

- h. FO: renovation.
- i. GO: analytical rework.
- j. HI: modification not in conjunction with overhaul/repair.
- k. H2: modification in conjunction with overhaul/repair.
- l. IO: repair.
- m. J1: inspect & test (excluding calibration).
- n. J2: inspect & test (including calibration).
- o. J3: inspect & test calibration preshop for reliability centered maintenance at depot level.
- p. KO: fabricate/manufacture.
- q. LO: reclamation/disassembly.
- r. MO: maintenance assistance.
- s. NO: BII replacement (must identify major group).
- t. TO: plant equipment (must identify major group equipment category).
- u. X1: cancellation/reduction cost.
- v. ZI: software maintenance.

E-11. Method codes

- a. A: organic, IOC.
- b. C: contract.
- c. X: organic, Navy.
- d. Y: organic, Air Force.
- e. Z: organic, Marine Corps.

Appendix F DOD Core Methodology

F-1. General

This appendix contains instructions, by block number, for completing the core determination process. Figure F-1 is a detailed process flow chart for the core requirements determination process.

F-2. Instructions for calculating DOD core requirements

a. *Block A-1: JCS Scenario Input.* The determination of the total DOD organic depot-level capability will be based on the JCS combat contingency scenario(s) and defense planning guidance. Each Service's required organic capabilities, expressed in direct labor hours (DLHs), may vary according to their respective roles in support of the JCS scenario(s).

b. *Block A-2: Platform Required to Support Scenario.* Each Service will determine the specific platform (for example, Abrams A-1 tank, F-1, F-15) required to support the selected JCS scenario. If the platform is required, quantify and compare the scenario requirements with the respective total active inventories to identify any inadequacies. If the platform quantity is not available, equal to the JCS requirement, go to block B-1 (Quantify Total Peacetime DLHs in support of JCS Scenario) and enter the amount greater than the JCS requirement in block G (Adjust for Economy/Efficiency). If the platform is not required, go to block G (Adjust for Economy/Efficiency).

c. *Block B-1: Quantify Total Peacetime DLHs in Support of JCS Scenario.* Determine the peacetime DLHs for those platforms necessary to support the JCS scenario. This is accomplished by dividing the JCS scenario platform requirements by the occurrence factor (for example, number of years between return to depot) multiplied by the platform work package/norm (based on the roles of that platform in support of the JCS scenario).

d. *Block B-2: Workload Adjustment.* Adjust workload for experience and scenario driven factors. Develop scenario workload experience for those quantities passed from block B-1 (Quantify Total Peacetime DLHs in Support of JCS Scenario). Use either a composite, weighted average or platform specific factor to consider readiness, sustainability, and/or return to peacetime readiness in these calculations. Specific workload factors will be determined by compiling available information from scenario models (which include factors for platform OPTEMPO, attrition, and so on), occurrence factors, historical factors (for example, DESERT SHIELD/DESERT STORM), and other scenario-driven factors.

e. *Block C: Estimate Scenario Workload.* Estimate workload based on readiness/sustainability requirements. Using the information from block B-2 (Workload Adjustment), determine the scenario-related workload in DLHs.

f. *Block D: Trade Skill Breakdown.* Determine depot skills required. Using block C (Estimate Scenario Workload) as a basis, identify the depot-level capabilities by skill required to support the scenario-driven platforms and associated workload. This breakdown is not part of the numerical calculations.

g. *Block E: Resource Adjustment.* Adjust for depot surge capacity by applying a Service-derived value to block C (Estimate Scenario Workload) to reduce the scenario workload to peacetime staffing required DLHs. This adjustment should reflect the ability of the depot workforce to surge through the use of overtime and additional work days to meet emergent requirements.

h. *Block F-1: Quantify DLH as Maintenance Hardware Requirements.* Divide the quantity DLHs from block E (Resource Adjustment) by the platform work packages/norms to establish the maintenance hardware requirements.

i. *Block F-2: Assessment of Private Capability.* If the capability associated with a specific maintenance hardware requirement is needed to support the Service Secretary's organic industrial base required for readiness and control, go to block F-3 (Basic Core). If not, conduct a risk assessment to determine whether maintenance sources exist in the private sector to support the platform/hardware requirement. This assessment will consider criteria such as: (1) do private sources exist that are economical and possess the maintenance capability and capacity to do the work, and (2) have private sources demonstrated proven past performance? As a minimum, the criteria listed in *m* through *r*, below, will be used. If the assessment determines that the private sector can provide the required capability with acceptable risk, reliability, and efficiency, then go to block I-1 (Best Value Analysis). If not, then go to block F-3 (Basic Core).

j. *Block F-3: Basic Core.* Compute Basic Core by subtracting the value of the requirements routed to block I-1 (Best Value Analysis) as a result of the risk assessment performed in block F-2 (Assessment of Private Capabilities) from the total requirements reflected in block E (Resource Adjustment).

k. *Block G: Adjustment for Economy/Efficiency.* Ensure that the required minimum core support is not exorbitantly and prohibitively expensive by examining capability utilization and applying efficiency factors to optimize throughput and effectively use available personnel. These economy efficiency adjustments must be constrained by the number of personnel required to accomplish requirements identified in block F-3 (Basic Core). Examine the maintenance requirements for the platform types passed from block A-2 (Platform Required to Support Scenario) for potential augmentation of like platforms/commodities or to improve economies of scale. If needed, go to block H (Peacetime Core). If not needed, go to block I-1 (Best Value Analysis).

l. *Block H: Peacetime Core.* Enter the sum of block F-3 (Basic Core) and block G (Adjust for Economy/Efficiency).

m. *Block I-1: Best Value Analysis.* Business case analysis and/or formal competition (including public/private competition) will normally be used to determine best value. If private, go to block I-2 (Private). If organic, go to block I-3 (Last Source/Non-Core Requirements).

n. *Block I-2: Private Sector.* Enter total requirements for those platforms passed from block I-1 (Best Value Analysis) for support by the private sector (contracted out).

o. *Block I-3: Best Value/Last Source Non-Core Requirements.* Enter requirements passed from block I-1 (Best Value Analysis) for support by an organic source and any additional adjustments required by policy or law (for example, adjustments necessary to satisfy 10 USC 2466 "50/50" requirements).

p. *Block J: Total Organic Capability Requirement.* Enter the sum of block H (Peacetime Core) plus block I-3 (Best Value/Last Source Non-Core Requirements) to determine annual organic workload consistent with JCS scenario requirements, expressed in DLHs.

q. *Minimum Risk Assessment Criteria (block F-2).*

(1) *Number of commercial sources.* How many potential commercial sources are there for this system/item? The higher the number of potential commercial sources, the lower the risk of placing the workload in the commercial sector.

(2) *Capability.* Do the potential commercial sources have the types of facilities, equipment, and skills as well as access to technical data needed to perform this workload? The higher the presence of existing capability in the commercial sector, the lower the risk of placing the workload in the commercial sector.

(3) *Capacity.* Does each of the potential commercial sources have the ability to accomplish the projected quantity of workload? The greater the number of commercial sources with adequate capacity, the lower the risk of placing the workload in the commercial sector.

(4) *Remaining DOD organic capability.* Is there an adequate skill and technology base remaining in DOD to provide maintenance necessary for contingency requirements if the contractor defaults? The more substantial the remaining DOD organic capability, the lower the risk of placing the workload in the commercial sector.

(5) *Surge rate.* How much does the maintenance requirement of this item increase in the event of a contingency? The lower the rate of increase, the lower the risk of placing the workload in the commercial sector.

(6) *Ratio of MRC requirements to inventory.* What is the ratio of the number of units required to support the JCS MRC contingency scenario to the total inventory? The lower the ratio, the lower the risk of placing the workload in the commercial sector.

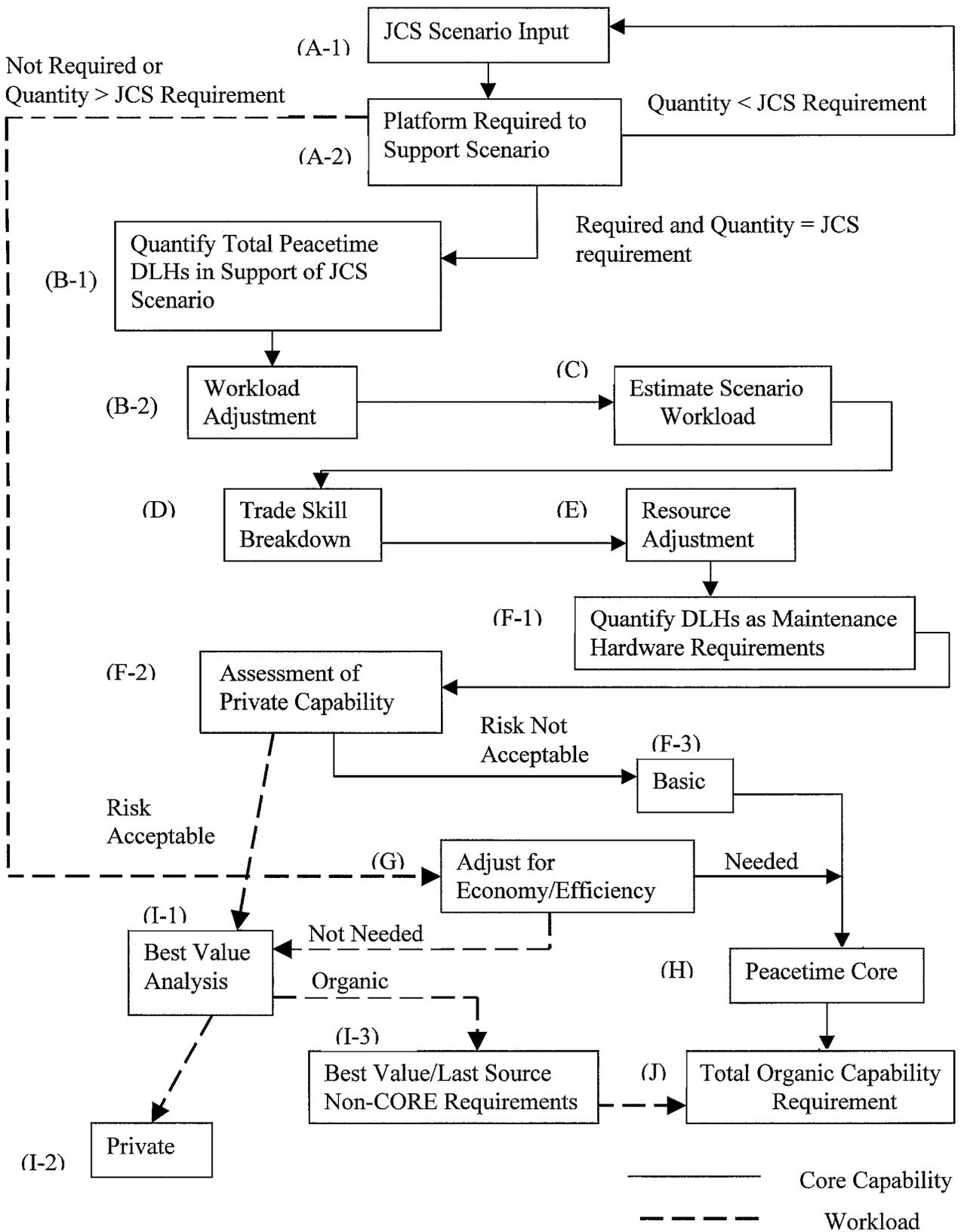


Figure F-1. Flow chart for core requirements determination process