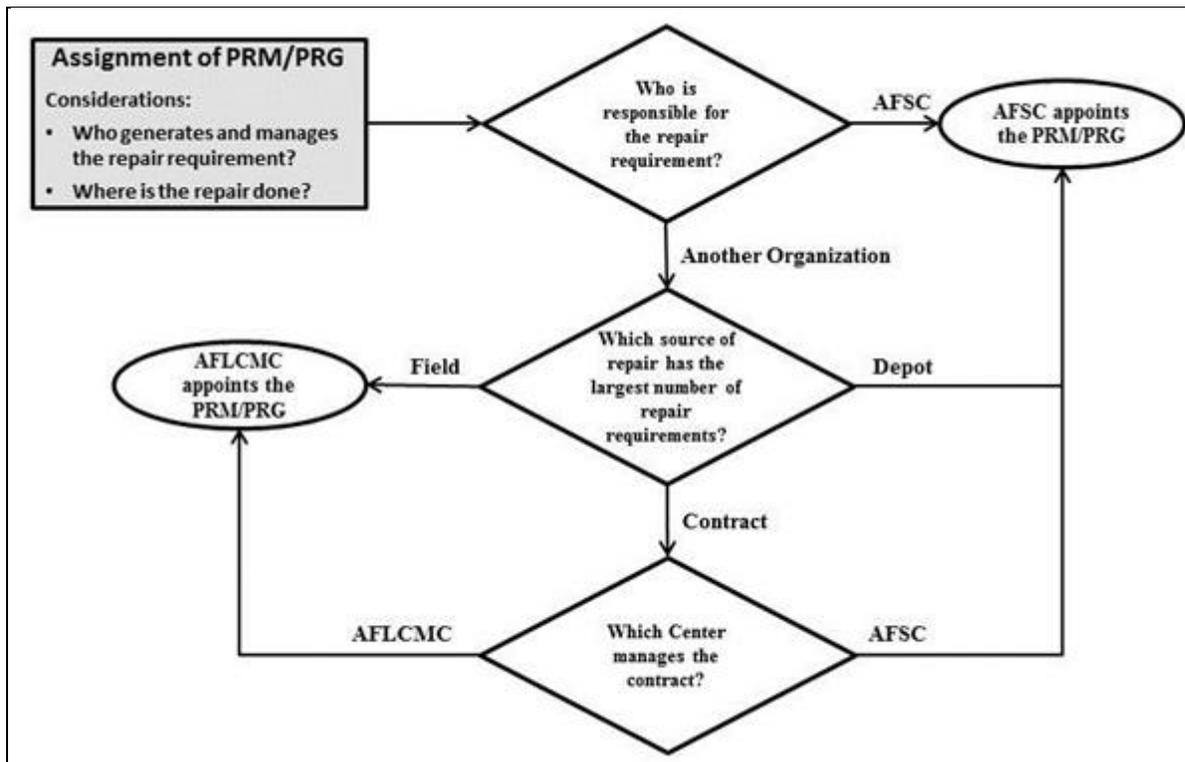


Figure 6.2. Assign PRM/PRG



6.4. Network Implementation. Network Implementation is the product of the data analysis phase and its primary output is a MAJCOM coordinated and approved Implementation Plan that identifies PRG and applicable RN IOC and FOC dates.

6.4.1. Network IOC is the stand-up/transition period for a planned network. This period provides for adjustment of the implementation plan, phased implementation when necessary, and sufficient time to achieve FOC. Specific IOC characteristics include:

- 6.4.1.1. PRMs/RNMs are identified.
- 6.4.1.2. The network implementation plan is initiated.
- 6.4.1.3. The network design is finalized.
- 6.4.1.4. Personnel have completed requisite training IAW Chapter 7 of this AFMAN.
- 6.4.1.5. MOAs/MOUs are completed, if necessary.
- 6.4.1.6. CRFs, if included in the network design, support and receive intermediate repair assets from other units.

6.4.2. Network FOC indicates the network is operational and all network resources (manpower, equipment, processes, support systems, and baseline metrics) are in place and supporting enterprise repair management. FOC characteristics include:

- 6.4.2.1. CRF-supported units are shipping planned assets to designated CRFs for intermediate repair.

6.4.2.2. Induction and repair of assets are based on enterprise requirements and managed by supporting IT systems (e.g., LIMS-EV/RNV, EXPRESS Web Toolkit, etc.).

6.4.2.3. PRMs have compared baseline metrics to performance metrics captured during IOC to ensure the network has not negatively affected MGN support.

6.4.3. The PRM, in coordination and conjunction with MAJCOMs, must develop and publish a network implementation plan NLT 180 days prior to IOC. **(T-2)**. **Note:** This implementation plan is not required when network implementation is governed by strategic initiatives requiring completion of P-Plans/PMsgs IAW AFI 10-501, *Program Action Direction (PADs)*, *Program Guidance Letters (PGLs)*, *Programming Plans (PPlans)*, *Programming Messages (PMsgs)*. The implementation plan must include:

6.4.3.1. IOC and FOC dates and detailed IOC/FOC criteria.

6.4.3.2. A change management and communications plan that engages, informs, and involves stakeholders in the PRG implementation process.

6.4.3.3. RNI CAP2 initial upload guidance including required timelines.

6.4.3.3.1. PRMs/RNMs will build PRGs within LIMS-EV/RNV and task NMs through the respective MFMs to complete the RNI CAP2 baseline data. **(T-2)**.

6.4.3.3.2. NMs will complete/validate the RNI baseline data in LIMS-EV no later than 120 days prior to IOC. **(T-2)**.

6.4.3.3.3. As the network matures, the RNM will coordinate with NMs and MFMs to standardize reporting of productivity levels for apprentice (3-level), journeyman (5-level), and craftsman (7-level) personnel and establish business rules for RNI CAP2 inputs/updates. **(T-2)**.

6.4.3.4. Workload allocation guidance and prescribed timelines if required.

6.5. CRF Implementation.

6.5.1. When CRFs are included as part of the network design, MAJCOMs will:

6.5.1.1. Notify AFMC and affected installations NLT 120 days prior to establishment of CRF.

6.5.1.2. Establish organizational identification using Special orders or Programming Plans (P-Plans)/Programming Messages (PMsgs).

6.5.1.3. Direct host installation LRS to establish the required autonomous category II/IIA satellite account for the CRF IAW AFI 23-101.

6.5.1.4. Provide the following indicative data to AFMC/A4, NLT 120 days prior to CRF stand-up (for additional guidance refer AFI 23-101, AFMAN 23-122, AFH 23-123, Volume 1, *Materiel Management Reference Information*, and AFI 65-601):

6.5.1.4.1. Finalized listing of CRF locations.

6.5.1.4.2. CRF routing identifiers (RID).

6.5.1.4.3. CRF Stock Record Account Number (SRAN).

6.5.1.4.4. CRF repair Organization ID.

- 6.5.1.4.5. CRF repair Organization Code and Shop Code.
- 6.5.1.4.6. CRF Equipment Account.
- 6.5.1.4.7. NSNs for all items CRFs will repair, including all Interchangeable and Substitute Group (I&SG).
- 6.5.1.4.8. Estimated CRF stand-up dates, transition periods, etc.
- 6.5.1.4.9. For CRF-supported bases:
 - 6.5.1.4.9.1. List of installations, RIDs, and SRANs.
 - 6.5.1.4.9.2. Organization codes, shop codes, and Bench Stock organization codes for locations that currently complete repairs.
- 6.5.1.5. Ensure effective CRF command and control by closely monitoring CRF operations and providing supply chain and funding guidance to CRFs and supported units IAW AFI 21-101, AFI 23-101, and this AFMAN.
 - 6.5.1.5.1. MAJCOMs must ensure all required funding and Lines of Accounting are in place at CRFs NLT 30 days prior to initiation of CRF repair.
- 6.5.1.6. Liaison with supported MAJCOM Maintenance and Logistics Readiness staffs to ensure CRF capabilities are included in crisis action, contingency, and wartime planning.
- 6.5.2. When CRFs are included as part of the network design, AFMC/A4 will ensure:
 - 6.5.2.1. Necessary requirements and leveling data are updated/entered in D200A (7SC) and Readiness Based Level requirements via the Standard Base Supply System.
 - 6.5.2.2. All CRF-supported NSNs (including related I&SG NSNs) are reviewed to ensure records are loaded properly for all bases. Accomplish this review on a quarterly basis and upon introduction of new CRF NSNs.
 - 6.5.2.3. Required IT system(s) capable of supporting enterprise management of repair assets are in place at CRFs and other repair nodes as necessary.

Chapter 7

TRAINING

7.1. Overview. This chapter outlines the agency responsible for maintaining and updating RNI courses, and PRM, RNM, MFM, and NM training requirements. Training may be conducted in-person, via teleconference, or through Computer-Based Training (when available).

7.2. Responsibilities/Training Requirements.

7.2.1. AFMC/A4L will develop, maintain, and provide training to AFMC Center Commanders, PRMs, MFMs, and other stakeholders. Organizations/personnel may request training by contacting afmca4hvmrnipmo@us.af.mil.

7.2.2. PRMs must complete the AFMC Center Commander/PRM course within 45 calendar days of appointment, and monitor and provide training of RNMs within the PRG. **(T-2)**.

7.2.3. MFMs must complete the RNI 101 Course within 30 calendar days of notification of analysis affecting their functional area.

7.2.4. RNMs must complete LIMS-EV/RNV and RNM courses within 45 calendar days of appointment. RNMs must monitor and provide training for NMs within their RN(s). **(T-2)**.

7.2.5. NMs must complete LIMS-EV/RNV and NM courses within 45 calendar days of appointment. **(T-2)**.

7.3. Training Courses. AFMC/A4L provides the following courses:

7.4.1. RNI 101. This course provides an overview of RNI concepts and is designed for stakeholders/personnel within the repair enterprise without a specific role.

7.4.2. LIMS-EV/RNV. This course provides LIMS-EV/RNV user guidance on updating and managing RNI CAP2. This course is intended for, but not limited to, personnel assigned as RNMs and NMs.

7.4.3. AFMC Center Commander/PRM. This course provides an overview of the processes and products required to monitor and oversee PRGs.

7.4.4. RNM. This course focuses on the execution of network operations and development. It provides guidance for determining overall network repair requirements, RNI CAP2 management, workload planning, and performance assessments.

7.4.5. NM. This course focuses on the execution of operational level processes centered on RNI CAP2 management, workload planning, and performance assessments.

JOHN B. COOPER, Lieutenant General, USAF
DCS/Logistics, Engineering & Force Protection

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

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- AFI 23-101**, *Air Force Materiel Management*, 8 August 2013
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- AFI 21-101**, *Aircraft and Equipment Maintenance Management*, 21 May 2015
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- T.O.00-20-3**, *Maintenance Processing of Repairable Property and the Repair Cycle Asset Control System*, 15 August 2015
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- AFI 38-201**, *Management of Manpower Requirement and Authorizations*, 30 January 2014

Prescribed Forms

None

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

ADTMH —Average direct touch man-hours

AF —Air Force

AFEMS —Air Force Equipment Management System

AFH —Air Force Handbook

AFI —Air Force Instruction

AFLCMC —Air Force Life Cycle Management Center

AFMAN —Air Force Manual

AFMC —Air Force Materiel Command

AFRC —Air Force Reserve Command

AFS —Air Force Specialty

AFSC —Air Force Sustainment Center

AFSOC —Air Force Special Operations Command

ANG —Air National Guard

ARC —Air Reserve Component

AWP —Awaiting Parts

BCA —Business Case Analysis

BOBJ —Business Objects

CA/CRL —Custody Authorization/Consolidated Receipt Listing

CANN —Cannibalizations

RNI CAP2 —Capability and Capacity

CC —Commander

CFM —Career Field Manager

CMA —Centrally Managed Allotment

CPI —Continuous Process Improvement

CRF —Centralized Repair Facility

CSAF —Chief of Staff, United States Air Force

DLA —Defense Logistics Agency

DLR —Depot Level Repairable
DMISA —Depot Maintenance Inter-service Support Agreement
DoD —Department of Defense
DTS —Defense Transportation System
ELG —Enterprise Logistics Governance
FEM —Facilities and Equipment Maintenance
FMR —Financial Management Regulation
FOC —Full Operational Capability
HQ —Headquarters
I&SG —Interchangeable and Substitute Group
IAW —In Accordance With
IE —Issue Effectiveness
IOC —Initial Operational Capability
IT —Information Technology
JTRT —Joint Transportation Requirements Tool
LIMS-EV —Logistics Installations and Mission Support-Enterprise View
LIMS-EV/RNV —Logistics Installations and Mission Support-Enterprise View/Repair Network View
LRU —Line Replaceable Unit
MAJCOM —Major Command
METWEB —Metrology Web
MFM —MAJCOM Functional Manager
MGN —Mission Generation Network
MMH —Maintenance Man Hour
MOA —Memorandum of Agreement
MOU —Memorandum of Understanding
MPA —Military Personnel Appropriation
MRTFB —Major Range and Test Facility Base
MTTR —Mean Time to Repair
MXG —Maintenance Group
NM —Node Manager
NPA —Network Performance Assessment
NSN —National Stock Number

OCCR —Organization Cost Center Records
OCONUS —Outside the Continental United States
OCR —Office of Collateral Responsibility
O&M —Operation and Maintenance
OPR —Office of Primary Responsibility
ORT —Order Response Time
P-Plan —Program Plan
PAMS —PMEL Automated Management System
PFMR —Project Funds Management Records
PMEL —Precision Measurement Equipment Laboratory
POM —Program Objective Memorandum
PRG —Product Repair Group
PRGIP —PRG Implementation Process
PRM —Product Repair Manager
PSM —Product Support Manager
R&D —Research and Development
RegAF —Regular Air Force
RID —Routing Identifiers
RN —Repair Network
RNI —Repair Network Integration
RNM —Repair Network Manager
RNV —Repair Network View
RO —Requisitioning Objective
SAF —Secretary of the Air Force
SCOW —Supply Chain Operations Wing
SDT —Second Destination Transportation
SE —Stockage Effectiveness
SMR —Source, Maintenance and Recoverability
SOR —Source of Repair
SRAN —Stock Record Account Number
SRU —Shop Replaceable Unit
TAC —Transportation Account Code

TDD —Time-Definite Delivery

TDY —Temporary Duty

TMDE —Test Measurement and Diagnostic Equipment

TMS —Type Model Series

UMD —Unit Manning Document

USAF —United States Air Force

USC —United States Code

WRE —War Readiness Engines

WSV —Weapon System View

Attachment 2

RNI CAPABILITY AND CAPACITY (RNI CAP2) CALCULATION PROCESS

A2.1. Capability. Personnel and associated skill set available to complete a repair.

A2.1.1. Personnel to account for:

A2.1.1.1. Authorized - Number of positions on node Unit Manning Document (UMD)

A2.1.2. Assigned. Filled positions on node UMD.

A2.1.2.1. Personnel types.

A2.1.2.2. Full-time military.

A2.1.2.3. ARC (Reserve/Guard) full-time.

A2.1.2.4. ARC part-time (traditional).

A2.1.2.5. Civilian.

A2.1.2.6. Contractor.

A2.1.3. Available hours derived from AFI 38-201, *Management of Manpower Requirement and Authorizations*, where applicable.

A2.1.3.1. Shifts, days and hours:

A2.1.3.1.1. Number of shifts worked by node.

A2.1.3.1.2. Number of days worked per shift per week.

A2.1.3.1.3. Number of hours worked per shift.

A2.1.4. Military personnel are accounted for by the following skill-levels:

A2.1.4.1. 3-level apprentice.

A2.1.4.2. 5-level journeyman.

A2.1.4.3. 7-level craftsman.

A2.1.5. Civilian equivalent skill-levels for personnel without USAF skill-level:

A2.1.5.1. Apprentice.

A2.1.5.2. Journeyman.

A2.1.5.3. Craftsman or advanced journeyman.

A2.1.5.4. For contractor personnel or field service teams, the assumption is that all contractors hold a journeyman skill level.

A2.1.6. Personnel productivity. Productivity percentages take into account tasks performed by personnel who are not accounted for in Standard Availability hours per AFI 38-201, but take away from direct touch man-hours. The productivity percentage takes into account both non-direct touch and direct touch personnel.

A2.1.6.1. Tasks may be unique to a particular node, MAJCOM, etc., but should be reviewed and agreed upon by the nodes chain of command. These are tasks performed

outside the network (e.g., commander's calls, safety down days, administrative tasks, etc.)

A2.1.6.2. Non-direct touch personnel will have their hours deducted as an assigned task.

A2.1.6.3. **Figure A2 1** provides an example of how productivity percentage is calculated in LIMS-EV/RNV.

Figure A2.1. Productivity Calculation Example

	Active Duty	Guard/Res Full-Time	Traditional Guard/Res	Civilian/Military Technician	Contract Full Time Equivalent
Available Hours*	1808 (AFI 38-201)	1720 (AFI 38-201)	312**	1720 (AFI 38-201)	1764 (AFI 38-201)
Mission Generation Tasks (Variable)	0	0	0	0	0
Additional/Administrative Duties (i.e. EPRs, MIS documentation, Bench Stock Monitor, Records Management, HAZMAT, etc.)	450	450	4	450	450
CC Calls (1 per month for 1 hour)	12	12	12	12	12
Wing Training/Safety Down Days (1 day per Quarter)	32	32	32	32	32
TDYs out of shop (variable but projectable)	0	0	0	0	0
Additional Training (1 day per month)	96	96	96	96	96
Total Available Hours to Provide Direct Touch Labor (max MTTR****)	1218	1130	168	1130	1174
Productivity % to Enter into RNI CAP2	67.4%	65.7%	53.8%	65.6%	66.6%
<p>*This is not an all-inclusive list of items that may affect available man-hours.</p> <p>** This figure is determined by multiplying 12 months by 16 hours (drill days) and adding 120 hours (annual training).</p> <p>*** Mean Time to Repair (MTTR).</p>					

A2.2. Capacity. Equipment, physical infrastructure, or facilities, available to complete a repair.

A2.2.1. Equipment data comes from node CA/CRL (Custody Authorization/Consolidated Receipt Listing) through Air Force Equipment Management System (AFEMS).

A2.2.1.3. Constraining asset. A constraining asset is an equipment asset most likely to bottleneck production if unavailable.

A2.2.1.4. Constraining assets may change from commodity-to-commodity within each node.

A2.2.1.5. Constraining assets may change as equipment breaks down.

A2.2.1.3.1. For example, an avionics test stand is listed as constraining asset for a commodity and a fixture needed for that commodity becomes unavailable. This causes a bottleneck in the production of that commodity but not for other commodities utilizing the avionics test stand. The fixture would then become the constraining asset for the affected commodities.

A2.2.2. Calculating Capacity. Capacity is calculated two ways:

A2.2.2.1. Raw capacity considers the capacity hours available for equipment assets.

A2.2.2.2. Maintenance man-hour (MMH) capacity considers the average crew size required to operate the equipment on a given task.

A2.2.2.2.1. Average crew size. The average number of people that it takes to operate the repair equipment-asset during normal repair of asset being worked.

A2.2.2.2.2. Availability percentage. The percent of time that equipment-asset is operational and available to do work. This accounts for any downtime the equipment-asset is not available to do work, i.e., broken equipment or calibration time.

A2.2.2.2.3. Shared resource percentage. Percent of time that repair equipment-asset is used on the product that is being assessed. For example, if the user is entering data for the F100-229 network at a node that also repairs another TMS, and if the engine rails are shared between them, then the user must enter the percent of time the engine rail is used on the F100-229.

A2.2.2.2.4. If the equipment is not shared with anyone, the shared resource is 100%.

A2.2.3. Production. Production takes into account average flow days (Propulsion only) and average direct touch man-hours.

A2.2.3.1. Average flow days. The average, or mean, number of days it takes an end-item to be repaired from time of induction to time ready for shipment/storage as a serviceable asset. This calculation considers work-stoppage time.

A2.2.3.2. Average direct touch man-hours (ADTMH) or MTTR. The number of direct-touch labor hours it takes to repair an end item (e.g., engines) or commodity.

A2.2.3.3. Includes actual repair time of commodity.

A2.2.3.4. Does not include downtime (e.g., awaiting maintenance or awaiting parts).

A2.2.4. Potential Throughput. Potential throughput is determined by comparing the available hours of capability and capacity. The comparison is made using the MMH capacity formula to make a fair comparison and is driven heavily by the average direct touch man-hours. For example, low average direct touch man-hours would result in a higher potential

throughput and indicate additional hours are available for production. Potential throughput is the lesser of available capability or MMH capacity multiplied by ADTMH.

Attachment 3

NETWORK PERFORMANCE ASSESSMENT GUIDE

A3.1. Overview. RNMs should utilize this guide as a tool when conducting a NPA IAW Chapter 4 of this AFMAN. This guide is not all-inclusive and PRMs/RNMs may add assessment areas, issue supplemental guidance, and revise it to meet assessment needs. Consider the following performance assessment areas when conducting a NPA:

A3.2. Network Maturity.

A3.2.1. Has the network been FOC a minimum of 12 months?

A3.2.2. Have non-enterprise (below AF or MAJCOM) changes been in place for longer than 12 months?

A3.3. Transportation/Throughput.

A3.3.1. Has throughput kept pace with the demand for the past four quarters?

A3.3.2. Have transportation lead times affected MGN demand (e.g., increased spares requirements, increased MICAPs, etc.)?

A3.3.3. Does the current transportation infrastructure meet planned/future demand requirements?

A3.3.4. Is node RNI CAP2 sufficient to meet planned throughput requirements?

A3.3.5. Are additional CRFs required to increase throughput?

A3.3.6. Are non-CRF locations capable of sustaining local, and if necessary, enterprise operations?

A3.3.7. Does network surge capability exist? Is it sufficient to meet wartime requirements?

A3.4. Workload/Workforce Utilization.

A3.4.1. Has workload been transferred between nodes? If so, how many times and what primary issues drove the need for the transfer (e.g., equipment, manpower, convenience, infrastructure, etc.)?

A3.4.2. Are current CRF manpower requirements codified and modeled in the Logistics Composite Model.

A3.4.3. Are current LRS manpower requirements sufficient to support network operations?

A3.4.4. Were the results of the workload planning process accurate? If not, closely analyze and conduct root cause analysis as appropriate.

A3.5. Metrics.

A3.5.1. Do performance metrics indicate a negative trend? Note: Traditionally, analysts define a trend as a movement in a specific direction over a period of seven consecutive data points (metric measures). However, network managers should closely analyze and conduct root cause analysis when a network experiences three consecutive negative measures.

A3.5.2. Are current metrics realistic and achievable?

A3.5.3. Have root-cause analyses been conducted when metrics indicate negative trends? Have those causes been elevated when they affect enterprise operations? What actions are required to resolve the causes?

A3.5.4. Should additional metrics be developed and tracked at the enterprise, network, or node level?

A3.6. Requirements Analysis.

A3.6.1. Have allocated spares and consumables kept pace with repair requirements?

A3.6.2. Have network repair requirements changed based on technical data requirements, mission needs, supply chain changes, etc.?

A3.6.3. Based on production deltas, is the current infrastructure sufficient? What changes are required?

A3.6.4. Are there pending requirement changes (e.g., increased flying hours, additional bench-check requirements, etc.)?

A3.6.5. Should CRFs/units be allowed additional intermediate repair capabilities to meet production requirements?

A3.7. Costs.

A3.7.1. Have the costs of CRF operations changed since FOC? To what degree and direction? What are the primary drivers?

A3.7.2. Have repair times changed? Have nodes identified the primary drivers of any changes?

A3.7.3. Have transportation costs increased? To what degree?

A3.8. Policy.

A3.1.7. Are there gaps in RNI or CRF policy (AFI 21-101, AFI 23-101, AFI 20-117, AFMAN 20-118) that have affected performance, caused delays, etc.?

A3.1.8. Are there local, Supply Chain Center, or MAJCOM policies that should be codified in departmental publications?

A3.1.9. Are components appropriately coded? Note: RNMs should use Technical Order 00-20-3 for baseline consideration.

A3.9. Strategic Issues.

A3.9.1. Do previous RNI performance reports identify/include unresolved network issues that must be addressed from the corporate/strategic level?

A3.9.2. Are there pending network redesign initiatives?

A3.9.3. Are there strategic issues (see Chapter 5) affecting network performance or that may affect network performance in the future?

Attachment 4

PRODUCT REPAIR GROUP (PRG) SUMMARY TEMPLATE

Figure A4.1. PRG Summary

MEMORANDUM FOR AFMC/A4	<Date>
FROM: <PRG Office Symbol> <Street> <Base, State, and Zip Code>	
SUBJECT: RNI <Insert Name of PRG (e.g., Hydraulics)> Product Repair Group Summary	
1. In accordance with AFI 20-117 and AFMAN 20-118, <PRG Designation> submits the following performance assessment.	
Individual Network Performance Assessment.	
a. <Insert network name>:	
(1) Significant RNI CAP2 variance vs production:	
(2) Network changes, lessons learned, and/or CPI results:	
(3) Performance Measures/Metrics:	
b. <Insert additional network names as required>	
(1) Significant RNI CAP2 Variance vs Production:	
(2) Network Changes/Lessons learned, and/or CPI Results:	
(3) Performance Measures/Metrics:	
2. The PRM/RNM submit the following redesign recommendations: <provide detailed network or PRG redesign recommendations, if any>.	
3. If you have any questions, please contact <insert OPR contact name, organization, phone number, email address>.	
<Sign (written or digital signature)> <Name, rank, office symbol>	