## **CHAPTER 3**

## DOD NUCLEAR WEAPON SYSTEM SAFETY PROGRAM RESPONSIBILITIES

## A. GENERAL

DoD nuclear weapon system safety responsibilities are assigned in DoD Directive 3150.2 (reference (c)).' This Chapter elaborates on those responsibilities and provides additional guidance.

## **B. RESPONSIBILITIES**

- 1. The Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs (ATSD(NCB)) shall do the following:
- a. Be responsible to the Secretary of Defense for all matters associated with nuclear weapon system safety under DoD Directive 5134.8 (reference (e)), establish safety policy, and monitor compliance with the DoD Nuclear Weapon System Safety Program.
  - (1) Request special safety studies and safety assessments.
    - (a) Review safety assessment recommendations.
- (b) Recommend temporary compensatory measures when required to address special safety concerns for nuclear weapon system operations.
- (2) Monitor the conduct of the DoD Nuclear Weapon System Safety Training Program.
- (3) Ensure that nuclear weapon safety is addressed in DoD Directives 4540.5 and 5210.41, and DoD C-521 0.41-M (references (a), (b), and (f)).
- (4) Provide safety topics of special interest to the Chairman of the Joint Chiefs of Staff to be addressed during NWTIs and monitor the effectiveness of NWTIs to assess unit compliance with the DoD Nuclear Weapon System Safety Program.
- (5) In the event of an accident or incident, ensure that positive measures are developed to prevent a future occurrence.
- (6) Monitor the effectiveness of the PRP and DoD Directive 5210.42 (reference (d)) to support the DoD Nuclear Weapon System Safety Program.
- (7) Provide assistance during the Service nuclear weapon system certification process.

<sup>&#</sup>x27;Extracts from reference (c) are denoted in bold type.

- (8) Serve as proponent for and monitor compliance with this Manual.
- b. Serve as the OSD principal point of contact with the DoD Components, the DoE, the Department of State, the Joint DoD-DoE Nuclear Weapons Council, and other Government Agencies in executing safety responsibilities. Communication with the Combatant Commands shall be through the Chairman of the Joint Chiefs of Staff.
- (1) Serve as principal point of contact in the OSD for annual reports, Military Department nuclear weapon system safety reports, and safety rules packages.
  - (2) Provide input to the Annual Report to the President on Nuclear Weapon Surety.
  - (3) Coordinate Military Department safety rules packages with the DoE.
  - (4) Approve administrative changes to safety rules.
- (5) Provide guidance and direction for safety related requirements for Quality Assurance/Reliability Test Program (QART) testing and monitor results of safety validations and reliability point estimates.
- (6) Oversee non-nuclear assurance program (NNAP) activities and coordinate with the DoE for the provision of NNAP support.
  - (7) Respond to joint Nuclear Weapons Council (NWC) safety actions.
- (8) Serve as the DoD Executive Agent for the independent joint advisory committee chartered to provide high-level advice to the Secretary of Defense, the Secretary of Energy, and the NWC on nuclear weapon system surety matters (e.g., safety, security, reliability and control).
- 2. The ATSD(NCB) shall ensure that the Director, Defense Special Weapons Agency (DSWA), shall do the following:
- a. Provide technical advice and assistance to the OSD, the Chairman of the Joint Chiefs of Staff, and the Secretaries of the Military Departments in the execution of the DoD Nuclear Weapon System Safety Program.
- (1) Provide safety assessment support to the DoD Components, including conducting tests to verify safety data, as requested.
- (a) Develop and evaluate safety risk assessment methodologies, models, and probabilities of occurrence for credible accident scenarios and assess mitigating factors, as requested.
- (b) Conduct assessments and tests to define STS environments in support of the DoD Components, as requested.
- (2) Serve as the DoD lead agent for coordination of DoD accident response planning with other Federal Agencies, in accordance with DoD Directive 5100.52 and DoD

5100.52-M (references (g) and (h)).

- (3) Respond to NWC safety actions.
- b. Support the Military Departments and the Combatant Commands on nuclear weapon system safety matters.
- (1) Coordinate with the Services on their nuclear weapon system TPs, as requested, and coordinate with Military Departments and the DoE on safety-related JNWPS TPs and other publications that have joint safety applications.
- (2) Coordinate with the Chairman of the Joint Chiefs of Staff on TPs that refer to the Chairman of the Joint Chiefs of Staff or implement policies under his purview.
- (3) In coordination with the Military Departments, pursue exploratory developmentlevel programs of research, development, test, and evaluation for enhancing safety and security at nuclear weapon storage and maintenance facilities.
  - (4) Provide a member for all Service conducted NWSSG studies.
- c. Develop and maintain nuclear weapon safety databases as requested by a Military Department.
- d. In coordination with the Military Departments, Chair a joint-Service working group to define requirements for the maintenance of nuclear weapon safety databases. With the concurrence of the Military Departments, this activity may include requirements for the compiling, storing, and retrieving data used in safety evaluation and assessment models.
- e. Develop, implement, and operate a DoD nuclear weapon system safety training program described in Chapter 9.
- (1) Develop additional courses as required in coordination with the Military Departments.
- (2) Coordinate with the DoE for support on selected topics in the DoD Nuclear Weapon System Safety Training Program and for the nomination of DoE officials to receive DoD Nuclear Weapon System Safety Training Program courses.
- f. Conduct Defense Nuclear Surety Inspections (DNSI) for the Chairman of the Joint Chiefs of Staff, as described in Chapter 12, below, and TP 25-1 (reference (i)).
  - 3. The Secretaries of Military Departments shall do the following:
- a. Ensure the safety and security of all nuclear weapons and nuclear weapon systems for which the Military Department has a life-cycle management responsibility.
- (1) Develop detailed technical and operational procedures that, with approved safety rules and other positive measures, govern all nuclear weapon operations, including weapons transport and storage and maintenance, throughout the STS. Those procedures will

be in place before a new or modified weapon is received and remain in effect until custody is relinquished to the DoE.

- (2) Develop safety rules and other positive measures to ensure that maximum safety is achieved, consistent with operational requirements and the DoD nuclear weapon system safety standards.
  - (3) Publish nuclear weapon system safety procedures in JNWPS or Service TPs.
  - (4) Respond to NWC safety actions.
- (5) Implement PRP regulations and directives to ensure that assigned personnel meet the requirements specified in DoD Directive 5210.42 (reference (d)).
  - (6) Ensure that NNAP activities are conducted on all test assemblies.
- (7) In the event of an accident or incident, develop positive measures to prevent a future occurrence.
- b. Conduct nuclear weapon system safety studies, reviews and safety assessments on U.S. nuclear weapons and Allied systems using U.S. nuclear weapons to support the DoD Nuclear Weapon System Safety Program.
  - c. Ensure that nuclear weapons technical inspections are conducted.
  - d. Establish safety design and evaluation criteria for nuclear weapon systems.
- e. Conduct safety certifications of nuclear weapon systems, including DoD support equipment and software that effect nuclear safety.
- (1) Ensure early identification of new or modified items requiring nuclear safety design certification.
- (2) Establish nuclear weapon system safety certification and recertification procedures for combat delivery vehicles, transport vehicles, software, critical components, and support equipment to be used with nuclear weapons and nuclear weapon systems.
- (3) Maintain a list of nuclear weapon system safety certified equipment and software.
- f. In coordination with the Defense Special Weapons Agency, participate in a joint-service working group to define requirements for the maintenance of nuclear weapon safety databases.
  - 4. The Chairman of the Joint Chiefs of Staff shall do the following:
    - a. Advise the Secretary of Defense on nuclear weapon system safety matters.
    - b. Coordinate with the Military Departments, the Combatant Commands, the Defense

Agencies, the OSD, and the other Government Agencies on nuclear weapon system safety matters.

- (1) Coordinate safety rules packages, as described in Chapter 5.
- (2) Respond to NWC safety actions.
- c. Establish nuclear weapons technical inspection policy and monitor implementation of the inspection system.
  - 5. The Commanders of the Combatant Commands shall do the following:
- a. Ensure the safety and security of all nuclear weapons and nuclear weapon systems for which the Combatant Command has responsibility.
- (1) Ensure that procedures, equipment, facilities, units, and organizations under their cognizance are certified before conducting operations with nuclear weapon systems.
- (2) Ensure that command units that assemble, test, maintain, transport, store or employ nuclear weapons, their associated components and their ancillary equipment, are inspected at regular intervals.
- (3) Ensure that actions taken in response to a nuclear accident or significant incident are conducted with nuclear weapon safety as a major criterion in determining response actions.
- (4) Implement PRP regulations and directives to support the DoD Nuclear Weapon System Safety Program and ensure that assigned personnel meet the requirements specified in DoD Directive 5210.42 (reference (d)) and this Manual.
  - (5) Respond to NWC safety actions.