SUBJECT: Readiness-based Materiel Condition Reporting for Mission-Essential Systems and Equipment

(d) Section 117 of title 10, United States Code
(g) Deputy Secretary of Defense Memorandum, “Establishment of the Office of the Under Secretary of Defense for Research and Engineering and the Office of the Under Secretary of Defense for Acquisition and Sustainment,” July 13, 2018

1. REISSUANCE AND PURPOSE

This Instruction:

1.1. Reissues Reference (a) to update policy and responsibilities for the reporting of mission-essential systems and equipment.

1.2. Expands the requirement for the Military Services to include total inventory and number of weapons systems the quarterly reporting is based upon.

1.3. Requires the Military Services to comply with current Defense Readiness Reporting System guidance.

1.4. Revises the basis for quantitative materiel condition goals to accommodate operational readiness requirements.
1.5. Requires each Military Service to designate one office as the focal point for materiel condition goals.

2. **APPLICABILITY AND SCOPE**

2.1 This Instruction applies to the Office of the Secretary of Defense, the Military Departments, the Chairman of the Joint Chiefs of Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities in the Department of Defense (hereafter referred to collectively as the “DoD Components”).

2.2 This Instruction is supported by the guidance established in DoD Directive 8320.2 (Reference (b)), which directs the use of resources to implement data sharing among a community of interest (COI). A COI is a collaborative group of users that must exchange information in pursuit of its shared goals, interests, missions, or business processes.

3. **POLICY**

It is DoD policy that all mission essential systems and equipment identified by the Services in order to meet National Military strategy shall be maintained to the optimum mission capable status. Readiness-based materiel condition reporting for mission-essential systems and equipment (hereafter referred to collectively as “weapon systems”) shall be collected and reported by the DoD Components responsible for the weapon systems reporting. DoD Components shall develop and report readiness-related materiel condition data to support logistics, operational, and planning requirements as established by DoD Directive 7730.65 (Reference (c)); Section 117 of title 10, United States Code (Reference (d)); and DoD Directive 4151.18 (Reference (e)); and other authorized DoD reporting requirements that may benefit from such data.

4. **RESPONSIBILITIES**

4.1. The Deputy Under Secretary of Defense (Logistics and Materiel Readiness), under the Under Secretary of Defense for Acquisition, Technology and Logistics, through the Assistant Deputy Under Secretary of Defense (Materiel Readiness and Maintenance Policy) (ADUSD(MR&MP)), shall:

4.1.1. Monitor materiel condition reporting for weapon systems and use materiel condition information in the oversight of logistics programs and operations.

4.1.2. Maintain this Instruction to ensure the incorporation of policy and procedural changes that may affect the guidance herein.
4.2. The Secretaries of the Military Departments shall:

4.2.1. Maintain and operate automated logistics management information systems to support requirements established in this Instruction to depict weapon system materiel condition. At a minimum, the information systems will reflect the following for each weapon system:

4.2.1.1. The total number of each weapon system in the inventory;

4.2.1.2. The number of weapon systems the reporting is based upon;

4.2.1.3. The materiel condition status; readiness-based material condition goals; and

4.2.1.4. The unit of assignment.

4.2.2. Report material condition status in accordance with this Instruction and Reference (c).

4.2.3. Report information ultimately on a near-real-time basis. If current information systems cannot support this periodicity, the Military Departments will provide plans and timelines depicting the eventual ability to report on a near-real-time basis. In the interim, quarterly reports will satisfy this reporting requirement.

4.2.4. Use the criteria set forth in this Instruction to review maintenance and supply effectiveness, to include consideration of optimum system reliability and cycle time, in support of weapon systems.

4.2.5. Identify the primary causes of high weapon system non-readiness conditions or excessive support costs for correction.

5. PROCEDURES

5.1. Materiel condition goals and reporting

5.1.1. The Military Departments shall establish quantitative materiel condition goals for their mission-essential systems and equipment. These goals shall be based on estimates of the maximum achievable given the designed reliability and maintainability, with planned usage. The goals shall be reviewed by the Military Services no less frequently than annually and revised when necessary to ensure validity.

5.1.2. Each Military Department shall designate one office to act as the focal point for reviewing the goals annually and for maintaining a documentary record of the basis for the goals chosen and other key decisions in the goal-setting process.
5.1.3. Consideration may be given to “flexible goals” that take into account a unit’s task or deployment status; e.g. establishing higher goals for deploying units and lower goals for non-deployed units.

5.1.4. For aircraft, ground combat vehicles, missiles, etc., quantitative readiness-based goals (for each mission) shall be established at the Type Model Series (TMS)/Mission Design Series (MDS) level as may be appropriate. For ships, goals shall be at the ship class level.

5.2. Materiel condition. Materiel condition information shall be maintained by the Military Departments for comparison to established goals and evaluated at intervals that are sufficiently frequent (at least monthly) to provide an objective, quantitative appraisal that identifies substandard areas requiring corrective action. The Military Departments will be required to report materiel condition information quarterly.

5.3. Condition Status Measurements. The condition status codes listed below shall be used to describe the capability of weapon systems, other than ships and submarines, to perform mission(s); describe the causes for weapon systems being unable to perform any/all mission(s); and measure maintenance and supply effectiveness.

5.3.1. Condition status measurements defined in the following paragraphs shall not be applicable to ships and submarines. However, ship and submarine materiel condition status reporting data shall be covered by the Type Commander Readiness System (Type Commander Readiness Management System (TRMS)).

5.3.2. A condition status measurement other than those listed below may be more appropriate for a particular weapon system or categories of weapon systems. Military Departments that choose to use an alternate system, e.g., weapon system availability, ready for training, or scheduling effectiveness, shall submit a request to the ADUSD(MR&MP) with justification for exemption from the reporting categories listed below.

5.3.2.1. Mission Capable (MC). MC status designations are used in the context of specific identified missions; i.e., MC is a materiel condition indicating that weapon systems are capable of performing an identified mission. In that sense, a weapon system MC rate for a given mission should reflect the materiel readiness of a weapon system or, when aggregated, a set of weapon systems; e.g., aircraft squadron and tank battalion or the entire inventory of the weapon system to perform that particular mission.

5.3.2.2. Not Mission Capable (NMC). NMC is a materiel condition indicating that weapon systems are not capable of performing an identified mission. NMC shall be divided into the following categories:

5.3.2.2.1. Not Mission Capable Maintenance (NMCM). NMCM is a materiel condition indicating that weapon systems are not capable of performing an identified mission because of unit level maintenance requirements. Recording of NMCM time shall start for: (a) unscheduled maintenance, when a malfunction is discovered, or at mission completion, whichever is later; and (b) scheduled maintenance, when the determination is made that a system
cannot be returned to mission capable status within 2 hours. Time stops when maintenance has been completed or is interrupted by work stoppage due to supply shortage. The period of work stoppage due to supply shall be measured as Not Mission Capable Supply (NMCS). NMCM shall resume when required supply items are delivered to the maintenance activity.

5.3.2.2.2. NMCS. NMCS is a materiel condition indicating that weapon systems are not capable of performing an identified mission because of maintenance work stoppage due to a supply shortage. Recording of NMCS time shall start when work stoppage results from lack of parts and the NMCS requisition is not satisfied one hour after the demand is initiated and remains unsatisfied. For weapon systems measured on a daily basis, when both NMCM time and NMCS time are encountered in the same day and the sum is more than 12 hours, the whole day is carried against the condition status with the most hours.

5.4. Problem Identification and Correction (PIAC). Each Military Department shall have a program or process for the continuous identification of maintenance and materiel problems that adversely affect the readiness-based materiel condition of its weapon systems. PIAC will be documented and reported in accordance with current Military Service and Department guidance on sustaining materiel condition health.

6. INFORMATION REQUIREMENTS

6.1. DoD Components shall use their own logistics management information systems to collect and report data in support of this Instruction. Pursuant to Reference (d), standard data elements that have been registered with the DoD Comptroller shall be used.

6.2. Exception-type reporting may be used; that is, unless reported NMC for a specific mission, weapon systems are considered MC for all identified missions.

6.3. The reporting requirements in this Instruction are exempt from licensing in accordance with paragraph C4.4.2. of DoD 8910.1-M (Reference (f)).

7. SUMMARY OF CHANGE 1. This change reassigns the office of primary responsibility for this instruction to the Under Secretary of Defense for Acquisition and Sustainment in accordance with the July 13, 2018 Deputy Secretary of Defense Memorandum (Reference (g)).

8. EFFECTIVE DATE

This Instruction is effective immediately.