

21 November 2018

The Honorable Richard C. Shelby
Chairman
Committee on Appropriations
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

(U) Pursuant to sections 171a(e) and (j)(2) of title 10, United States Code, enclosed is the Annual Report on the Activities of the Council on Oversight of the National Leadership Command, Control, and Communications System (NLC3S), which includes the integrated tactical warning and attack assessment determination.

(U) The report captures the Council's actions in 2017, along with proposed activities to be undertaken during Future Years Defense Program 2019-23. Based on Council actions over the past year, we have continued to invest significant additional resources to address NLC3S gaps and deficiencies. The nuclear command, control, and communications (NC3) enterprise remains capable of accomplishing its current operational requirements; however, threats to NC3 capabilities are increasing. Many of the critical systems, platforms, and facilities comprising the NC3 architecture are approaching, at, or past planned life cycles. Continued budgetary support is required to modernize aging systems and architectures to ensure the enterprise continues to remain safe, secure, and reliable.

(U) We appreciate your continued concern for and support of our men and women in uniform. An identical letter is being sent to the other congressional defense committees.

Sincerely,



PAUL J. SELVA
General, U.S. Air Force
Vice Chairman of the Joint Chiefs of Staff



ELLEN M. LORD
Under Secretary of Defense for Acquisition
and Sustainment

Enclosure:
As stated

cc:
The Honorable Patrick J. Leahy
Vice Chairman

21 November 2018

The Honorable Rodney P. Frelinghuysen
Chairman
Committee on Appropriations
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

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ELLEN M. LORD
Under Secretary of Defense for Acquisition
and Sustainment

Enclosure:
As stated

cc:
The Honorable Nita M. Lowey
Ranking Member

21 November 2018

The Honorable William M. "Mac" Thornberry
Chairman
Committee on Armed Services
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

(U) Pursuant to sections 171a(c) and (j)(2) of title 10, United States Code, enclosed is the Annual Report on the Activities of the Council on Oversight of the National Leadership Command, Control, and Communications System (NLC3S), which includes the integrated tactical warning and attack assessment determination.

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Vice Chairman of the Joint Chiefs of Staff



ELLEN M. LORD
Under Secretary of Defense for Acquisition
and Sustainment

Enclosure:
As stated

cc:
The Honorable Adam Smith
Ranking Member

21 November 2018

The Honorable James M. Inhofe
Chairman
Committee on Armed Services
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

(U) Pursuant to sections 171a(e) and (j)(2) of title 10, United States Code, enclosed is the Annual Report on the Activities of the Council on Oversight of the National Leadership Command, Control, and Communications System (NLC3S), which includes the integrated tactical warning and attack assessment determination.

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General, U.S. Air Force
Vice Chairman of the Joint Chiefs of Staff



ELLEN M. LORD
Under Secretary of Defense for Acquisition
and Sustainment

Enclosure:
As stated

cc:
The Honorable Jack Reed
Ranking Member

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Department of Defense



The estimated cost of this report or study for the Department of Defense (DoD) is approximately \$14,000 in fiscal years 2017-2018. This includes \$11,000 in expenses and \$2,940 in DoD labor.
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2018

(U) Title 10 USC §171a(e) and (j)(2) National Leadership Command, Control, and Communications System Annual Report and Integrated Tactical Warning and Attack Assessment Determination

~~Classified By: Dana Deasy~~
~~Reason: 1.4(a)(D)(i)~~
~~Declassify On: 31 May 2043~~

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(U) INTRODUCTION

(U) The "National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2014, (Public Law 113-66)," in section 1052, amends Chapter 7 of title 10, United States Code, to add section 171a. This new section establishes within the Department of Defense (DoD) a "Council on Oversight of the National Leadership Command, Control, and Communications System" (NLC3S). NDAA section 1052 also requires (as amended by NDAA for FY 2017) that "During the period preceding January 31, 2021, at the same time each year that the budget of the President is submitted to Congress pursuant to section 1105(a) of title 31, and from time to time after such period at the discretion of the Council, the Council shall submit to the congressional defense committees a report on the activities of the Council. Each report shall include the following:

- (1) (U) A description and assessment of the activities of the Council during the previous fiscal year. (Section I)*
- (2) (U) A description of the activities proposed to be undertaken by the Council during the period covered by the current future-years defense program under section 221 of this title. (Section II)*
- (3) (U) Any changes to the requirements of the command, control, and communications system for the national leadership of the United States made during the previous year, along with an explanation for why the changes were made and a description of the effects of the changes to the capability of the system. (Section III)*
- (4) (U) A breakdown of each program element in such budget that relates to the system, including how such program element relates to the operation and sustainment, research and development, procurement, or other activity of the system. (Section IV (Enclosure 1))*
- (5) (U) An assessment of the threats and vulnerabilities described in the reports and assessments collected under subsection (f) during the previous year, including any plans to address such threats and vulnerabilities. (Section V)*
- (6) (U) An assessment of the readiness of the command, control, and communications system for the national leadership of the United States and of each layer of the system, as that relates to nuclear command, control, and communications. (Section VI)*

(U) The DoD submits the following report in response to that request.

I. (U) ACTIVITIES OF THE COUNCIL DURING CALENDAR YEAR (CY) 2017

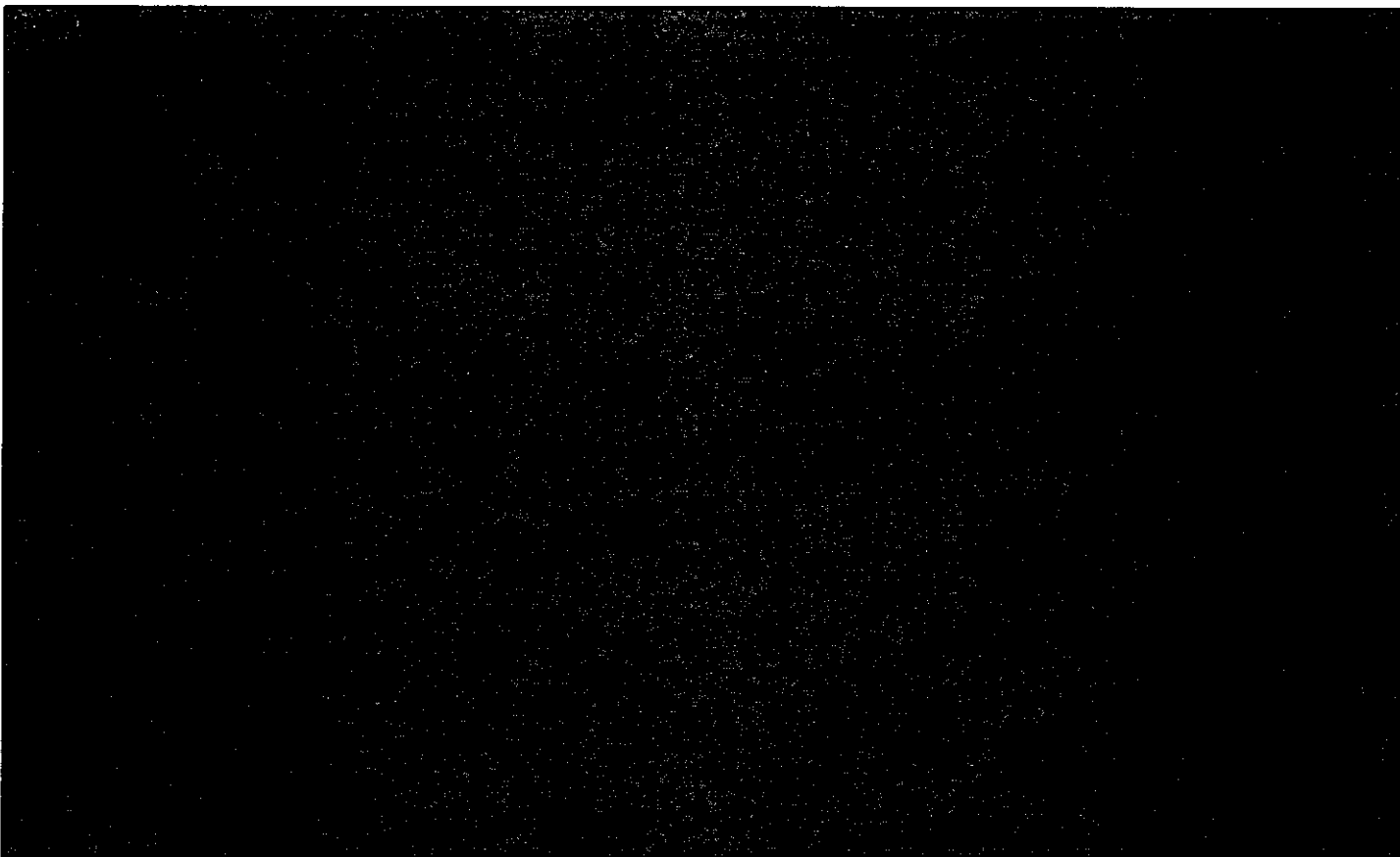
A. (U) GENERAL. In calendar year (CY) 2017, the Council convened three in-person/video teleconference meetings and a fourth meeting hosted by the co-chairs to discuss resource prioritization in the performance of specified NLC3S¹ responsibilities. In addition, there were three in-person meetings of the four-star level National Leadership Command Capability (NLCC) Executive Management Board (EMB) and five in-person meetings of the two-star level NLCC Senior Steering Group (SSG) that covered some subjects not presented to the Council. Numerous working groups (WG) and sub-working groups feed the Council governance process. These include the Nuclear Command, Control, and Communications (NC3) Issues WG; the Military Strategic and Tactical Relay (MILSTAR) to Advanced Extremely High Frequency (AEHF) Transition WG; the Low Frequency/Very Low Frequency WG; the NC3 Assessments WG; the Hybrid Solution WG; and

¹ NLC3S is the congressional term for what the DoD refers to as the National Leadership Command Capability (NLCC).

the NC3 System High Altitude Electromagnetic Pulse (HEMP) WG (NC3SHWG), which generally meet once every one to two months.

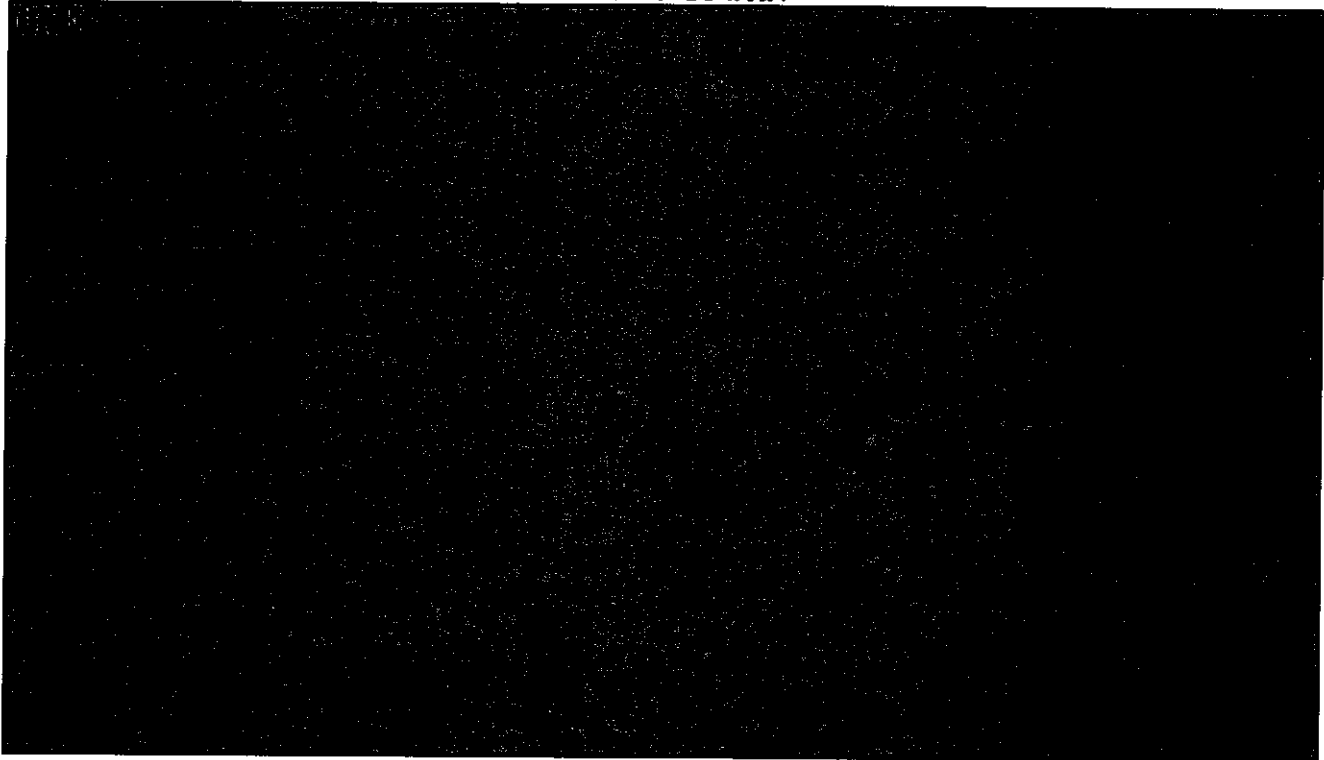
B. (U) PERFORMANCE ASSESSMENTS (INCLUDING INTEROPERABILITY) (Office of Primary Responsibility (OPR): Chairman of the Joint Chiefs of Staff (CJCS). Offices of Collateral Responsibility (OCRs): White House Military Office (WHMO); DoD Chief Information Officer (CIO)).

(U) Work continued on the 2015 Deputy Secretary of Defense-directed NLCC and NC3 System Enterprise Review findings and recommendations. The Council reviewed the status of the 13 major recommendations and agreed to close the NLCC/NC3 cybersecurity recommendation and the Navy's portion of the NLCC/NC3 Operations and Maintenance Training and Units and Organization Manning Recommendation. Air Force Organizational Task Force (TF), NLCC and NC3 Engineering TF, and E-6 Requirements Recommendations remain closed. The remaining items report satisfactory progress.

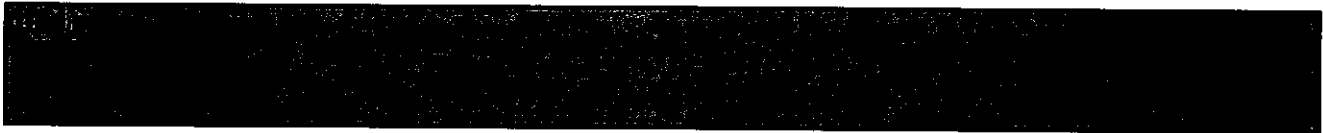


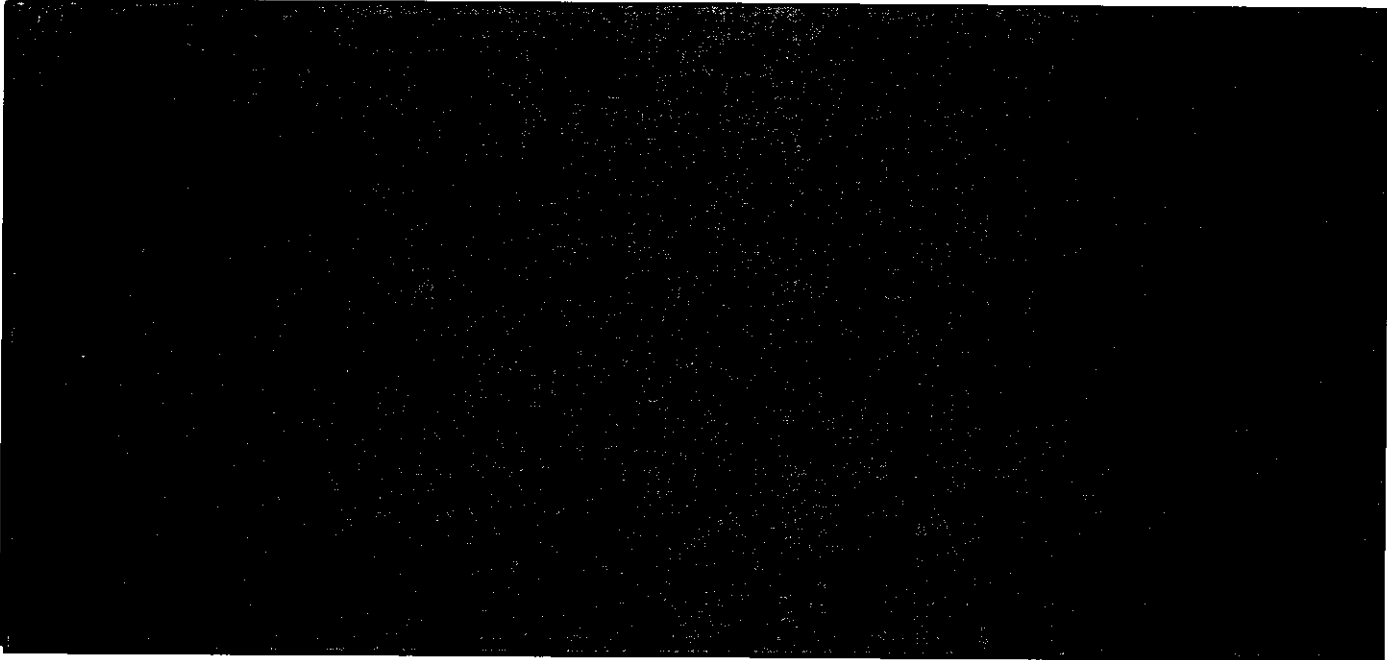
(U) Additional performance assessment activities included:





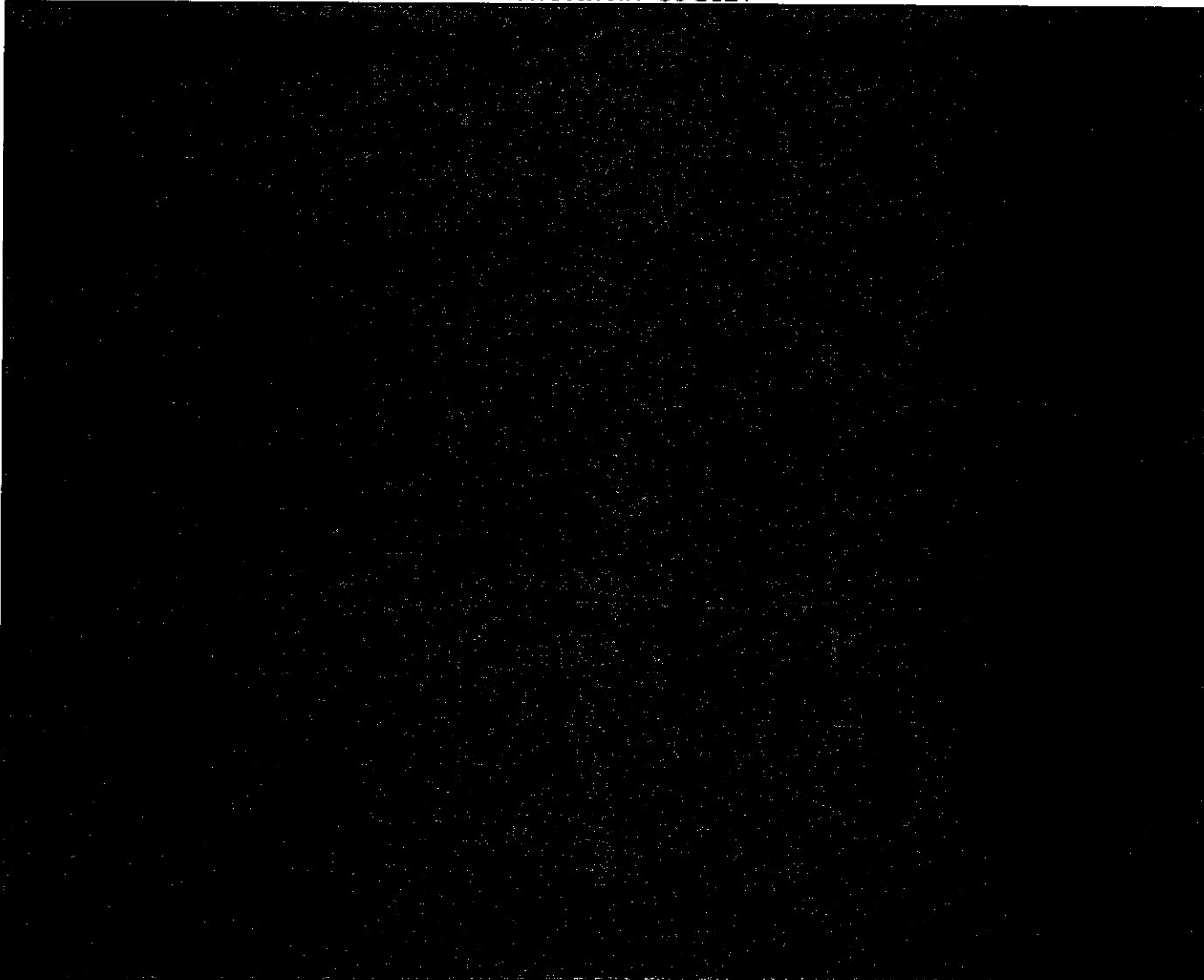
C. (U) VULNERABILITY IDENTIFICATION AND MITIGATION (OPRs: USD for Intelligence (USD(I); Joint Staff; Commander, U.S. Strategic Command (CDRUSSTRATCOM).
OCRs: National Security Agency (NSA); DoD CIO).

- 
- (U) Worldwide Nuclear Threats (Russia, non-Russia; Electromagnetic Pulse (EMP)).
 - (U) Electronic Warfare (EW) and EW/Cyber Threats to NLCC.
 - (U) Counter Space Weapon Threats to NLCC.



**D. (U) ARCHITECTURE DEVELOPMENT (OPR: Defense Information Systems Agency (DISA).
OCRs: NSA; CDRUSSTRATCOM; Commander, U.S. Northern Command; Services)**

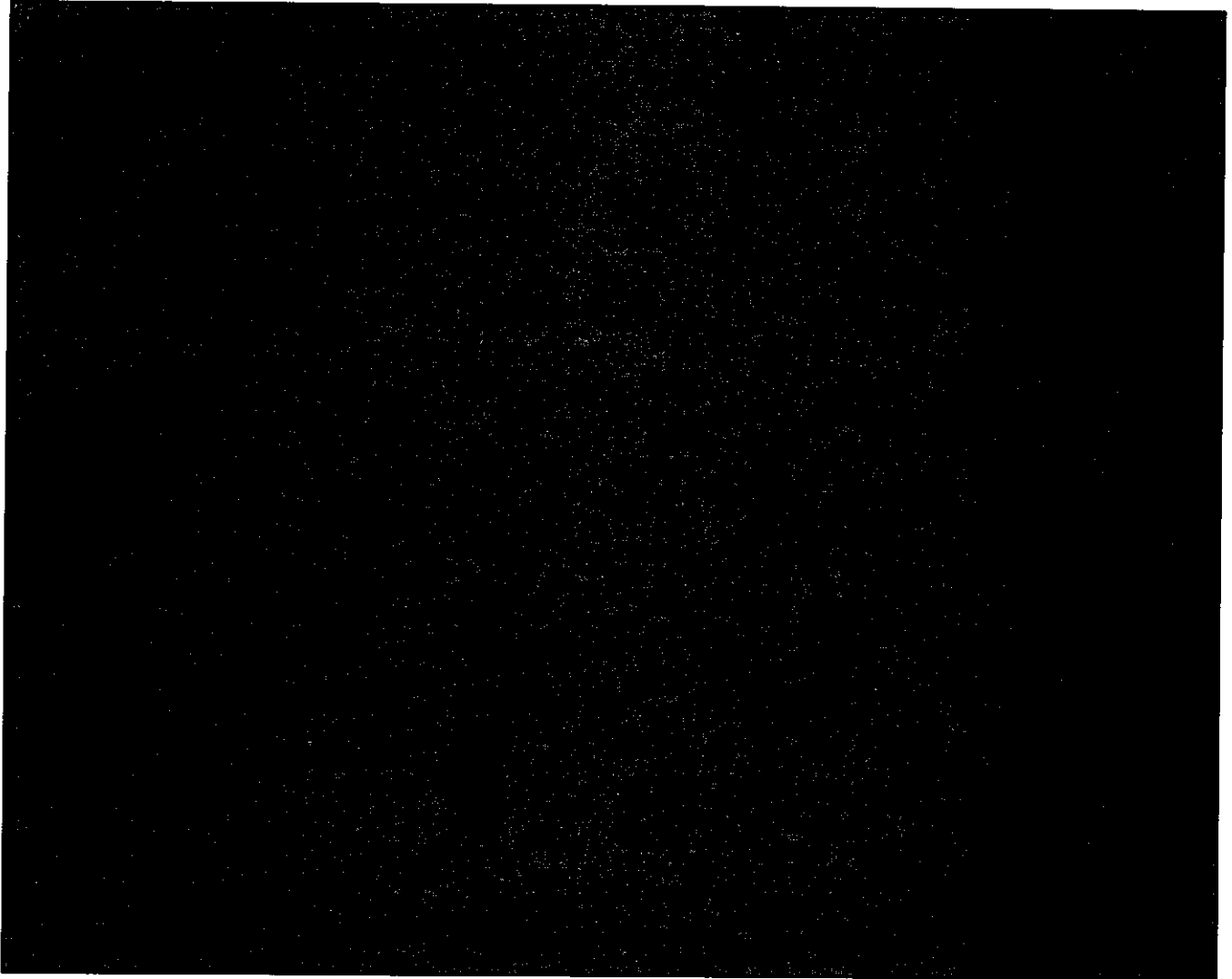
(U) In 2017, DISA/Joint Systems Engineering and Integration Office (JSEIO) stood up the NLCC Systems Engineering and Architecture Review Board (SEAR Board) to fulfill its Deputy Secretary of Defense task to “provide systems engineering and integration functions (including, but not limited to requirements, configuration management, technical assessments, and architecture).” It meets on a quarterly basis and the working groups meet monthly. Figure 1 below depicts the SEAR Board’s organizational structure.



(U) DISA/JSEIO briefed progress on the NLCC Enterprise Architecture (EA) and the NLCC Reference Architecture to the NLCC SSG/JSEIO Executive Committee in November 2017. Originally developed in Microsoft Visio, the EA is now being transitioned to model-based systems engineering tool MagicDraw while also being federated across the NLCC community.

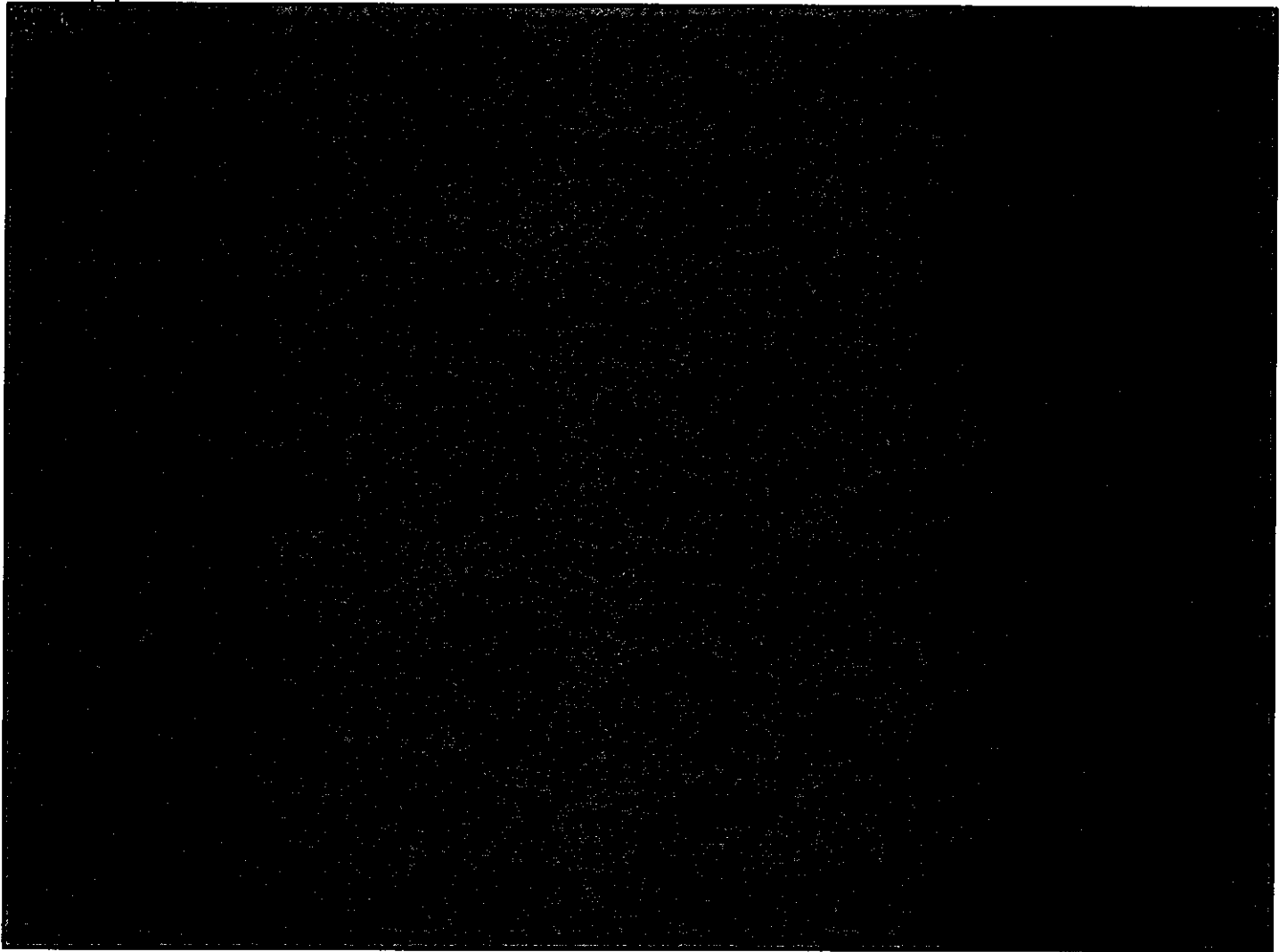
(U) The NLCC Modeling and Simulation project (currently funded for FY 2017–21) is providing an additional decision making tool, the Modeling and Simulation for Strategic Communications (MASSC). This tool was enhanced in 2017 to better depict force direction modeling capability, completing the architecture for all current peacetime and wartime communications systems, as well as near-future thin-line systems. MASSC uses individual mission thread assessments (e.g., Very Low Frequency, decision conferencing) to determine ability to meet performance requirements in order to identify gaps.

E. (U) RESOURCE PRIORITIZATION (OPR: All)



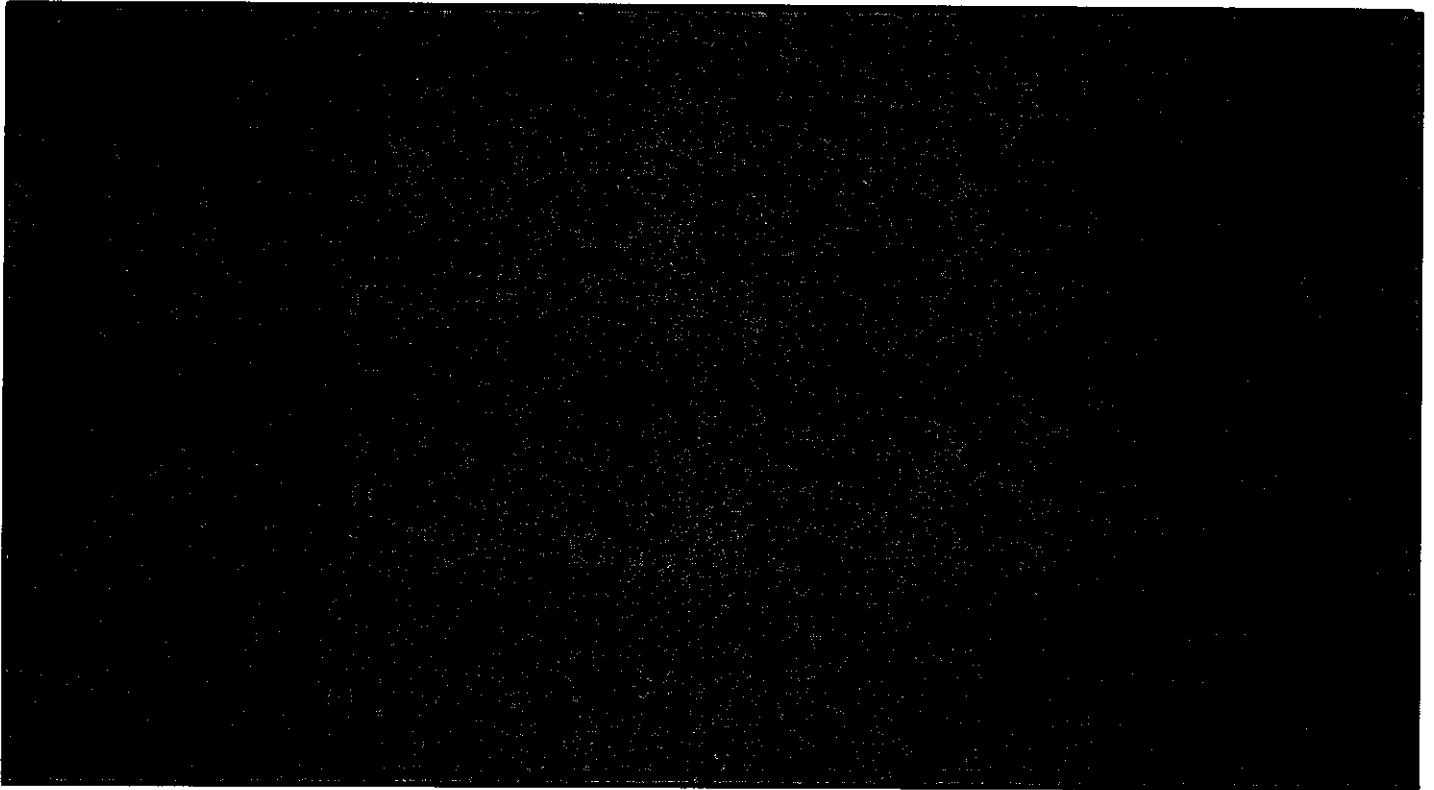
- (U) In December 2017, per section 1052(f) (3) of the NDAA for FY 2014, the Council co-chairs informed the congressional committees of concerns with congressional marks on the Senior Leader Enterprise (PE 0303122K), E-6 Series (PE0101402N), E-4 (PE0302015F), National Airborne Operations Center (NAOC) Recapitalization (PE0604288F), and Minimum Essential Emergency Communications Network (MEECN) (PE0303131F).

F. (U) OTHER

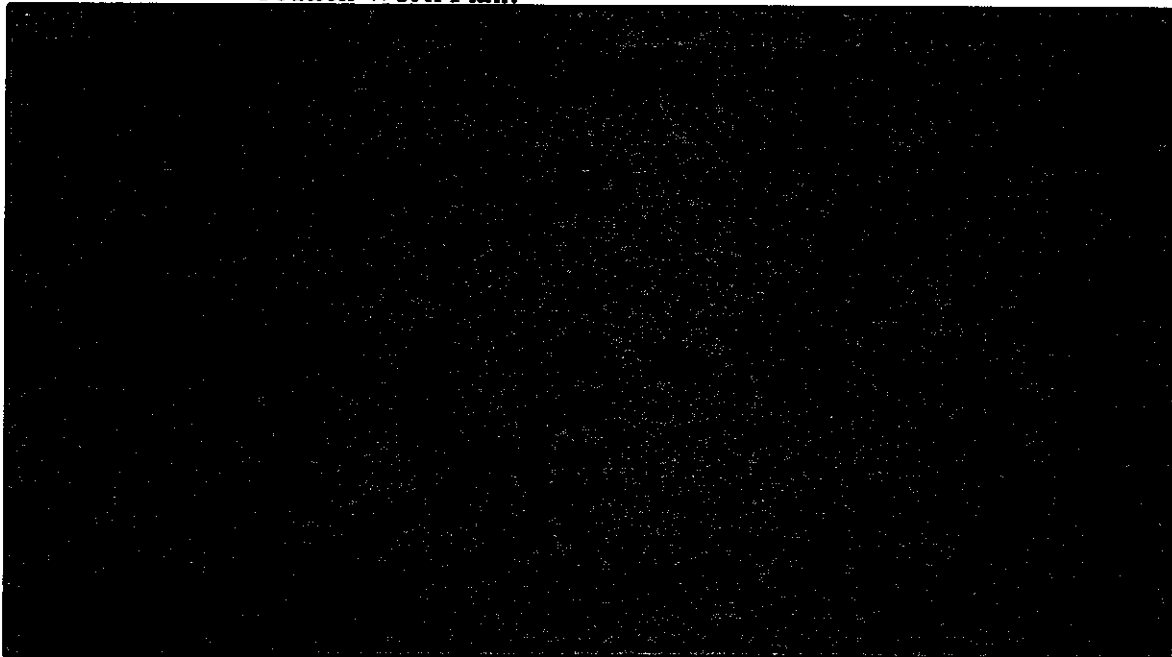


II. (U) ACTIVITIES PROPOSED TO BE UNDERTAKEN BY THE COUNCIL DURING THE CURRENT FUTURE YEARS DEFENSE PROGRAM

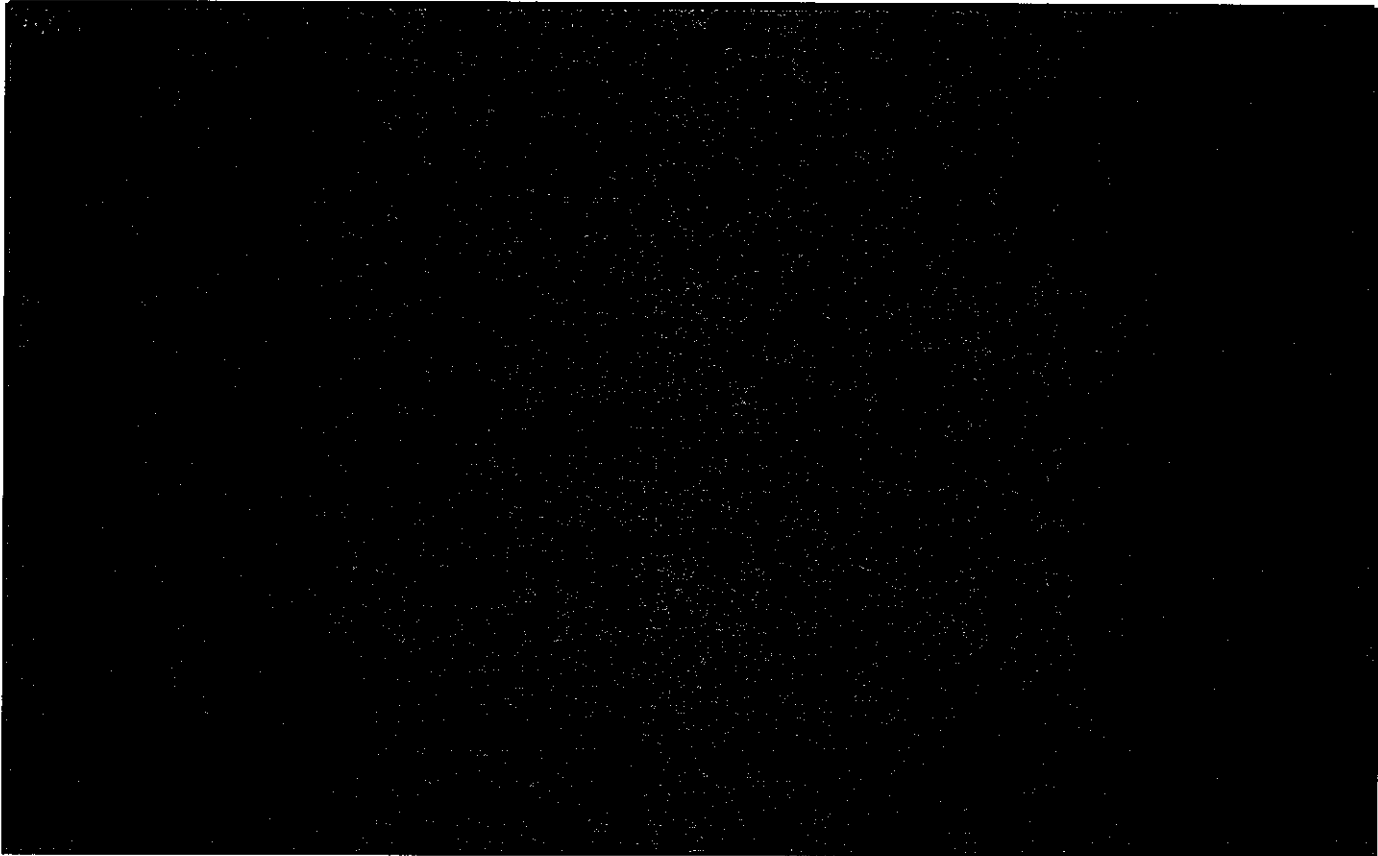
Table 3 is the Council Work Plan for CY 2018. Table 4 is the Council Work Plan for CY 2019–22.



B. CY 2019–22 Council Work Plan:



III. (U) CHANGES TO NLC3S REQUIREMENTS MADE DURING PREVIOUS YEAR



(U) FY 2017 NDAA language added, on an annual basis, a determination by the Council as to “*whether the integrated tactical warning and attack assessment system and its C2 system have met all warfighter requirements for operational availability, survivability, and endurance.*” While this determination is not required to be reported here, it is included. (Enclosure 2)

(U) FY 2018 NDAA language added Council reporting actions as described in Section 1651, *Annual Assessment of Cyber Resiliency of NC2 System*; section 1654, *Oversight of Delayed Acquisition Programs by the Council*; Section 1657, *Oversight of Aerial-Layer Programs by the Council*; and section 1658, *Security Classification Guide for Programs Relating to NC3 and Nuclear Deterrence*. These reports will be submitted separately as detailed in the NDAA language.

IV. (U) BREAKDOWN OF NLC3S PROGRAM ELEMENTS.

See Enclosure 1.

V. (U) AN ASSESSMENT OF THE THREATS AND VULNERABILITIES DESCRIBED IN THE REPORTS AND ASSESSMENTS COLLECTED UNDER SECTION I.B. DURING THE PREVIOUS YEAR, INCLUDING ANY PLANS TO ADDRESS SUCH THREATS AND VULNERABILITIES.

See Section I.C.