NATIONAL RECONNAISSANCE OFFICE

OFFICE OF INSPECTOR GENERAL

(U) FINAL REPORT

(U) Audit of the Use of Federally Funded Research and Development Centers in the Systems Engineering Directorate
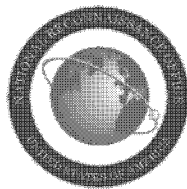
Project Number 2014-007 A

22 December 2014

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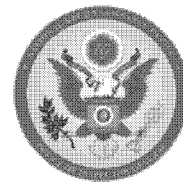THIS PAGE INTENTIONALLY LEFT BLANK

NATIONAL RECONNAISSANCE OFFICE

Office of Inspector General
14675 Lee Road
Chantilly, VA 20151-1715

22 December 2014

MEMORANDUM FOR DIRECTOR, NATIONAL RECONNAISSANCE OFFICE
DIRECTOR, SYSTEMS ENGINEERING DIRECTORATE

SUBJECT: (U) Final Report: Audit of the Use of Federally Funded
Research and Development Centers in the Systems
Engineering Directorate (Project Number 2014-007 A)

(U) The National Reconnaissance Office (NRO) Office of Inspector
General (OIG) report on the *Audit of the Use of Federally Funded
Research and Development Centers in the Systems Engineering
Directorate* is attached. I am providing this report for your
information and implementation of the recommendations. I appreciate
the responses to the draft report, which meet the intent of the
findings and recommendations.

(U//~~FOUO~~) I also appreciate the courtesies extended to my staff
during this audit. Please direct any questions you may have regarding
this report to [   ], Auditor-in-Charge, at [   ]   (b)(3)
(secure), or [   ], Deputy Assistant Inspector General, at
[   ] (secure). Please direct any questions you may have regarding
corrective action reporting to [   ], OIG Follow-up
Administrator, at [   ].

Adam G. Harris
Inspector General

Attachment:
(U) Final Audit Report
(Project Number 2014-007 A)
~~(S//TK//REL TO USA, FVEY)~~

cc:
PDDNRO
DDNRO

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SUBJECT: (U) Final Report: Audit of the Use of Federally Funded
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          Engineering Directorate (Project Number 2014-007 A)

OIG/ ☐ / ☐ / ☐ /22 Dec 14   (b)(3)

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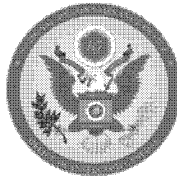
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EXECUTIVE SUMMARY
(U) Audit of the Use of Federally Funded Research and Development Centers in the Systems Engineering Directorate

(U) To view the full report, including the scope, methodology, results, and management comments, go to
https://corpstaff.svc.nro.ic.gov/oig

(U) Why the OIG Did This Audit

(U//EOUO) Each year, the National Reconnaissance Office (NRO) expends a substantial portion of the budget to obtain specialized support from Federally Funded Research and Development Centers (FFRDCs). In May 2014, the NRO Office of Inspector General (OIG) issued a report on the NRO's Management, Oversight, and Use of FFRDCs at a corporate level. The OIG found the NRO lacked a corporate process to acquire, manage, and oversee its FFRDCs. The OIG performed this audit to determine how the NRO manages its FFRDCs at a Directorate level. The OIG selected the Systems Engineering Directorate (SED) as it is a significant user of FFRDCs (⬚ per year), it uses the services of multiple FFRDCs, and the work performed within the SED has a direct impact on directorates across the NRO. **(b)(3)**

(U) The objective of the audit was to determine whether the SED properly (1) defined requirements, (2) awarded work to FFRDCs, and (3) oversaw the work performed. Specifically the audit evaluated whether the SED obtained the best value in meeting its mission requirements through the use of FFRDCs.

(U) What the OIG Found

(U//EOUO) The SED is not obtaining the best value in meeting its mission requirements through the use of FFRDCs. The issues identified in the prior audit, coupled with the SED's organizational challenges, and the lack of controls in the SED in awarding and overseeing FFRDCs, perpetuates an environment that focuses on budget execution rather than on the quality and value of the work performed.

(U//EOUO) To illustrate, in managing to budget execution, one FFRDC in particular, ⬚
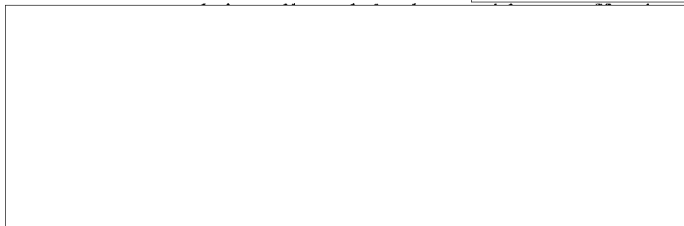
- (U) proposed additional work to the government;

- (U) performed work outside of its prescribed charter; and
- (U) worked on tasks better suited for Systems Engineering and Technical Assistance contractors.

(U//EOUO) Overall, the SED is not sufficiently defining and prioritizing its FFRDC requirements. It does not have an effective decision-making process for awarding work to its FFRDCs, and it does not have insight into the detailed hours and costs charged by the FFRDCs. This limits management's ability to assess the reasonableness of the work performed.

(U) What the OIG Recommends

(U//EOUO) The OIG recommends that the Director, SED,

- identify and provide training on the variation, selection and use of FFRDCs with focus on awareness of FFRDC's core mission and capability, thereby aligning its identified FFRDC needs to the specific skillset of the respective FFRDCs; and
- establish a process to review its budget and resource allocation, and to prioritize FFRDC requirements. This process should include periodic reviews to
  - o assess the tasks performed and the related budget expended,
  - o verify that future tasks continue to support the SED mission priorities, and
  - o assess the organizational placement of FFRDCs within the SED.

(U) Management Comments

(U) The Director, SED reviewed a draft of this report and concurred with the findings and recommendations presented. The Director, SED comments and plans meet **(b)(4)** the intent of the recommendations. As part of our **(b)(4)** follow-up process, we will monitor the status of the corrective action plans through full implementation. Complete copies of the management comments can be found in Appendix B.

Project Number 2014-007 A

22 December 2014

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(U) TABLE OF CONTENTS

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(U) NATIONAL RECONNAISSANCE OFFICE
OFFICE OF INSPECTOR GENERAL

(U) Audit of the Use of Federally Funded Research and Development Centers in the Systems Engineering Directorate
(Project Number 2014-007 A)

(U) <u>INTRODUCTION</u>

(U//FOUO) The National Reconnaissance Office (NRO) Office of Inspector General (OIG) conducted this audit to determine how directorates use Federally Funded Research and Development Centers (FFRDCs). The OIG selected the Systems Engineering Directorate (SED) as it is both a significant user of FFRDCs (over [   ] per year), and it employs the services of multiple FFRDCs—[   ] The objective of the audit was to determine whether the SED properly (1) defined requirements, (2) awarded work to FFRDCs, and (3) oversaw the work performed. Specifically the audit evaluated whether the SED obtained the best value in meeting its mission requirements through the use of FFRDCs. (b)(3) (b)(3) (b)(3)

(U) In Fiscal Year (FY) 2013, the OIG conducted an audit of the *NRO Management, Oversight, and Use of Federally Funded Research and Development Centers*. During the survey phase of this audit, the OIG identified a broad range of FFRDC usage (See Prior Audit Coverage in Appendix C). As a result, the OIG recognized the need for a multi-phased approach to auditing the management, oversight, and use of FFRDCs in the NRO. The initial audit focused on oversight of FFRDCs at the corporate level. This audit assessed the management, oversight, and use of FFRDCs at the directorate level.

(U) <u>BACKGROUND</u>

(U) **The Intended Purpose of FFRDCs**. The United States government sponsors and funds FFRDCs to meet specific long-term technical needs not available from industry. The Federal Acquisition Regulation (FAR) states that these unique entities are to operate in the public interest with objectivity and independence. The purported advantage of a long-term FFRDC relationship includes the government obtaining core competencies in domains such as analysis, engineering, acquisition support, and research and development.

(U) FAR Part 35.017, "Federally Funded Research and Development Centers," establishes the policy for the establishment, use, review, and termination of FFRDCs and related sponsoring agreements. Each FFRDC has a sponsoring agency that manages, administers, monitors, funds, and is responsible for the overall use of an FFRDC across multiple federal agencies. Per the FAR guidance, "All work placed with the FFRDC must be within the purpose, mission, general scope of effort, or special competency of the FFRDC."

(U) **NRO use of FFRDCs.** The NRO is not a sponsor of any FFRDCs. The NRO sends its FFRDC requirements and related funds to each of the respective FFRDC sponsors for approval and coordination through an Economy Act order. FAR part 17.5, "The Economy Act," authorizes agencies to enter into mutual agreements to obtain supplies or services from another

agency. The objective of the Economy Act is to enable one agency to leverage another agency's experience and expertise. It is not to be used to redirect funds or work and avoid legislative restrictions. The NRO also must determine that it cannot obtain the goods or services "as conveniently or cheaply" from a private contractor.

(U) In recent years, due to Congressional concerns over the high level of FFRDC support provided within the Intelligence Community, Congress established FFRDC funding and Staff Year or Technical Effort (STE) ceilings.[1] To comply with these ceilings, the NRO's Business, Plans and Operations, Resource Management (BPO/RM) issues FFRDC guidance to the Directorates and Offices (Ds and Os). The BPO/RM manages budgetary ceilings, reviews execution rates, and manages all funding on behalf of the NRO.

(U//FOUO) **The SED Workforce.** The SED provides enterprise system integration and architecture systems engineering activities in support of the NRO mission. The Director, SED (D/SED)   (b)(3)

Chart 1 below shows the current SED organizational structure.

(U) Chart 1: The SED Organization Chart

(b)(3)

| D/SED |
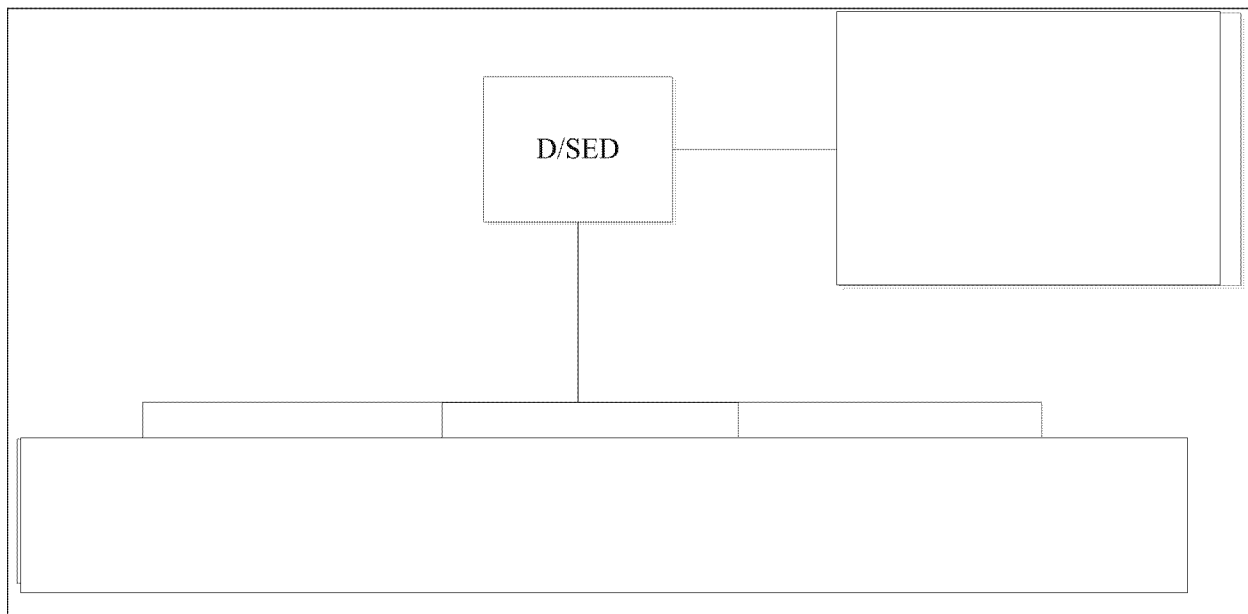
(b)(3)

This Chart is Unclassified

(U) **SED Organizational Challenges.** The SED has undergone significant changes over the last five years, and it continues to deal with a changing environment. Specifically,

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[1] (U) The Office of the Under Secretary of Defense for Acquisition, Technology and Logistics defines the standard STE work year as 1,810 hours of paid effort for technical services.

- *A Changing Organizational Structure* – the SED has had six significant reorganizations since its inception in 2009.

- *Instability at the Top* – the SED has an Acting Director and Acting Deputy Director since December 2013 (at the start of the audit, there were nine individuals in acting management positions in the SED). Further, on 11 August 2014, the Director, NRO appointed a new acting D/SED.

- *Rotational Government Workforce* - 34 percent of the SED government employees have tour end dates by 30 September 2015. Additionally, 50 percent of the government individuals interviewed had been with SED three years or less.

(U) In April 2014, [   ] assessment of the SED to the Deputy   **(b)(3)**
Director of the NRO. This assessment highlighted several significant issues with the SED
requirements processes and office accountabilities. [   ] assessment concluded that the   **(b)(3)**
SED created confusion in the other Ds and Os with competing sets of requirements. Specifically
the assessment highlighted that

- the SED is unable to achieve consensus on requirements, nomenclature, requirements development, documentation, strategies, and methodologies, requirements management tools usage and schemas, and related architecture artifacts.

- there is no agreement on what "systems" are at the system level that need requirements.

- requirements development at the system level is being repeated with differing outcomes.

- function–level requirements for systems and capabilities are being developed prior to the delivery of approved system level requirements, and after acquisition **(b)(1)**
offices have begun development of these systems and capabilities. **(b)(3)**

(S//TK//REL) **The SED Budget.** SED's fiscal year (FY) 2013 budget was [   ]
[   ] through Systems Engineering and
Technical Assistance (SETA) and FFRDC support.[2] The SED obtains SETA support through
the [   ] contracts ([   ] full time equivalents in FY 2013).[3] The SED   **(b)(3)**
also acquires FFRDC support from [   ] comprises   **(b)(3)**
[ ] percent ([   ] STE in FY 2013). Figure 1 below illustrates the allocation of major SED
workforce resources.

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[2] (U) SETAs and FFRDCs both provide system engineering support to the government. FFRDCs are precluded from performing any work that industry (i.e., SETAs) can perform as effectively. However, FFRDCs may be used if the requirements meet one of eleven specific criteria. These criteria include the need for a freedom from bias due to predilection for a particular approach or outcome; the need to protect industry proprietary information from competitors; and the need to provide continuity of effort on long duration programs.

[3] (U) [   ] supports the [   ][   ] supports [   ] within SED.   **(b)(3)**

(U) Figure 1: The SED Workforce Allocation

(b)(3))(3)

This Figure is Unclassified//FOUO

(U) The SED FFRDC Usage.

[   ] provides independent technical and scientific research, (b)(3)
development, and advisory services to national security space programs. [   ] performs (b)(3)

[   ] (b)(3)

[   ] everage its broad involvement across the Department of Defense (DoD) (b)(3)
programs and supports technology activities. (b)(3)

(U//FOUO) Use by the SED: [   ] for all aspects of
its mission. [   ] SED Offices
[   ]

Supporting this management structure are [   ] technical staff and on-site (b)(3)
administrative support. [   ] (b)(3)
[   ] to support the SED taskings. (b)(3)

(U//FOUO) In addition, [   ] provides '[   ]' to the SED. [   ] are (b)(3)
additional STEs that provide support to tasks related to the overall space program architecture
and applications of engineering disciplines that cut across multiple programs.

[   ] provides broad and deep technical support for the acquisition and (b)(3)
employment of mission information capabilities across the DoD, Intelligence Community, and
its partners in the national security mission. It also performs general systems engineering and
integration, ensuring that complex systems meet operational needs. [   ] competencies (b)(3)
[   ] (b)(3)

4

(U//~~FOUO~~) Use by the SED: The SED uses [   ] or specific research projects and   (b)(3)
reports at the lowest working levels within the Directorate. [   ] has limited interaction with   (b)(3)
SED senior management.

(U) [   ] provides technical innovation and leadership through research and   (b)(3)
development to advance the practice of software engineering and technology in support of DoD
needs. [   ] specializes in [   ] and practices and has core   (b)(3)
competencies in the areas of [   ]   (b)(3)
[   ]   (b)(3)

(U//~~FOUO~~) Use by the SED: The SED has [   ] to assist with the   (b)(3)
corporate standards program from a requirements management perspective. [   ]
[   ] to the lower working level within the [   ]

(U) SCOPE AND METHODOLOGY

(U//~~FOUO~~) The audit scope included all FY 2013 and FY 2014 SED FFRDC taskings
performed by [   ] The OIG conducted this performance audit from   (b)(3)
February 2014 through August 2014 in accordance with generally accepted government auditing
standards. Those standards require that the OIG plan and perform the audit to obtain sufficient
appropriate evidence to provide a reasonable basis for the findings and conclusions based on the
audit objectives. The OIG assessed the internal controls significant within the context of the
audit objectives. The OIG believes that the evidence obtained provides a reasonable basis for the
findings and conclusions based on the audit objective.

(U//~~FOUO~~) The OIG reviewed relevant laws and regulations, as well as DoD and NRO
guidance, policies, and procedures. The OIG reviewed project work statements (PWSs) for
[   ] and Technical Objectives and Plans (TO&Ps) [   ] and compared this   (b)(3)
documentation to the core mission of each of the FFRDCs, as documented in their respective
agency sponsoring agreements. The OIG assessed the appropriateness of the actual taskings by
comparing the task description (which was provided by government, FFRDC, and SETA
officials during interviews or documented in various status documents) to the initial tasking
documents (PWSs and TO&Ps). The OIG also reviewed all related monthly budget execution
reports and status updates.

(U) The OIG conducted interviews with [   ] government, FFRDC, and SETA personnel to   (b)(3)
gain an understanding of both the process of assigning work and the type of tasks performed by
the FFRDCs.[4] In addition, the OIG interviewed [   ] SED government officials to determine
whether they demonstrated awareness and familiarity with the FFRDC workload necessary to

[   ]   (b)(4)
[   ]   (b)(3)

provide adequate oversight. Finally, to corroborate information obtained during the interviews, the OIG

- reviewed FY 2013 hours charged to the SED [   ]   (b)(3)

- performed a five-year trending analysis [   ] on annual   (b)(3)
  workload; and

- reviewed the Weekly Activity Reports and Project Management Reports (PMRs)
  prepared [   ] for FY 2013 and FY 2014.   (b)(3)

6

(U) AUDIT RESULTS

(U//FOUO) The OIG's prior audit findings (See Prior Audit Coverage in Appendix C) coupled with SED's organizational challenges, impede the SED's ability to obtain best value through the use of its FFRDCs. The OIG also found that the SED needs to strengthen controls over its FFRDCs as the SED does not properly identify its FFRDC requirements and assign the tasks to the appropriate party. Further, the SED lacks insight into the detailed hours and costs charged by the FFRDC which limits management's ability to oversee and assess the reasonableness of the work performed. As a result, the current SED control environment allows FFRDCs to manage to budget execution rates instead of focusing on SED priorities. This has perpetuated an environment permitting an FFRDC to

- propose its own work;

- work on tasks better suited for Systems Engineering and Technical Assistance (SETA) contractors;

- act in a Government Point of Contact (GPOC) role;

- perform work outside of its prescribed charter; and

- increase hours toward the end of the fiscal year using   (b)(4)

(U//EOUO) Finding 1: The SED does not have a requirements process that (a) adequately defines FFRDC requirements, (b) ensures selection of the most appropriate FFRDC, and (c) oversees FFRDC compliance with set requirements.

(U//EOUO) The SED is not providing sufficient direction to define and award the work of the FFRDCs. Further, the SED lacks insight into hours and costs charged by the FFRDC which limits management's ability to adequately oversee the work performed. The OIG found that the SED has an overreliance on FFRDCs. As a result, FFRDCs often help draft task requirements, propose additional work, and perform work better suited for a SETA or other FFRDC thereby maximizing the expenditure of funds available.

1. (U) **Defining the FFRDC Requirements**

(U//EOUO) The SED is not consistent in defining and prioritizing FFRDC requirements. The OIG found the SED documentation of FFRDC requirements focused on the non-specific high-level requirements necessary to address sponsor requirements and budget drills. The implementation and oversight of specific SED FFRDC tasks were accomplished essentially through an informal undocumented process.

(U//EOUO) Formal Requirements. The FFRDC requirements processes followed by the SED do not identify the specific tasks that FFRDCs are expected to perform or the anticipated level of effort to perform those tasks. FFRDC requirements are broadly written to FFRDC capabilities rather than to meet specific technical needs of the SED. This is due in part to the fact that the NRO does not directly contract with its FFRDCs. As a result, the NRO must restrict disclosure of FFRDC tasking requirements at the unclassified level to the sponsor. This tends to limit the documentation's value in meeting SED's management's need to administer FFRDC support. The OIG found that the documented FFRDC needs were similar from year to year. Notably, the documented FFRDC requirements [   ] s well as a majority of those for [   ] unchanged 2013 compared to 2014. These requirements documents are drafted by the FFRDCs for approval by the government.   (b)(3)
                                                                                                              (b)(3)

(U) Informal Management of Specific Tasks. The OIG found the SED generally manages the actual specific tasking requirements, level of effort, and status of execution of tasks [   ]   (b)(3)
[   ] The SED was unable to provide detailed documentation to support specific FFRDC tasks beyond the limited documentation provided to the sponsors. Having been principally developed to satisfy budget exercises, the documentation provided lacked detailed FFRDC requirements or task execution milestones. Emphasis was on expenditure rather than attention to support to mission.

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[5] (U) In January 2014, [   ] which can better enable the SED to manage the   (b)(3)
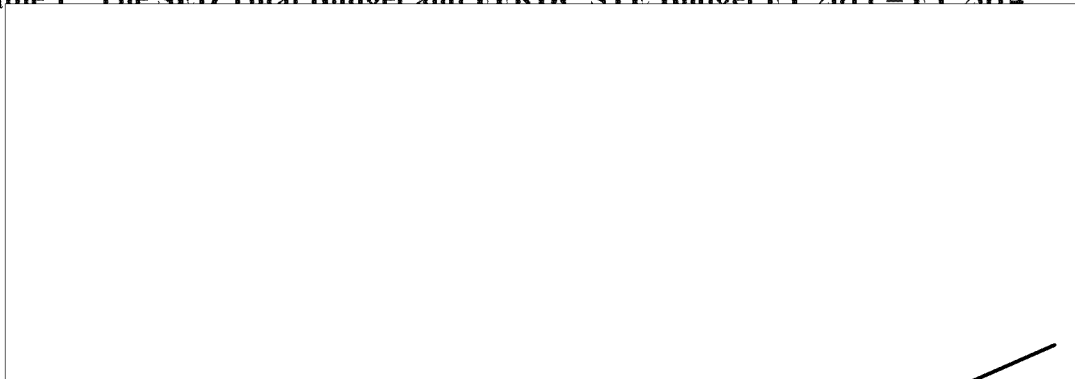detailed tasks, the status of these tasks, and the resources expended.

2. (U) **Appropriate Assignment of the Work**

(U//FOUO) This audit validated the OIG's prior audit findings (2013-003A *NRO's Management, Oversight, and Use of Federally Funded Research and Development Centers* – see Prior Audit Coverage in Appendix C) which illustrated the NRO's unfamiliarity with the rules for using FFRDCs and their respective specialties and highlighted a risk of overreliance on the incumbents. The OIG found the SED's organizational placement of FFRDCs coupled with the rotational SED workforce stressed the need for training on the use and unique core competencies of the FFRDCs.

(U//FOUO) Organizational Placement of FFRDCs. The organizational placement of FFRDCs within SED may impact decisions on awarding work to FFRDCs. The OIG found that the SED senior management has very little insight into specific _____ askings. _____ within the SED organization. This is in stark contrast _____ and _____ SED management chain. Correspondingly, _____ receives _____ FFRDC budget within the SED regardless of changing budget, tasks, and mission focus. Additionally, as highlighted in Table 1 below, despite _____ its staffing levels.

(b)(3)
(b)(3)
(b)(3)

(U) Table 1: The SED Total Budget and FFRDC STE Budget FY 2011 – FY 2014

(b)(1)
(b)(3)

(U//FOUO) Rotational SED Workforce. The SED has experienced six significant reorganizations since its inception in 2009. At the time of this OIG audit, _____

(b)(3)

Several SED government employees, with responsibility for assigning and supervising the work of the FFRDCs, expressed unfamiliarity with certain FFRDCs capabilities (particularly with respect to _____, and with the differences in the use of an FFRDC and a SETA. According to those interviewed, many of the employees received their only information on how to use an FFRDC from the FFRDCs themselves, and there was little discussion, if any, about the skillset and core mission of the respective FFRDCs.

(b)(3)

(U//FOUO) The OIG identified a number of tasks performed by the FFRDCs that did not correlate with the core competencies the FFRDC used. Interviews revealed that for many of the tasks, the SED program officials used the most immediately available support, irrespective of the purpose, mission, or general scope of the required task.

(U//FOUO) Example: FFRDCs Performing Work Better Suited for a SETA

(U//FOUO) FFRDCs were assigned to work jointly on projects with the SETA due solely to staffing shortages, and not due to the specialized skills or independent role that an FFRDC can provide. There were several instances where the FFRDCs were drafting concepts of operations and writing both system requirements and the policies for the organization. Per FAR 35.017, an FFRDC may be used to meet some special long-term research or development need that cannot be met as effectively by existing government or contractor resources. They are not intended to be used for tasks interchangeably with SETAs.

(U//FOUO) Example: FFRDCs acting in a GPOC role

(U//FOUO) The SED had FFRDC personnel act in roles beyond their prescribed use. For example, [REDACTED] activities within [REDACTED] and acted in what the government described as a "GPOC lead role" for approximately six months. **(b)(3)(3)**

(U//FOUO) [REDACTED] characterized their role as technical lead vice GPOC. They indicated that they performed day-to-day activities, but they were not the decision-makers, nor did they direct contract employees. [REDACTED] senior official stated that, while he believes his people know the difference between a GPOC and technical lead, the government does not. *The government has a job that needs to be done, and will select a good person to do it, regardless of whether it is a SETA,* [REDACTED] **(b)(3)** **(b)(3)** **(b)(3)**

(U//FOUO) SETA contractors maintained that [REDACTED] did direct contract employees. However, when this occurred, the SETAs intervened and/or took the issue to senior SED management, who resolved the issue. Although the SED appeared to resolve the issues, one interviewee stated that *we are probably walking a very fine line concerning* [REDACTED] *leading government efforts.* **(b)(3)** **(b)(3)**

(U//FOUO) According to the [REDACTED] User's Guide,[6] [REDACTED] should not perform routine technical or management tasks that could be considered personal services, such as those described above. This use diverts resources that should be devoted to priority technical tasks. Further, [REDACTED] are prohibited from directing government contractors in any manner. **(b)(3)** **(b)(3)** **(b)(3)**

(U//FOUO) Although the [REDACTED] User's Guide states [REDACTED] can establish, operate, participate, and when appropriate, lead working groups, Integrated Product Teams (IPTs), and Independent Review Teams (IRTs), this does not appear to be how the government used [REDACTED] in the examples above. Rather, it appeared that the government asked [REDACTED] to fill a GPOC lead role, due to a lack in government resources. **(b)(3))** **(b)(3)** **(b)(3)**

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[6] (U) The [REDACTED] is the sponsoring agreement between the [REDACTED] for the operation of the FFRDC. The NRO obtains [REDACTED] services through this agreement. **(b)(3)** **(b)(3)**

(U//FOUO) The OIG found several other instances [   ] performing tasks that are outside of the intended areas of use of an FFRDC. These included [   ] writing requirements that are better suited for SETA support; drafting meeting minutes despite having cheaper support contractors available to do the task; and researching for external training providers for an Information Technology certification. While individually these tasks did not involve a significant level of effort, collectively they add up, possibly warranting additional oversight.

(b)(3)

(b)(3)

(U//FOUO) According to the FAR, FFRDCs should not perform the work that the for-profit companies can perform. Since FFRDC system engineering typically costs [   ] comparable for-profit companies' costs,[7] the SED needs to ensure that the directorate has the right mix and selection of FFRDCs and SETAs. The SED should align its defined requirements for FFRDC with the core competencies of each of the respective FFRDCs or SETAs. [   ] ground systems and software. As a result, the OIG would expect a shift toward the broad and deep technical support and software engineering capabilities of [   ] However, the OIG found a continued desire to maintain the incumbent FFRDC even though it may not be as strong in the competencies needed to support ground systems and software engineering.

(b)(3)

(b)(3)

(U//FOUO) The SED must place greater emphasis on pairing its FFRDC requirements to the specific skillset of the FFRDC. This lack of a stable SED government workforce can contribute to confusion and indecision. It also diminishes the corporate knowledge of the staff and fosters greater reliance on FFRDC's and SETA support and advice, which makes training and refresher training regarding the rules for using FFRDCs and their respective specialties an important part of managing and overseeing FFRDCs.

> **(U) Recommendation #1 for the Director, SED:**
> (U//FOUO) The OIG recommends that the SED identify and provide training on the variation, selection and use of FFRDCs with focus on awareness of FFRDCs' core mission and capability, thereby aligning its identified FFRDC needs to the specific skillset of the respective FFRDCs.

(U) Management Response: The Director, SED concurred with this recommendation. A representative from the NRO Acquisition Center of Excellence will conduct a training session with SED personnel. A complete copy of the management comments is included in Appendix B.

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[7] (U) Professional Services Council, *Time for Competition: Billions in Sole-Source Awards to FFRDCs Impose Tremendous Costs on the Taxpayer* (June 2014)

3. (U) The SED Oversight of FFRDCs

(U//FOUO) The OIG found the SED does not have insight into the detailed hours and costs charged by the FFRDC, which limits management's ability to assess the reasonableness of charges for the work performed. This fosters an environment that maximizes the expenditure of funds without the support of a relevant need.

(U//FOUO) Lack of Insight into Detailed Hours and Costs. The SED has no visibility into the detailed costs incurred. The SED does not oversee the process in the aggregate (from requirements identification through invoicing of work performed). Since the NRO does not directly contract with FFRDCs, it does not receive invoices for work performed. Rather, the

(b)(3)

(U//FOUO) Similarly, the individual offices that provide direct oversight [ ] work have limited insight into STE and costs charged. [ ] Contracting Officer Technical Representative (COTR) position [ ] which creates a challenge with respect to oversight [ ] within the SED. In addition, within a two-year period, the role [ ] was transitioned four times. As a result, the COTR's ability to maintain the level of knowledge and experience needed to provide adequate oversight was problematic. For example, all users, including the SED, pay an acquisition fee of approximately [ ] the contract owner. At the time of the audit, [ ] having been recently assigned, had no awareness of the administrative fee or the basis.

(b)(3)
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(U//FOUO) The SED lacks sufficient information to reconcile the costs billed for the tasks performed by FFRDCs with expenses in the NRO Financial Information System (NFIS). The OIG ascertained that more detailed accounting of the hours charged are obtainable directly from the FFRDCs; however, the SED does not receive or request that information. The SED instead [ ] to oversee FFRDC performance.

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(U//FOUO) The lack of adequate SED oversight of FFRDC performance increases the risk that the SED is not receiving the services of the type or level necessary to meet requirements. This may include individuals lacking the requisite skillset, the performance of tasks that do not align with the SED priorities and expectations, or FFRDCs are working on tasks that are not within the special competency of that FFRDC.

(U//FOUO) Maximizing the Expenditure of Funds. The information from the OIG interviews, along with a review of the hours charged revealed that FFRDCs routinely increased hours worked timed to align with quarterly and year-end funds expenditure reviews. For example, the OIG noted that nearing the close of reporting periods, [ ]

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However, in discussions with OIG, the SED could not identify a corresponding need to warrant the periodic surge in hours executed.

(U//~~FOUO~~) Interviews with the SED government [ ] employees confirmed a major emphasis on STE execution rates. Both groups indicated that once the NRO approves the overall funding level, the SED relies [ ] to manage its resources to the established funding ceiling [ ] manages the budget execution tightly. For example, [ ]

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Overall, the OIG found examples wher [ ] directed their employees to work a targeted number of overtime hours without approval or effective oversight by the SED.

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(U//~~FOUO~~) A five-year analysis of [ ] STE execution rates against the budget (Table 2) demonstrates the high degree of precision in measuring [ ] execution against budget. In meeting execution rates in FY 2013, [ ] (Table 3) allotted hours across [ ] individuals. Only [ ] (approximate) of the [ ] individuals were full time SED STE employees. In addition, [ ] individuals were not located at NRO headquarters and out of the direct oversight of SED.

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(U) Table 2: Percent of STE Execution against STE Budget				
2009	2010	2011	2012	2013

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This table is Unclassified//FOUO

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(U) Table 3: FY 2013 [ ] STE hours for the SED

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Aerospace FY 2013	SED Direct	SED Allocables	SED Total
Budgeted Hours			
Actual			
(over)/under execution			
% funding executed			

*(U) Calculated using [ ]

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The OIG assessment of activity noted a disproportionate increase in the number of hours [ ] charged for services in the last two months of the year. Specifically,

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- [ ] hours for [ ] (41 percent in final 8 weeks)
- [ ] hours of [ ] support (37 percent in final 8 weeks)   (b)(4)
- [ ] hours for [ ] (100 percent in final 8 weeks)

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(U//FOUO) The OIG interviewed the SED government, [ ] nd SETA staffs to obtain an understanding of the tasks performed and the need for the escalation in hours. Interviewees consistently stated that the overall workload for the year was stable, with occasional surges needed for individual efforts based on their specific task, but no broad need for a year-end surge.
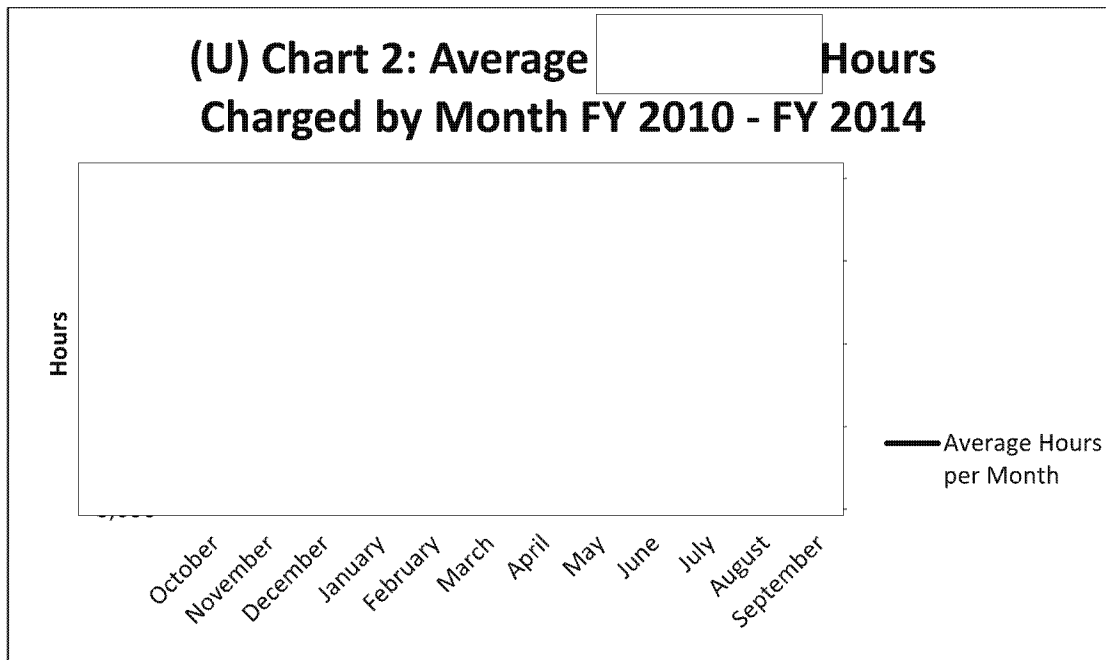
(U) Finally, to determine whether the ramp up in hours toward the end of the FY 2013 was an anomaly, the OIG performed a four-year trending analysis of average monthly hours [ ] charged to SED. As shown in Chart 2, the results of the analysis indicate a consistent spike in hours at quarter ends, with the most significant jump occurring at year end. These spikes coincide with the timing of the major execution metrics review and fiscal year run out.

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and based on the OIG interviews and review of taskings and workload requirements, the expenditure increases are not driven by task milestones demands.

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(U) Chart 2: Average [____] Hours Charged by Month FY 2010 - FY 2014

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Hours

──── Average Hours per Month

October November December January February March April May June July August September

This Chart is Unclassified//FOUO

(U) Recommendation #2 for the Director, SED:
(U//FOUO) The OIG recommends that the SED establish a process to review its budget and resource allocation, and to prioritize FFRDC requirements. This process should include periodic reviews to
- evaluate the tasks performed and the related budget expended;
- verify that future tasks continue to support the SED mission priorities; and
- assess the organizational placement of FFRDCs within the SED.

(U) Management Response: The Director, SED concurred with this recommendation. The Director, SED scheduled quarterly program management reviews to address the areas of concern. The first program management review was held with [_____] in October 2014. A complete copy of the management comments is included in Appendix B.

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(U) CONCLUSION

(U//FOUO) Throughout the performance of this audit, the OIG found the SED did not have adequate controls to identify requirements, assign tasks, and oversee the work performed by its FFRDCs. Management of FFRDCs is limited to review and acceptance of funding execution as support of task performance rather than identifying and assigning tasks based on the SED priorities. As a result, the SED needs to improve controls to manage the priorities of the SED efforts and to maximize the return on investment. As emphasized in the background of this report, the recurrent SED organizational changes over the past several years have been further hindered the management and execution of the SED mission. Currently, SED management is taking steps to increase the stability and direction of its organization, including enhancing the oversight controls over FFRDCs.

(U//FOUO) FFRDCs play a critical role in the SED, and in the NRO as a whole, as they are the organization's independent, objective, long-term organizational knowledge base. Therefore, it is essential to maintain adequate oversight over these "trusted advisors." The establishing and maintaining of sound controls that ensure regular, thorough, and objective assessments of the scope and breadth of all FFRDC activities is vital to achievement of mission success.

(U) APPENDIX A: SUMMARY OF AUDIT RECOMMENDATIONS

(U) Recommendation #1 for the Director, SED:
(U//FOUO) The OIG recommends that the SED identify and provide training on the variation, selection and use of FFRDCs with focus on awareness of FFRDC's core mission and capability, thereby aligning its identified FFRDC needs to the specific skillset of the respective FFRDCs.

(U) Recommendation #2 for the Director, SED:
(U//FOUO) The OIG recommends that the SED establish a process to review its budget and resource allocation, and to prioritize FFRDC requirements. This process should include periodic reviews to
- evaluate the tasks performed and the related budget expended;
- verify that future tasks continue to support the SED mission priorities; and
- assess the organizational placement of FFRDCs within the SED.

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(U) APPENDIX B: MANAGEMENT COMMENTS
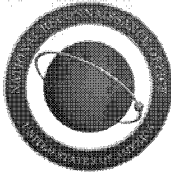
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NATIONAL RECONNAISSANCE OFFICE
14675 Lee Road
Chantilly, VA 20151-1715

17 December 2014

MEMORANDUM FOR INSPECTOR GENERAL

SUBJECT: (U//FOUO) Draft Report: Audit of the Use of Federally
Funded Research and Development Centers in the
Systems Engineering Directorate (Project Number
2014-007 A)

(U) Thank you for the opportunity to review the subject draft
report. I reviewed the recommendations contained in the subject
report and concur with the findings and recommendations. This
memorandum addresses the status of the implementation plans for each
of the two recommendations in the subject report.

(U//FOUO) **Recommendation #1 for the Director, Systems Engineering
Directorate (SED): The Office of Inspector General (OIG) recommends
that SED identify and provide training on the variation, selection,
and use of Federally Funded Research and Development Centers (FFRDC)
with focus on awareness of FFRDC's core mission and capability,
thereby aligning its identified FFRDC needs to the specific skillset
of the respective FFRDCs.**

(U) SED Chief Of Staff has contacted the National Reconnaissance
Office (NRO) Acquisition Center of Excellence (ACE) for training in
this area. ⬜⬜⬜⬜⬜⬜⬜⬜⬜⬜ NRO ACE, will conduct a training
session with SED government personnel on 5 January 2015 at 1400 in the
ACE auditorium.   (b)(3)

(U//FOUO) **Recommendation #2 for the Director, SED: The OIG
recommends that the SED establish a process to review its budget and
resource allocation and to prioritize FFRDC requirements. This
process should include periodic reviews to:**

-      **Evaluate the tasks performed and the related budget expended;**

-      **Verify that future tasks continue to support the SED mission
priorities; and**

-      **Assess the organizational placement of FFRDCs within the SED.**

CL BY: ⬜⬜⬜⬜⬜⬜
DECL ON: 25X1, 20391217   (b)(3)
DRV FM: INCG 1.0, 13 February 2012

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UNCLASSIFIED//FOUO

SUBJECT: (U//FOUO) Draft Report: Audit of the Use of Federally
          Funded Research and Development Centers in the
          Systems Engineering Directorate (Project Number
          2014-007 A)

     (U) I have already scheduled quarterly program management reviews
with [REDACTED] and completed the initial program
management reviews of [REDACTED] in October 2014.

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                              Acting Director, Systems
                              Engineering Directorate

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(U) APPENDIX C: PRIOR AUDIT COVERAGE

(U//FOUO) In May 2014, the National Reconnaissance Office (NRO) Office of Inspector General (OIG) issued an audit report on the *NRO's Management, Oversight, and Use of Federally Funded Research and Development Centers* (FFRDCs) at a corporate level.[11] The OIG found the NRO lacked an overall governance framework to acquire, oversee, and account for FFRDC support. Specifically, the OIG found the NRO did not have

- an FFRDC requirements process that (a) ensures the requirement demands the work of an FFRDC, (b) selects the most appropriate FFRDC; and (c) assesses requirements at the corporate level;
- a process for appropriately overseeing its FFRDCs; and
- a complete accounting and reporting of its FFRDCs.

(U//FOUO) The OIG concluded the NRO's lack of a corporate process limits the NRO's ability to effectively identify, manage, and oversee the more than [   ] spent annually on FFRDCs. The OIG developed six recommendations to provide the NRO with process and oversight controls to ensure the NRO obtains best value for its money.

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(U) The OIG recommended the following:

1. (U//FOUO) Director, NRO establish a government official accountable for ensuring that the NRO selects the appropriate FFRDC for the requirement and oversees the prioritization of FFRDC requirements and funding at a corporate level.
2. (U//FOUO) The NRO develop a requirements evaluation process that determines whether the work requires an FFRDC or should be competed.
3. (U//FOUO) The NRO develop training to ensure acquisition officials and program managers know how to properly identify, acquire, and use FFRDCs.
4. (U//FOUO) The NRO develop and implement oversight controls to provide assurance that the FFRDC performed the tasks assigned and properly billed the NRO for the work performed.
5. (U//FOUO) The NRO consider directly contracting with its FFRDCs to provide more insight into and control over the services performed and costs charged.
6. (U//FOUO) The Director Business Plans and Operations, Resource Management, in coordination with Congress, the Office of the Director of National Intelligence, and the Department of Defense (DoD), confirm and document accounting and reporting requirements for Non-DoD sponsored FFRDCs, launch, and other related FFRDC costs.

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[11] (U) Project Number 2013-003A

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(U) APPENDIX D: MAJOR CONTRIBUTORS TO THE REPORT

☐		NRO/OIG Assistant Inspector General for Audits
☐		NRO/OIG Deputy Assistant Inspector General for Financial Management Audits
☐	(b)(3)	NRO/OIG Auditor in Charge
☐		NRO/OIG Auditor
☐		NRO/OIG Auditor
☐		Quality Assurance Reviewer