National Archives and Records Administration

Date : January 6, 2009

Reply to
Attn of : Office of Inspector General (OIG)

Subject : Advisory Report No. 09-03, OIG Monitoring of the Electronic Records Archives Program Status

To: Adrienne Thomas, Acting Archivist of the United States (N)

The purpose of this report is to advise you of the current status of the "Base" Electronic Records Archives (ERA) Program. We continue in our effort to evaluate and report on government and contractor efforts associated with developing the Electronic Records Archives. This initiative focuses upon assessing whether (a) the ERA Program is meeting cost and schedule requirements, and (b) management is taking timely action to correct any actual or potential problems with program performance. Periodically, we will provide you with reports on program status as warranted.

As of the end of fiscal year (FY) 2008, internal National Archives and Records Administration (NARA) documentation reflected that the ERA Program was progressing in a satisfactory manner. That is, development of the ERA System was progressing in accordance with the program's rebaselined[1] cost and schedule objectives. However, in our opinion, because of previous funding issues and schedule delays, it is likely that the ERA System will not achieve Full Operating Capability (FOC) as originally envisioned, i.e., the ERA will not have all the desired functionality when the development contract with the Lockheed Martin Corporation ends in March 2012. As a result, additional funding will be needed to complete the program. To date, program officials are unable to clearly define when, or if, the ERA may be fully operational. The nomenclature "FOC," initially derived from the Department of Defense, is traditionally defined as when a deliverable is available that is capable of fully accomplishing the mission or criteria for which it was developed. For example, a runway under construction would reach FOC when the aircraft for which it was designed are able to land and receive required ground support.

When asked if NARA was still shooting for a March 2012 FOC for the system, the ERA Executive Officer stated, "…technically, FOC is achieved when every one of ERA's Requirements Document (RD) requirements are met in the system. However, since the RD only addresses the requirements at the high level and since the ERA System by definition will need to be changing to accommodate new record types, data types, ingestion, and deployment requirements even within its own lifecycle, the determination of FOC is more tied to contracts and budgets than to actual performance." He further stated that, "Over the next few months

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[1] *Rebaselining* is a formal reprogramming that results in changes to the program's scope, schedule, budget, or all three. It should never be done to eliminate variances for the sake of "starting over" unless the baseline is so unrealistic that retaining the variances would forever skew performance data so much as to be unusable.

NARA will be looking at the acquisition to determine whether the date should be changed, which would entail extending the contract period, or whether requirements should be adjusted." Thus, the OIG lacks assurance that FOC as traditionally defined will be met by the target date communicated to internal and external stakeholders.

Another senior ERA Program official, assigned to the Program Support Division (NHEP), told us that everyone agrees that the ERA Program will not achieve FOC by 2012. Most likely, it will be necessary to extend the period of contract performance or to award a new, follow-on contract to complete the program. Program officials, both government and contractor, are currently revising the ERA program requirements and schedule. The program has been proceeding with the old schedule because, recently, the emphasis has been on developing the EOP System. According to that official, the NARA Deputy Program Director was working this issue.

The OIG's ongoing monitoring effort consists mainly of reviewing applicable program documentation, including the: (a) Cost Performance Reports, (b) Contract Funds Status Reports, (c) Monthly Status Reports, and (d) Earned Value Management System Reports. Additionally, we continue to review the: (a) ERA contract (NAMA-04-C-0007) and other program contracts, (b) Program Management Plan, (c) ERA contract Cure Notice and NARA Response, (d) Test Plans and Reports, (e) Contract Work Breakdown Structure, and (f) Requirements Documents. We routinely attend ERA Program Status Briefings and the Combined Monthly Status Reviews.

Since 2001, NARA has been working to develop an Electronic Records Archives, the purpose of which is to preserve and provide access to massive volumes of all types and formats of electronic records, including Presidential records. The ERA, a major information system, is being designed to store and manage NARA's electronic records and to manage the lifecycle of paper records and other holdings. It will manage the entire lifecycle of temporary and permanent electronic records from ingestion through preservation and dissemination to customers. The system must perform its functions free from dependence on any specific hardware or software.

In August 2004, NARA awarded two firm-fixed-price (FFP) contracts, totaling approximately $20 million, to the Harris Corporation and to the Lockheed Martin Corporation for the ERA system design phase. On September 30, 2005, NARA officials awarded a cost-plus-award-fee (CPAF) contract to the Lockheed Martin Corporation to develop the ERA in increments, the first of which was scheduled to be completed in September 2007.

Developmental effort is proceeding on two separate tracks: the ERA Base System and the Executive Office of the President (EOP) System. The Base ERA will provide basic electronic records management capability for NARA legacy data and records and for current transactions of other federal agencies. The EOP System will provide ingest, search, and retrieval capabilities for the records of the George W. Bush Administration. These records are scheduled to be transferred to NARA on January 20, 2009. The EOP System, estimated to cost $38.9 million, reportedly achieved Initial Operational Capability (IOC) on December 5, 2008. Other work on the ERA EOP during FY 2009 will focus on developing and deploying capabilities for ingesting and searching additional data types not included at IOC.

NARA's ERA Program Management Office (NHE) is managing the program, and the Transportation and Security Solutions Division of the Lockheed Martin Corporation is developing the ERA. Other program participants include: ALON, Inc., a program office support contractor; Northrup Grumman Corporation, Independent Verification and Validation (IV&V)[2] contractor; Defense Contract Management Agency (DCMA); and Defense Contract Audit Agency (DCAA). Hitachi Data Systems is the contractor providing the EOP[3] System.

Originally, the contractor was required to achieve IOC for the ERA System in September 2007, with completion of the second phase to follow in November 2007. However, in December 2006, a government analysis indicated a high probability of a delay in the completion of the ERA development, and in May 2007, Lockheed Martin officials confirmed a schedule delay and a cost overrun. As a result, NARA officials and Lockheed Martin Corporation officials negotiated an over-target baseline[4] for the Base ERA system development, eliminating all prior program cost and schedule variances. At this point, because of the schedule delays, (a) certain required capabilities were delayed until later increments, and (b) a portion of the ERA, called the EOP System, was split-off from the Base ERA to continue as a separate, parallel development effort.

As of September 30, 2008, NARA had expended $237.18 million on the ERA Program. The total life cycle cost for the program through 2011 is estimated to be $453 million. Program costs include the development contract with the Lockheed Martin Corporation, program management, research and development, and program office support.

As of October 24, 2008, the Cost Performance Report (CPR)[5] for the ERA development contract with the Lockheed Martin Corporation revealed that (a) contract effort was generally progressing satisfactorily in accordance with the schedule (Note: There was an unfavorable cumulative schedule variance of $1.047 million), while (b) contract cost performance was satisfactory, i.e., the actual cost of work performed by the contractor was $27,000 less than the amount budgeted for that work. At completion of contract effort in March 2012, the contractor estimates that total contract costs will be $341,000 less than the amount budgeted for the contract.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our

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[2] *Independent Verification and Validation* is the process of checking that a product, service, or system meets specifications and that it fulfils its intended purpose.
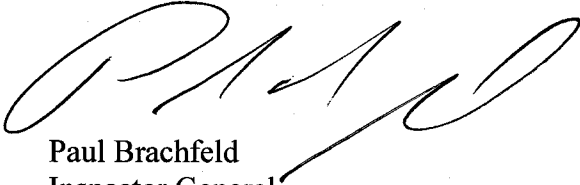
[3] Because of delays in the rollout of the ERA, a separate system for presidential records, known as the *Executive Office of the President* (EOP) system, was developed. The EOP system uses a different architecture from that of the ERA base. It is being built on a commercial product that is to provide the basic requirements for processing presidential electronic records, such as rapid ingestion of records and the ability to search content.

[4] An *over-target baseline* is the baseline which results from formal reprogramming resulting from a cost and/or schedule overrun

[5] The *Cost Performance Report (CPR)* consists of five formats containing data for measuring contractors' cost and schedule performance. CPR data is used by system managers to: (1) integrate cost and schedule performance data with technical performance measures, (2) identify the magnitude and impact of actual and potential problem areas causing significant cost and schedule variances, and (3) provide valid, timely program status information to higher management. The CPR is a management report that provides timely, reliable summary-level data with which to assess current and projected contract performance. The CPR's primary value to the Government is its ability to reflect current contract status and reasonably project future program performance.

audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

If you have any questions concerning the information presented in this Advisory Report, or there are other areas of the ERA Program that you would like for us to review, please do not hesitate to contact me.

Paul Brachfeld
Inspector General

cc: NH (M. Morphy)