ADVISORY COMMITTEE ON THE ELECTRONIC RECORDS ARCHIVES
MEETING NO. 5
NATIONAL ARCHIVES BUILDING

MINUTES
DAY 1 OF 2
NOVEMBER 28, 2007

In accordance with the provisions of Public Law 92-463, the meeting was open to the public from 9:00 a.m. to 5:00 p.m.

COMMITTEE MEMBERS

Name	Organization
Lewis Bellardo	National Archives and Records Administration
Laura E. Campbell	Library of Congress
David Carmichael	Georgia Archives
Sharon Dawes	Center for Technology in Government
Dr. Richard Fennell	Administrative Office of the U.S. Courts
Daniel Greenstein – **Not Present**	University of California
Dr. Christopher Greer	National Science Foundation
Jerry Handfield	Washington State Archives
Robert Horton – **Not present**	Minnesota Historical Society
Dr. Robert E. Kahn	Corp. for National Research Initiatives
Andy Maltz	Academy of Motion Picture Arts and Sciences
Richard Pearce-Moses – **Not Present**	Digital Government Information
John T. Phillips	Information Technology Decisions
Dr. Dan Reed - **Not Present**	University of North Carolina at Chapel Hill
Adrienne Reagins	National Archives and Records Administration
Jonathan M. Redgrave	Redgrave Daley Ragan & Wagner LLP
David Rencher	Federation of Genealogical Societies
James Neighbors	U.S. Air Force
Dr. Ken Thibodeau	National Archives and Records Administration
Allen Weinstein	National Archives and Records Administration
Dr. Kelly Woestman	Pittsburgh State University

Final ACERA Meeting Minutes, 11/28/07

The bi-annual ACERA Advisory Committee was brought to order by Dr. Robert Kahn, the Advisory Committee chairman, at 9:23 a.m.

Welcome Remarks – Allen Weinstein

Dr. Weinstein - This is the most important meeting thus far – given where we are. We are rolling forward in good ways and perhaps not so good ways.

Comments from the Chair – Dr. Robert Kahn

Dr. Kahn asked for any suggestions to the agenda. None were offered.

The chairman, Dr. Kahn, reviewed the agenda for the two day meeting. He mentioned that the Committee was scheduled to receive a few presentations. He also stated that the Committee would be provided an update from the Hill and on the overall progress of ERA. He hoped this meeting would generate ideas that will help the ERA Program Management Office (PMO) as it moves forward.

Dr. Kahn - There is still a funding shortfall and the Advisory Committee can help by observing the changes ERA is experiencing and, where possible, making suggestions on how to prioritize. The Committee can reflect on what is most important based on their experience in archiving and understanding of metadata.
Dr. Kahn noted that a presentation was planned on the Hitachi Content Archive Platform (HCAP) tool that allows rapid ingest and search. HCAP was now to be used by Lockheed Martin in its implementation of the ERA system. Dr. Kahn asked if there were other tools examined by NARA or Lockheed Martin before the HCAP tool was selected..

Dr. Thibodeau summarized Lockheed Martin's process for market analysis and added that Mr. Dyung Le, Director of Systems Engineering in the PMO. would discuss later with the group and identify those tools not considered. Andres Rodriguez, Chief Technology Officer of HDS, will demonstrate this product. Hitachi is marketing HCAP as middleware, independent of Hitachi hardware.

Dr. Kahn introduced the two new members to the Committee: Dr. Chris Greer, who had attended previous meetings as a representative for Dan Atkins, was approved as a new member of the committee. He had been at the National Science Foundation and was recently appointed to head the National Coordinating Office for Networking and Information Technology Research and Development, and Mr. Jim Neighbors from the Air Force, who replaced Mr. Richard Testa upon his retirement from the Air Force.

April Meeting Minutes Review

Dr. Robert Kahn asked if there were any comments on minutes from last spring.

No comments were made. A motion to accept the minutes was made and seconded. The minutes were accepted.

Action Items Review

Action Item 1- Inquiry on state archivists' involvement with User Adoption Group

Dr. Thibodeau - stated that there has not been any action since there is not enough data in the system to encourage participation. Dr. Thibodeau said that some state archivists approached him about the possibility of states using the ERA system. However, he advised them to wait until further development is complete, until the bugs are worked out, and testing reviews are favorable.

Mr. David Carmichael - asked if the archivist user adoption group exists yet.

Dr. Thibodeau - answered that one does exist, but that it consists solely of NARA archivists at present.

Dr. Kahn - Asked Dr. Thibodeau when the state archivists can start participating? He believed that the sooner the better. The Committee members agreed. Dr. Kahn suggested that some early coordination take place between the interested parties.

Dr. Thibodeau - requested that the Committee table this request until after his presentation. The first deployment has only limited functionality and is fine-tuned to NARA processes. The second deployment will be focused on the acquisition of Presidential records, given the legal requirement to transfer Presidential records at the end of the current Administration. Deployment 3 will not take place until late 2009.

Dr. Kahn suggested that Mr. Jerry Handfield and Dr. Thibodeau take action by getting together and deciding whether the state archivists can participate in the user group prior to deployment 3, and if so when

Action Item 2-Organizational Impact Assessment: provided in handouts for this meeting. Closed

Action Item 3 Committee vacancies: No nominations were received from members.

Dr. Kahn - There are currently three member vacancies. Vacancies are due to the departure of Daniel Greenstein, Luciana Duranti and Daniel Reed. Mr. Lewis Bellardo will officially resign from the Committee on December 31, 2007. Mr. Daniel Pitti from the University of Virginia has accepted a position on the Committee, replacing Richard Pearce-Moses. His term will begin at the spring 2008 meeting.

Action item 3- was removed from the action item list

Action Item 4, Involvement in PEROPS research - Dr. Thibodeau stated that the Committee may receive PERPOS software for exploratory usage. Committee members need to let him know

and he will send access information. One limitation is that there is no technical support for use of the software, but there is a user's handbook available on line. Dr. Thibodeau also mentioned another software tool that could be provided to members, namely the Multi-Valent Document (MVD) software for digital preservation. This software was originally developed by Wilensky and Phelps at UC-Berkeley. Phelps is now collaborating in an international project to extend the usefulness of the software. This project is now located at the University of Liverpool, UK.

The Committee briefly discussed and compared the two applications, namely PERPOS and MVD. In this connection, Dr. Kahn mentioned that he and Wilensky co-authored a seminal paper on digital library architecture.

PERPOS is available on the Georgia Tech Website with the following capabilities:

- parse the structure of a digital file.
- scan a body of text and organize it into policy, geographic, or other relevant groups..
- perform preservation on access.

MVD can be downloaded from Sourceforge.

Mr. Kahn and Dr. Thibodeau agreed that this is not an action for the Committee. Anyone on the committee who wants the application software should just ask. Action Item 4 was closed.

Action Item 5, Performance Metrics

The Committee asked that performance metrics be added to the agenda to show progress on the project. The Committee also asked that the Lockheed Martin Corporation present their status on what they have developed. ERA performance metrics will be presented tomorrow.

Action Item 6, Global Digital Format Registry (GDFR)

Dr. Thibodeau - the GDFR governance workshop met at NARA on the 14th and 15th of this month. The GDFR initiative, led by the Harvard University Library, aims to develop an architecture to support a distributed global registry for file format information. Once deployed, the GDFR will provide services for the centrally-organized collection of format representation information, the distributed storage, discovery, and delivery of that information, and it will provide a basis for related services such as format translation. This information is useful to any institution preserving digital data. Thus, the intention is to foster global collaboration to build and maintain this registry. The GDFR would be valuable for preservation in ERA. Harvard has received a Mellon Foundation grant to develop the architecture in collaboration with other groups. NARA is supporting the effort to define a governance model for the collaboration. Forty people from nine countries attended and participated in the workshop.

Two topics of interest that were discussed were CNRI's Handle system and IBM's Collaborative User Experience, or CUE. The attendees explored the kinds of things that can be stored in digital formats. Dr. Kahn asked if they discussed (and what to do about) proprietary formats,

and suggested that certain proprietary formats, especially those that do not achieve widespread use, may not be needed in the GDFR, at least initially. However, open source formats will be essential to effective information sharing over time. He also asserted that a digital format registry which tries to track all formats may not be able to keep up with the volume.

Committee Discussion

Several members discussed points important to the GDRF, such as representation of the GDFR and standards.

Dr Thibodeau - NARA wants to find a European partner to host the next governance workshop, to emphasize the global nature of the GDFR. If interested, please visit the Committee website to find out more information.

Ms. Laura Campbell agrees with Dr. Kahn that the practicality of maintaining formats over time is a great concern.

Mr. Chris Greer asked, "Who pays for implementation of such open source formats. If the focus is only on data standards, then someone should step up to assist with development!"

Ms. Campbell - The Copyright Office at the Library of Congress (LOC) had to develop their own standards. LOC has a dynamic registry and it must know what format it is dealing with.

Dr. Kahn - There are worldwide standards that currently exist: The Organization for the Advancement of Structured Information Standards (OASIS) is an entity that one can use to help develop standards, but it is not the only such entity. For example NISO is another relevant standards body in the U.S.

Dr. Kahn – The Global Registry may have temporal value, but in time, there will be a need to have most formats openly available It is not clear that this is something that needs a lot of money, since it will not change much from year-to-year and thus should not be expensive to maintain.

Action Item 7, ERA Bidders

The committee agreed to close Action Item 7.

Action Item 8, Increment 1, Release 2 Functionality

Dr. Kahn - Leave "In Progress" - Dr. Thibodeau to discuss in his update.

Action Item 9, Human Factors Specification

Dr. Thibodeau reported that the human factors document provided by Lockheed Martin has not been posted to Core.gov because it contains proprietary information and not all members have

signed non-disclosure agreements. Dr. Kahn - Why should there be a need for a non-disclosure agreement for a document that specifies the public interface of the system?

Dr. Thibodeau – The probable reason is to protect the LMC methodology for developing human factor specifications. Under the federal acquisition regulation, contractors may assert proprietary rights in data that is not specifically produced under the contract. LMC has an approach to human factors that is independent of the ERA project. We can ask that the methodology be redacted to produce a public version of the specifications. The vendor, Lockheed, has indicated that if the Committee wants as copy of the full deliverable, they must sign a non-disclosure.

There has been some discussion about whether the Committee members would sign or not. Some members say that they would sign a non-disclosure; others would not want to sign one.

Mr. Bellardo - NARA asked for some language about how they arrived at the content to determine validity and credibility of the resulting specifications. Who is to say that what is in the document is an already known methodology that any professional in that field would know?

Dr. Thibodeau - Said that he can provide the document to all Committee members without the methodology.

Dr. Kahn - That would be good. Just have Lockheed take out the methodology.

Action Item 4 (amended) take out the methodology and then distribute to Committee.

Closed action items

Committee took first morning break 10:20 a.m.

Committee reconvened at 10:45 a.m.

Dr. Kahn discussed the Internet Governance Forum. He shared some history about the two phases of the World Summit on the Information Society (WSIS) which took place under United Nations (UN) auspices in December 2003 in Geneva and in November 2005 in Tunis.   A follow-on effort, called the Internet Governance Forum (IGF) was established by the UN in which participants from around the work could engage in dialogue regarding topics such as critical resources, human rights, security and freedom of expression. Defining freedom of expression requires recognizing differences among nations. In the US it is the ability to speak one's mind, or to make available information. In certain other parts of the world, this can be more limited; for example it could mean freedom to access certain information.
While concern was expressed about the perceived US control of the Internet, often citing ICANN as the evidence for this assertion, the UN will continue to play a role in supporting discussions. The dialogue needs to bring others together as a collaborative entity to collectively discuss important Internet issues; there are major cultural differences that affect any international consideration of the Internet. Among them:

- Free Speech Differences – There are very different interpretations than in the US.

- Cyber Crime, which is defined differently in different countries' laws.
- Multilingualism – UN recognizes over 6,000 dialects

The Internet has been dominated one language, English. Yet, using only one language is perceived to compromise or diminish other countries cultural heritages. Making documents available online in many languages is impractical in many situations, or simply not possible in others.
Ms. Campbell - Requested how many attended this conference.

Dr. Kahn – I believe there were over 1,000 in attendance. Although not all were in attendance at all sessions. There were several workshops, discussion forums and sessions. This is a good forum to attend to see what the rest of world is thinking about internet. Refer to URL www.intgovforum.org

Deployment Process and Status of Funding Presentation

Dr. Thibodeau presented the status of Electronic Records Archives (ERA) Program to the Committee, including the finances and the current stage of ERA development.

Dr. Thibodeau - ERA is still operating under a $45.2M continuing resolution (CR) for fiscal year (FY) 2007. The CR authorizes expenditures for NARA's operations and oversight, and for ERA research, but requires specific approval from both appropriations committees to obligate additional funds to the development contract. NARA received congressional authorization to obligate funds to the development contract through October 30, when the first CR expired, and is currently requesting similar authorization for the duration of current continuing resolution, December 14, 2007. The President requested $58 million for ERA in FY2008 and that request passed the full House and the Senate Appropriations Committee. NARA has drafted an FY2008 Expenditure Plan, which will be needed to get authorization to obligate funds to the development contract assuming the appropriation is subsequently enacted.

Dr. Kahn asked if the letter to Congress from the ACERA Advisory Committee was useful for obtaining the support received. Prof. Weinstein agreed that it was helpful.

Dr. Thibodeau advised the committee that the ERA program did not reach the anticipated initial operating capacity (IOC) as planned in September 2007. In late April, Lockheed reported that it could only deliver an IOC with 10% of the functionality required for IOC. This was a major surprise to the committee. He explained his understanding of the circumstances that led to the delay and shift in schedule and how he came to fully appreciate the extent of the schedule slippage. The revised schedule for the original IOC is now set for June 2008, which adds 38% to the schedule delivery time. The cost overrun at IOC in June is now estimated to be $14.9 million, or 27% above the original cost. The estimate to complete development is now at $67.5 million. ERA can reach IOC through the use of multiple year funds. Thus, it will not face a short fall in funds if the FY 2008 appropriation is at the President's level. However, the use of FY 2007

funds to help cover the overrun has caused delays in development of Increment 1, Release 3 and the EOP ERA system, which further impacts downstream functionality.

Dr. Thibodeau – The problem started with the fact that LMC's estimate of the costs for development in 2005-2007 turned out to be twice the funding that became available. This meant that, as soon as development started, in September 2005, NARA and LMC had to negotiate a reduced initial scope. It was an iterative process of NARA deciding what its priorities for IOC were and LMC figuring out how to build a workable and worthwhile system within the funding constraints. The whole process took over a year and diverted a lot of high level attention from the current development to the replanning effort. Release 3 of the Increment 1 is now on hold.

Dr. Kahn - What went wrong?

Dr. Thibodeau – There were several factors. The first, already mentioned, was the diversion of attention to the replanning. One consequence was that sound engineering methods were not followed in many areas. Also, information NARA provided to LMC did not always reach the developers, with the result they did not always understand the requirements. This failure to communicate was not apparent to NARA. Moreover, Lockheed allowed the schedule to become the priority rather than ensuring that the requirements were being met in a satisfactory manner. Ultimately, this failed. NARA issued a "cure notice" to Lockheed in August, 2007 requiring them to produce a "forward plan" for correcting problems and reaching IOC successfully. As part of this effort, Lockheed determined that it needed to replace many of its ERA staff, especially the top-level ERA management LMC also brought in its internal process group to guide the ERA effort on following best practices.

Dr.Weinstein - Lockheed eventually brought in the A-team. No efforts to fix the problem seemed to be happening until I called the CEO. This happened after I was first alerted to the problem by the NARA staff.

Dr. Thibodeau - Lockheed management is now on a short leash. Lockheed proposed "pilot drops" for each release and NARA will evaluate each drop based on several criteria. If NARA's evaluation of any drop is negative, it can simply terminate the contract. Lockheed hasn't finalized the forward plan. NARA is requiring a final estimate of cost at completion from Lockheed. When received, NARA ERA will hold Lockheed to that estimate NARA expects Lockheed to absorb any additional cost overruns..

Mr. Jerry Handfield - Going to only 10% of the 100% planned for IOC is not a very good mark for ERA.

Dr. Thibodeau - Lockheed now has a much better engineering team in place along with good management. Previously, there were serious gaps in communications both between engineering management and the developers and between the Lockheed team and NARA.

Mr. Weinstein - Lockheed did not put the right people on the job. They did not listen to NARA and often dismissed what ERA/NARA said. Since NARA was not heard and requirements were

not being met, NARA had to threaten a shut down. The process should now improve. NARA is not going to spend $180 million of its funding on a system that does not work for NARA.

Dr. Kahn – Having to cancel the contract now would result in a lose-lose proposition for everyone: NARA and Lockheed and the country. He asked to hear the fallback plan.

Dr. Weinstein – Lockheed did not listen to us; they treated us like rubes. They did not take the situation seriously, until the very last minute

Dr. Kahn – There would undoubtedly be consequences from the Congress if the contract were to be summarily cancelled outright. Congress would likely investigate the situation and, among the many options, could take any of several actions including requiring an entirely new approach.

Dr. Thibodeau stated that ERA and Lockheed are addressing technical problems discovered during the initial development and are planning a new architecture which will be implemented for electronic records to be transferred from the Executive Office of the President in January 2009. This architecture eliminates a major difficulty in development by incorporating a new COTS product, the Hitachi Content Archive Platform (HCAP). NARA is now favorably impressed with the team LMC has put together for the EOP development going forward. The fallback plan also ties to HCAP. If the LMC EOP effort gets into more trouble, NARA will engage another contractor to implement a bare bones EOP system using the HCAP product. This would rely on HCAP's out-of-the-box capabilities for rapid ingest and full content searching to satisfy NARA's main requirements for presidential electronic records, but it would only satisfy a few specific requirements, such as workflow and case tracking. This would be a short term fix. As Dr. Kahn indicated, if the Lockheed contract were to be cancelled, and assuming the Congress continued to be supportive, NARA would have to develop a different approach.

The IOC system, now scheduled for June 2008 delivery should provide approximately 85% of functionality NARA had sought in the replan. NARA is not relieving LMC of the need to address the remaining 15% of requirements, and the costs of satisfying them will be counted as part of the overrun to be picked up by LMC. The residual requirements are not major functions, however, but rather fine tuning. For example, the IOC system will allow a user to put in data spans; however, the system will not enforce the rule that the ending date must be after the start date. ERA is effectively two systems, one inside the other: 1) the outer system provides business process modernization for records management for all types of records and 2) the inner system supports transfer, preservation and sustained access to the electronic records. What is being developed for IOC is mainly in the outer system: procedures, workflows and business rules for records scheduling and for transfer requests for all types of records. The IOC system will support transfer and storage of electronic records, but it will not provide any support for long-term preservation or for public access.

Dr. Weinstein stated that Lockheed and NARA are now working better together. There is now more of a sense of common purpose. He said that the delay and overrun was due to Lockheed's mismanagement and he insisted that Lockheed had to fix it. Perhaps, he suggested that NARA had been too open and, at times, had been too agreeable, and that it needed to tighten its control over LMC, which it was now doing.

Mr. Neighbors – He is aware that Lockheed has a powerful Capability Maturity Model Integrated (CMMI) Level 5 internal review processes. They should be asked to use those processes. When did the A-team come on board?

Dr. Thibodeau – NARA required all bidders to be CMMI certified at least Level 3. LMC has achieved Level 5 certification, but the ERA project was a new start which did not inherit Level 5 processes. A new project director, Sean Murphy, was brought on board in June. He has 22 years experience with Lockheed, starting as a developer. Reportedly, he has been used to save other troubled contracts.

Dr. Kahn - Asked about the nature of the interface between NARA and Lockheed. Why didn't NARA exercise its interface effectively? Why couldn't it find out the information it needed expediently? And what did ERA do to fix the interface?

Dr. Thibodeau - The root cause of the shortfall was financial. NARA told Lockheed that the $174 million initially bid was 100 % over budget. Therefore, NARA had to go back and forth on negotiations, prioritize requirements with the team, and request that Lockheed redo their proposal to consider all the modifications, starting back when the development contract was signed in 2005. They were able to finalize these negotiations only in July of 2007. A basic problem in the relationship between NARA and LMC is that the Federal Acquisition Regulation (FAR) promotes an adversarial relationship. NARA has good contracting staff, however NARA's representatives will always further NARA's interests, which tends to make negotiations and problem resolution more difficult at times.

Dr. Kahn - At what point should executive management be involved?

Dr. Weinstein - Managers should use the Archivist earlier in the process.

Mr. Bellardo - It is difficult to do that when there is insufficient empirical data. For much of the past two years, the Earned Value Management data was favorable. Unfortunately, assembling and transmitting the data takes time. By the time the data reveals problems, the contractor has proceeded further.

Dr. Weinstein - Certainly nothing has hit the newspapers or the business press. The best we can be is candid and upfront with what is going on with the ERA effort.

Dr. Bellardo requested an explanation of how the pilot works with timeline deliveries.

Dr. Thibodeau referred to slide 6. This slide demonstrated the earned value management (EVM), cost performance index (CPI) and schedule performance index (SPI) expectations. A program cannot deviate more than 10% according to OMB. If the schedule or cost deviations exceed 10%, the PMO must notify OMB. An agency is typically supposed to re-baseline the project in such cases. NARA chose not to do that because it would obfuscate the overrun. Keeping the original baseline ensures Lockheed remains fully accountable for the delay and costs. However, the original baseline does not contain any of the tasks needed to recover from

the slippage. As a result, NARA has implemented an Over Target Baseline that defines all the work that needs to be done to reach IOC in June 2008, but ties it back to the original baseline. That way, NARA can both oversee LMC's current work and simultaneously track the overrun.

Dr. Weinstein - Wants Lockheed to be accountable to what is required.

Dr. Thibodeau - Stated that since July, Lockheed is doing well. Lockheed is holding to its work breakdown schedule and is working to the Over Target Baseline. Lockheed proposed and negotiated for three pilot drops. The three drops will enable NARA to evaluate operations before the release for operations. NARA received the first release in September. That release provided basic scheduling, transfer requests, transfer plans, and legal transfer instrument capabilities. Lockheed has begun the development for the Executive Office of the President (EOP) records, which are scheduled for release by January of 2009. This system cannot be just a warehouse, it must be more. NARA gets many requests for information, data, documents, electronic files, etc. of recent presidential administrations it must be able to search and access all data from the presidential records.

Dr. Dawes asked whether Dr. Thibodeau knew how the preparation is going for managing the transition of ERA into NARA.

Dr. Thibodeau - There is a unit in the PMO that deals specifically with change management. It identifies organizational issues related to ERA and works with human resources staff and line units to address those issues. The current manager is good and very capable. NARA's transition started with business process reengineering (BPR) for core mission functions, and is now working towards ensuring successful implementation of the reengineered processes in ERA.

Dr. Dawes asked whether there was now a higher level of confidence that Lockheed will be effective.

Dr. Thibodeau stated that NARA had not been very satisfied with Lockheed's efforts related to organizational change, especially in the area of training. He believes we are getting better support from Lockheed. On NARA's side, the PMO has had to push this effort as other offices have not always seen the need to move forward quickly.

Mr. David Carmichael – Has Lockheed been working on the simplest requirements so far?

Dr. Thibodeau – Yes. That was by intention. NARA wanted to maximize the probability of success in implementing the initial system, so it pushed more challenging requirements to later increments. It will get progressively more difficult. If they fail, we stop.

Mr. Neighbors asked if the PMO staff is looking at the actual software..

Dr. Thibodeau - Yes. Even though NARA resources are stretched, there are teams examining the software. The team practices effective configuration management and quality management. However, NARA is a small agency and there aren't resources elsewhere in NARA from which ERA could get support. We have a former Air Force engineer dealing with integration. We are

forcing Lockheed to come up with a new architecture since the maintenance cost and sustainment cost are high with the old architecture. Our Navy partner at the Allegany Ballistics Lab has been supportive; the Navy has a contractor in place to help with support. We have also partnered with the Department of Defense to use the Defense Research and Education Network (DREN), rather than the open Internet. DREN provides better security.

Mr. Bellardo asked how the IV&V works.

Dr Thibodeau - Northrop & Grumman performs Independent Validation and Verification (IV&V) by doing detailed analysis of the code. Their work includes both looking specifically at coding patterns and conducting lifecycle stage assessments. NARA has provided the IV&V findings to LMC, but it has not consistently benefited from them to improve its processes. This is another area where the original LMC team did not communicate well.

Dr. Thibodeau went over the Initial Operating Capacity (IOC) schedule Overview. He pointed out that Drop 1 release largely provides a series of forms and workflows and the infrastructure that supports the system. NARA is performing dry-run Product Acceptance Testing for each drop. Drop 2 testing will begin in January. Dr. Thibodeau presented the functionality for each drop along with the schedule for acceptance testing, security testing, and evaluating user adoption. Training materials have not yet been tested because they will not be complete until Drop 3.

NARA is testing each drop as it is released and performing acceptance testing. NARA creates daily trouble reports and promptly sends them to Lockheed for action. This process has been a collaborative effort for all parties.

Dr. Thibodeau reviewed the four severity levels for acceptance testing and how they are determined. Only one severity 1 technical problem was found in Drop 1, a memory leakage. The system was not releasing memory reserved for a given program when that program finished. Lockheed identified the source of the problem - in a Java utility. Work-arounds for critical problems such as this are not allowed. NARA requires Lockheed to fix all severity 1 and 2 problems before proceeding to the next phase of development. Other not so critical problems can be fixed subsequently.

Dr. Kahn mentioned that Java runs differently when under heavy load and relies on the underlying platform to do the scheduling. He was told that the system is running on the Solaris platform.

All severity 1 and 2 and some severity 3 product trouble reports (PTRs) filed in acceptance testing of Drop 1 and have been closed. There are still some outstanding Security PTRs

Lockheed has some new conditions they must follow at the team level, program management level and testing level. NARA is somewhat concerned about receiving the traceability matrix; it has not yet been delivered. All the criteria for evaluating Lockheed for Drops 1 and 2 were delivered to Lockheed. NARA staff tested at Drop 1. NARA and staff of the four agencies who will be initial users at OIC will test at Drop 2.

The ACERA Committee will be able to test the system at Drop 2. The window for this will be late February. Committee members who are interested in testing should let Dr. Thibodeau know.

Dr. Thibodeau responded to concerns of not having guidance for testing by stating that there would be a reference guide provided to anyone involved in testing.

Mr. Neighbors - Stated that he would like to have his Air Force testers test the system when there is an opportunity.

Dr. Thibodeau will have Ms. Reagins coordinate security and access. Other comments led to requests to review test comments.

Plans for Evaluation of Pilots 2 & 3

Dr. Thibodeau - There will be representatives from four agencies. The results of the evaluation are to be submitted to Prof. Weinstein's oversight group where there will be a determination of a go/no-go on the contract.

Dr. Thibodeau - You can play with the system if you want – just let us know.

Ms. Sharon Dawes – Can you send release notes and feedback from the NARA team?

Dr. Thibodeau – Yes.

Ms. Reagins - Will check into posting comments and findings on the ACERA website.

Dr. Thibodeau reviewed the priorities for 2008 and 2009, stating the first priority is to meet the needs for records from the Executive Office of the President (EOP). Independent of the EOP, NARA will need to use that system for handling special requests for electronic records from elsewhere in the government. There was some discussion about whether it was possible to get everything on the same architecture. Dr. Thibodeau stated that Lockheed has purchased a system that meets the major requirements for handling presidential records. He especially believes that it allows one to get records into the system and access them quickly. The discussion yielded some concern as to how Lockheed was going to manage two architectures at the same time, especially since it is not fully resourced. The original system architecture wasn't refined enough. The new data model can more effectively search the metadata. The EOP system is light on workflows. ERA needs to define an architecture that is understandable.

The Committee recognized there have been some setbacks and that building a system such as this is not easy.

Dr. Thibodeau - NARA's core problem has been re-negotiating Lockheed's contract. Lockheed has had poor management and poor engineering. NARA has learned a great deal and believes they are now on track.

Mr. Kahn - This experience will serve future efforts at NARA.

Dr. Thibodeau - All documents will be put on Core.gov and is only accessible by the Committee members.

Committee agreed to take a 45 minute lunch break and reconvene at 1:10 p.m.

Adjourn for lunch at 12:31 p.m.

Jason Baron, NARA Chief of Litigation and General Counsel

Mr. Baron provided a briefing on search and retrieval processes that are typically required in litigation. He briefed the Committee on the advanced concepts coming forward in a large scale research project. Mr. Baron's paper was released in August of 2007 and summarizes various best practices for search and retrieval in his field. Developments in litigation are counter to the more selective approach used by archives, which push instead to keep everything. Mr. Baron says that his interest is in how to recreate or find corporate memory when it goes dark and how to extract the relevant from the vast volumes of irrelevant. What may be irrelevant today may be relevant in a decade or millennium from now.

The Committee discussed the need for intelligent and robust searches and the associated standards that might be required. Searching is complicated when record keeping is a moving target: what is confidential versus what is not; should we take the big bucket approach versus a filtering approach now or later? Now is the time for considering many strategies with a fusion of techniques to build the knowledge base for lawyers to search.

Mr. Baron responded to Mr. Neighbor's inquiry whether NARA is the right body to consider working on this issue by saying that NARA is not in the standards setting business, however there could be opportunity to inform various standards development processes. NARA would have to consider taxonomies, culture of context of search and complications and understanding of the language. Mr. Kahn mentioned that maybe understanding relationships can assist in searching. While text search can be on some records series, or can address who is the "To, " From" or subject of email; it cannot be on other types of information such as imagery.

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ERA Demonstration

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Rick Rogers from Lockheed Martin Corporation demonstrated the ERA software.

Mr. Rogers, president of Finestra Technology, provided information on Increment 1, all Drops. He explained that the Electronic Archives is about storage, preservation and access. However, Increment 1 will cover the automated records lifecycle management of scheduling, transfer, ingest and access review. He discussed the following:

- creating an approved records schedule and making it available for reference and use in ERA

- creating an approved Request to Transfer and available to initiate a Request to Transfer
- managing storage when performing a transfer group upload, scan and make available
- validating a transfer group for necessary validations and assessments made to recommend custody transfer
- executing change of custody access assets
- executing fully necessary custody transfer instrument.

He then provided a live demonstration of Drop 1.

Adjourn at 4.46 p.m.