

CHAIRMAN OF THE JOINT CHIEFS OF STAFF INSTRUCTION

J-6 DISTRIBUTION: A, B, C, J, S CJCSI 5119.01C 14 December 2007

CHARTER FOR THE CENTRALIZED DIRECTION, MANAGEMENT, OPERATION, AND TECHNICAL SUPPORT OF THE NUCLEAR COMMAND, CONTROL, AND COMMUNICATION SYSTEM

References: See Enclosure B

- 1. <u>Purpose</u>. To define the functions and responsibilities of the Nuclear C3 System Engineer, Joint Staff, combatant commands, Services, and Defense agencies for the centralized direction, management, operation, and technical support of the nuclear C3 system. This instruction identifies the Nuclear C3 System Engineer support to the Chairman, not all DISA responsibilities as the Nuclear C3 System Engineer, and is fully compliant with national guidance for nuclear C2 as promulgated through National Security Presidential Directives.
- 2. Cancellation. 5119.01B, 19 July 2004, is cancelled.
- 3. <u>Applicability</u>. This instruction applies to the Joint Staff, Services, combatant commands, and Defense agencies.
- 4. <u>Policy</u>. This instruction will be used for the operation, test, evaluation, and development of the nuclear C3 system.
- 5. <u>Responsibilities</u>. The Joint Staff, Services, combatant commands, and Defense agencies are responsible for carrying out the requirements established under this instruction.
- 6. <u>Procedures.</u> Detailed procedures and responsibilities are contained in Enclosure A. Exceptions to the procedures under the authority of this instruction will be submitted to the Director, Joint Staff, for resolution on a case-by-case basis.

- 7. <u>Summary of Changes</u>. This instruction is an administrative update to reflect current references; eliminate the term SIOP; add responsibilities for non-nuclear-capable combatant commanders; and identify changes to Nuclear C3 Systems Engineer, combatant commander, Joint Staff, and Military Service responsibilities.
- 8. <u>Releasability</u>. This instruction is approved for public release; distribution is unlimited. DOD components (to include the combatant commands), other federal agencies, and the public may obtain copies of this instruction through the Internet from the CJCS Directives Home Page--http://www.dtic.mil/cjcs_directives.
- 9. <u>Effective Date</u>. This instruction is effective upon receipt.

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Enclosures:

A - Charter for the Centralized Direction, Management, Operation, and Technical Support of the Nuclear Command, Control, and Communications System

B - References

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ENCLOSURE A

CHARTER FOR THE CENTRALIZED DIRECTION, MANAGEMENT, OPERATION, AND TECHNICAL SUPPORT OF THE NUCLEAR COMMAND, CONTROL, AND COMMUNICATIONS SYSTEM

1. General

- a. The nuclear C3 system is composed of C3 assets that provide connectivity from the President or Secretary of Defense through the NMCS to nuclear execution forces integral to fighting a worldwide, as well as theater, nuclear war. The nuclear C3 system includes the emergency action message (EAM) dissemination systems and those systems used for force management, planning, situation monitoring, decision-making, and force direction. The strategic portion of the nuclear C3 system is integral to and ensures performance of critical strategic functions of the GCCS.
- b. The nuclear C3 system supports presidential nuclear C2 and the President or Secretary of Defense C2 of the combatant commands in the areas of situation monitoring, decision-making, force direction, force management, and planning.
- c. The nuclear C3 system is centrally directed through the Joint Staff. General operational responsibility lies with the Chairman of the Joint Chiefs of Staff.
- d. The capability of the nuclear C3 system to meet objectives will be determined through the use of exercises, technical tests, technical analysis, simulation, and wargaming techniques. The nuclear C3 system will be exercised frequently under the most realistic conditions possible from an operational standpoint to ensure readiness and identify operational deficiencies. Also, technical tests will be conducted frequently to ensure maximum ability to function technically in support of the President and Secretary of Defense. Systems designated by the Director for Command, Control, Communications, and Computer Systems (J-6), Joint Staff, as critical to the nuclear C3 system (reference c) will receive the highest priority maintenance support from the Services.
- e. Emphasis will be placed on improving the system through proven technology that optimizes reliability, survivability, security, and endurance of the C3 system. Improvements to systems and operating procedures must ensure timely Integrated Tactical Warning/Attack Assessment (ITW/AA), adequate conferencing, and timely EAM delivery to strategic and theater nuclear forces with high confidence. Improvements must also ensure that no

action other than presidential-intended action will be taken, and that necessary force report back and retargeting capability exists.

- 2. <u>Nuclear C3 System Engineer Mission</u>. The Nuclear C3 System Engineer is charged with providing technical support to the Joint Staff, J-6 in carrying out responsibilities with respect to the nuclear C3 system. The Director, DISA is designated the Nuclear C3 System Engineer.
- 3. <u>Nuclear C3 System Engineer Functions</u>. The Nuclear C3 System Engineer will support the Joint Staff as follows:
 - a. Act as the primary technical advisor on nuclear C3 system matters.
- b. Provide system engineering and C3 planning support to the J-6 to improve design integrity, survivability, endurability, interoperability, compatibility, security, performance, and reliability of the entire system.
- c. Analyze systems, both existing and in design, to determine whether nuclear C3 system technical performance criteria specified in reference a and interoperability requirements can or are being met.
- d. Develop and supervise technical tests of the system in coordination with J-6.
- e. Assist Director for Operations (J-3) in the development, analysis, and conduct of operational assessments of the plans and procedures for the nuclear C3 system, in collaboration and coordination with the Military Services, combatant commands, and other appropriate agencies.
- f. Recommend common nuclear C3 system equipment and subsystem technical interface requirements and standards to achieve and retain C3 compatibility.
- g. Propose development efforts and new C3 systems to meet nuclear C3 system objectives.
- h. Recommend techniques to counteract the threat environment, particularly the threat of electronic countermeasures and nuclear effects on C3.
- i. Recommend techniques to counteract the threat of usurpation or exploitation of the system by a third party or cognizant agent.
- j. Provide J-6 with biennial draft updates to the Joint Staff nuclear C3 assessment reflecting compliance with reference a.

- k. Provide J-3 with a draft set of communication plans annually (or as requested) covering EAMs, force report back, replanning, and post-attack communications from the NMCS to the DOD infrastructure. Provide other communication plans associated with nuclear forces as requested.
- 1. Assist in evaluating the effectiveness of the nuclear C3 system through development and analysis of realistic exercises and in conducting theoretical studies. At the direction of J-3, develop and supervise operational tests and readiness exercises of the entire nuclear C3 system using the most realistic scenarios possible. Maintain a record of the observed performance, deficiency remediation, and performance trends of the system over time.
- m. At the direction of the J-6, conduct trade-off studies between existing, approved, and proposed systems to optimize the nuclear C3 network and assist in development of a system master plan.
- n. Perform survivability studies at the direction of J-6 and in collaboration and coordination with the Military Services, DTRA, and other appropriate agencies. Survivability studies will be conducted through analysis of the nuclear C3 system performance based on the analytical application of the hardening endurance, mobility, dispersal, and redundancy functions. Identify potential single-point failure locations, substandard performance, and interoperability limitations, and include recommendations for improvement.
- o. Evaluate current and new C3 systems, technologies, and techniques of the Military Services, Defense agencies, and other USG agencies for possible use in the nuclear C3 system.
- p. Recommend to J-6 assignment of selected tasks to the appropriate DOD organizations for accomplishment.
- q. Review nuclear C3 system-related programs of the Military Services, Defense agencies, and other USG agencies to determine whether they support effective integration, standardization, and interoperability.
- r. Advise J-6, Military Services, and agencies of program and budget requirements for satisfactory financial support of nuclear C3 system programs. This will be done in time to support POM development and whenever shortfalls exist.
 - s. Provide a nuclear C3 system security classification guide.
- t. Include necessary resources in DISA POM submission to execute nuclear C3 system engineering responsibilities.

- u. Review the adequacy of the test plans of nuclear C3 system development programs.
- v. Review test results of systems that disseminate EAMs and make nuclear C3 system certification recommendations for operational use to the Joint Staff J-3 for approval.
- w. Assist with the development of nuclear C3 exercise scenarios for the CJCS Command Assistance Visit (CAV), Staff Assessment Visit (SAV), and POLO HAT programs.
 - x. Assist with developing new exercise training scenarios for the NMCC.
- y. Provide operational support at NMCC Site R for the Nuclear Planning and Execution System and associated tasks, and the NATO Nuclear Command and Control Reporting System.
- z. Assist J-3 with document revisions for the EAP of the Chairman of the Joint Chief of Staff (EAP-CJCS).

4. Responsibilities

- a. <u>The Chairman of the Joint Chiefs of Staff</u>. The responsibilities of the Chairman of the Joint Chiefs of Staff with respect to the nuclear C3 system include:
 - (1) Operation of the nuclear C3 system.
- (2) Establishment of operational policies and procedures for the nuclear C3 system.
 - (3) Definition of the scope of the nuclear C3 system.
- (4) Development and validation of requirements for the nuclear C3 system.
- (5) Making recommendations to the Secretary of Defense to ensure responsiveness, interoperability, and standardization of the nuclear C3 system.
- b. <u>The Joint Staff</u>. The Joint Staff is responsible for advising the Chairman of the Joint Chiefs of Staff on the effectiveness of the nuclear C3 system and requesting the Services, combatant commands, and Defense agencies accomplish selected tasks in the development and operation of the nuclear C3 system. The Joint Staff will assist DISA in prioritizing resources annually for supporting the Nuclear C3 System Engineer functions in the coming year.

- (1) The Director, J-6 is the primary Joint Staff point of contact for electromagnetic pulse issues and providing centralized direction and management for the nuclear C3 system, and is responsible for:
- (a) Maintaining liaison with the Joint Staff, Military Services, DISA, combatant commands, and other Defense agencies.
- (b) Developing and recommending changes to the nuclear C3 system concepts and requirements.
- (c) Reviewing and recommending changes to nuclear C3 system procedural plans of the combatant commanders.
 - (d) Publishing a biennial nuclear C2 system assessment.
- (e) Publishing and maintaining CJCS nuclear command and control system technical performance criteria (reference a).
- (f) Publishing and maintaining CJCS prioritization of C3 nodes and systems for high-altitude electromagnetic pulse protection (reference b).
- (g) Publishing and maintaining CJCS critical nuclear command and control equipment and facilities (reference c).
- (h) Approving technical tests of the nuclear C3 system jointly with the J-3.
- (i) Reviewing recommendations submitted by the Nuclear C3 System Engineer and initiating appropriate action.
- (j) Monitoring the following areas relative to their impact on the nuclear C3 system:
 - 1. Exercises and tests.
 - 2. Treaties, agreements, and negotiations with foreign nations.
 - 3. Trends and estimates of hostile threats and capabilities.
 - 4. EAP and pertinent studies.
- (k) Accomplishing other nuclear C3 system-related tasks and functions that may be required in the management of the nuclear C3 system.

- (l) Developing, reviewing, and validating the nuclear C3 system requirements and ensuring current and future planning provides for adequate C3 capabilities.
- (m) Reviewing the planning and programming for systems that are or may be designated to support the nuclear C3 system.
- (n) Incorporating appropriate recommendations on nuclear C3 system-related items into the appropriate CJCS instructions covering communications policies.
- (o) Reviewing test plans and monitoring results ensuring the nuclear C3 system provides for a survivable, flexible, enduring, and reliable C3 capability.
- (p) Reviewing joint input pertaining to the Planning, Programming, Budgeting, and Execution process; development concept papers; and the Five-Year Defense Program as these relate to the nuclear C3 system or organizations and commands served by the nuclear C3 system.
- (q) Co-chairing the NMCS Configuration Steering Committee (CSC), Requirements Review Panel (RRP), and the NMCS Issues Working Group (NIWIG).
 - (2) The Director for Operations (J-3) is responsible for:
- (a) Publishing EAP-CJCS and specifying operational requirements for the effective use of the nuclear C3 system.
- (b) Determining, in collaboration with the Director, J-6 and CDRUSSTRATCOM, operational areas of airborne platforms for maintenance of worldwide communications coverage.
- (c) Promulgating schedules and providing direction for national-level nuclear C3 system operations and exercises ordered by the Chairman of the Joint Chiefs of Staff.
- (d) Advising the Director, J-6 of matters that may affect the current and future operation of the nuclear C3 system.
- (e) Requesting validation of nuclear C3 system requirements from the Director, J-6.
- (f) Planning for and considering OPSEC during all phases of operations, to include testing, exercises, and real-world operations.

- (g) Providing nuclear C3 systems certification for new systems that disseminate EAMs or operational EAM dissemination systems that are undergoing a significant modification
 - (h) Co-chairing the NMCS CSC, RRP, and the NIWIG.
 - (i) Managing the CJCS CAV and SAV programs.
- (j) Through the NMCC and NMCC Site R, routinely exercising and testing nuclear C3 systems to ensure the equipment meets performance standards. Initiating prompt action when deficiencies are discovered to recover operational capability.
- (k) Conducting end-to-end operational assessments of the EAM dissemination and force reportback networks.

c. Combatant/Non-Combatant Commanders

(1) CDRUSSTRATCOM will:

- (a) Ensure the nuclear C3 system for strategic force employment is adequate to meet the requirements of national guidance.
 - (b) Develop, maintain, and publish USSTRATCOM EAP.
- (c) Maintain the capability to execute and direct strategic forces through fixed and mobile command centers.
- (d) Develop policies, tactics, and procedures for strategic nuclear C3 assets and systems, in response to guidance from the Secretary of Defense and the Chairman of the Joint Chiefs of Staff.
 - (e) Provide single-CDR advocacy for strategic nuclear C2 matters.
- (f) In conjunction with Commander, USELEMNORAD, ensure the EAM dissemination and ITW/AA systems are able to perform their assigned missions in accordance with references a and d.
- (g) In conjunction with Commander, USELEMNORAD, and in accordance with references e and f, review and approve any addition of new or modification of existing hardware or software within or interfacing with the ITW/AA System.
- (h) Certify or decertify any additions or modifications of existing hardware or software within, or interfacing with, the ITW/AA system. Provide

an information copy of all certification/decertification documentation to Commander, USELEMNORAD.

- (i) Provide the annual status report for the ITW/AA System to the Joint Staff, J-39 Space and Missile Defense Division (SMDD) by 30 Aug each year.
- (j) Provide the annual Integrated Nuclear Survivability Status Report to the Joint Staff, J-39 SMDD, J-6, DISA, DTRA, Commander, USELEMNORAD, and nuclear-capable commanders by 30 Aug each year.
- (k) Annually identify and submit proposed changes to CJCSI 6810.01 and 3222.01 series to the Joint Staff, J-6 by 30 Aug.
- (l) Conduct the annual end-to-end test of the ITW/AA system and provide results to the Joint Staff, J-3/NMCS, DISA, DTRA, Commander USELEMNORAD, and nuclear-capable commanders 90 days after completion of the test.
- (m) Provide Nuclear Command and Control Extremely Sensitive Information (NC2-ESI) certification for all nuclear C3 systems and circuits that process NC2-ESI level data and voice in accordance with reference g.
- (n) Routinely exercise and test nuclear C3 systems to ensure the equipment meets performance standards. When deficiencies are discovered, initiate prompt action to recover operational capability.
- (o) Notify the Joint Staff and DISA of any plans to replace, upgrade, or modify nuclear C3 systems.

(2) Commander, USELEMNORAD will:

- (a) In conjunction with CDRUSSTRATCOM, ensure the ITW/AA system is able to perform its assigned mission in accordance with reference d.
- (b) Annually identify and submit proposed changes to CJCSI 6810.01 and 3222.01 series to the Joint Staff, J-6 by 30 Aug.
- (c) In conjunction with CDRUSSTRATCOM, and in accordance with references e and f, review and approve any addition of new or modification of existing hardware or software within or interfacing with the ITW/AA system.

- (3) Nuclear-capable commanders will:
- (a) Provide nuclear C3 system communications plans for their respective commands.
- (b) Routinely exercise and test nuclear C3 systems to ensure the equipment meets performance standards. When deficiencies are discovered, initiate prompt actions to recover operational capability.
- (c) Recommend operational procedures to improve the effectiveness of the nuclear C3 system to the Chairman of the Joint Chiefs of Staff.
- (d) Submit nuclear C3 system requirements for validation by the Joint Staff, J-6.
- (e) Provide operational assistance to DISA as directed by the Chairman of the Joint Chiefs of Staff.
- (f) Provide, or delegate to a subordinate command to grant, interim certification for operational use of Nuclear Command and Control System (NCCS) or other NC2-ESI cleared circuits, when required.
- (g) Submit test results, along with requests for operational use certification, to Joint Staff, J-3 via DISA.
- (h) Annually identify and submit proposed changes to CJCSI 6810.01 and 3222.01 series to the Joint Staff, J-6 by 30 Aug.
- (i) Notify the Joint Staff and DISA of any plans to replace, upgrade, or modify nuclear C3 systems
- (j) Recommend to the Chairman of the Joint Chiefs of Staff operational procedures to improve the effectiveness of the nuclear C3 system.
- (4) Non-nuclear capable combatant commanders who possess nuclear C3 systems will:
- (a) Routinely exercise and test nuclear C3 systems to ensure the equipment meets performance standards. When deficiencies are discovered, initiate prompt actions to recover operational capability.
- (b) Recommend to the Chairman of the Joint Chiefs of Staff operational procedures to improve the effectiveness of the nuclear C3 system.

- (c) Submit nuclear C3 system requirements for validation by the Joint Staff, J-6.
- (d) Provide operational assistance to the Nuclear C3 System Engineer as directed by the Chairman of the Joint Chiefs of Staff.
- (e) Provide, or delegate to a subordinate command to grant, interim certification for operational use of NCCS or other NC2-ESI cleared circuits, when required.
- (f) Submit nuclear C3 system test results, along with requests for operational use certification, to the Joint Staff, J-3 via DISA.
- (g) Annually identify and submit proposed changes to CJCSI 6810.01 and 3222.01 series to the Joint Staff, J-6 by 30 Aug.
- (h) Notify the Joint Staff and DISA of any plans to replace, upgrade, or modify nuclear C3 systems

d. The Military Services

- (1) Operate, maintain, evaluate, conduct technical tests, and support C3 system and assets that specifically support nuclear operations, ensuring the highest maintenance priorities are assigned. When deficiencies are discovered, initiate prompt action to recover operational capability.
 - (2) Review system planning, programming, and implementation.
 - (3) Monitor system exercises and technical tests.
- (4) Conduct trade-off studies between operational procedures and technical developments at the Service level.
- (5) Advise the Joint Staff, J-6 on the status of planning and programming related to the nuclear C3 system.
- (6) Advise the Joint Staff, J-6 and the Nuclear C3 System Engineer prior to making any planning and programming changes that impact the nuclear C3 system.
- (7) Identify and develop new systems, as required, to meet nuclear C2 system technical performance criteria specified in reference a.
- (8) Review and recommend techniques to counteract the threat environment, including nuclear and electronic countermeasure effects.

- (9) Provide technical assistance to the Nuclear C3 System Engineer as requested by the Chairman of the Joint Chiefs of Staff.
- (10) Provide system modification and system acquisition to support the system, including subsystem project plans, management engineering plans, installation and implementation plans, and test and transition plans.
- (11) Plan, program, and budget, consistent with the fiscal guidance of the Secretary of Defense, for systems identified for inclusion in the system.
- (12) Annually identify and submit proposed changes to CJCSI 6810.01 and 3222.01 series to the Joint Staff, J-6 by 30 Aug.

e. <u>Defense Agencies</u>

- (1) The National Security Agency is responsible for:
- (a) Providing the Joint Staff and DISA with an analysis of all SIGINT, usurpation, or exploitation threats to the system and an evaluation of COMSEC and countermeasures, in design or in use, to counter these threats and ensure compliance with approved DOD standards.
- (b) Developing and reviewing COMSEC measures to counter the threat and providing guidance to the Joint Staff and Nuclear C3 System Engineer on approaches for achieving nuclear C3 system COMSEC objectives.
- (c) Participating in the COMSEC aspects of planning, development, implementation, testing, and evaluation for the nuclear C3 system.
- (d) Producing COMSEC documents and cryptographic keying material to support execution of the nuclear C3 system communications plans.
 - (2) The Defense Intelligence Agency is responsible for:
- (a) Providing the Joint Staff and DISA with an assessment of the magnitude of the threat to destroy system elements of the nuclear C3 system or to disrupt communications; to include, but not be limited to, electronic jamming, deception, and nuclear effects.
- (b) Development of a standard jamming threat profile for use by all agencies involved in the development, operation, and evaluation of nuclear C3.
- (3) The Defense Threat Reduction Agency is responsible for providing nuclear effects models and data, hardening and test technology, test support, and system survivability assessments for use by DISA.

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ENCLOSURE B

REFERENCES

- a. CJCSI 6811.01 series, "Nuclear Command and Control System Technical Performance Criteria"
- b. CJCSI 3222.01 series, "CJCS Requirements for High Altitude Electromagnetic Pulse Protection of nuclear command, control, and communications (C3) nodes and systems"
- c. CJCSI 6810.01 series, "Critical Nuclear Command and Control Equipment and Facilities"
- d. CJCSI 6210.02 series, "Attack/Defense Information and Operational Architecture of the Integrated Tactical Warning and Attack Assessment System"
- e. Unified Command Plan, current
- f. Terms of Reference for the North American Aerospace Defense Command (NORAD), 21 February 2007
- g. CJCSI 3231.01 series, "Safeguarding Nuclear Command and Control Extremely Sensitive Information (NC2-ESI)"

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