

# 2000 Report

The Committee possessed broad expertise in archiving and records management. The members had experience in a variety of institutions including universities, national laboratories and scientific societies. This is the second review of the Archives program in two years: it is expected that the program will hereafter be reviewed biennially.

The Members of the Archives Review Committee were:

- · R. Joseph Anderson, AIP, Center for the History of Physics
- · Professor Richard Blankenbecler, SLAC, Chair
- · Asst. Professor Aaron Roodman, SLAC
- · Jerry Jobe, SLAC, Business Services Division
- $\cdot$  David Gaynon, Lawrence Livermore National Laboratory, Records and Archives Management
- · Margaret Kimball, Stanford University, Archives
- · Professor Jessica Wang, UCLA, History Department

Asked to assist the Committee was:

· Terry Carlino, Thomas Jefferson National Accelerator Facility

## **Charge to the Committee:**

The SLAC Archives and History Office (AHO) Advisory Committee is a standing committee charged with advising the Associate Director of the Research Division of SLAC on the goals, policies, and activities of the SLAC Archives and History Program. While the Advisory Committee's emphasis may change over time, its initial efforts will include the following areas:

- $\cdot$  Review the current archives and history program and assess how well it is fulfilling its mission and meeting DOE requirements.
- · Evaluate SLAC's near-term (1-2 year) archival <u>needs</u> and recommend changes.
- · Evaluate SLAC's longer-term (8-10 year) needs and strategy.
- · Review and comment on the Office's mission, goals, policies, and activities.
- · Prepare a report on these points and any other subject which may arise during the Committee's deliberations.

The SLAC Archives and History Office (AHO) is part of the Technical Information Services (TIS) which reports to the Associate Director of Research. TIS's mission is to support and enhance research and scholarly communication and includes the Archives Office, the HEP Databases, the Library, Technical Publications, and the SLAC Web Information Manager. The TIS Director, Pat Kreitz, is SLAC's (DOE-mandated) Scientific and Technical Information Officer, responsible for ensuring the prudent management and maximum accessibility of SLAC's scientific, intellectual and historical information.

The SLAC Archives Review Committee met for 1 and 1/2 days on 8/4/00 and 8/5/00. Jean Deken, the Head of SLAC's Archives and History Office, spoke to the Committee during the first day on the archival program, its operations and operating procedures. Laura O'Hara, SLAC's Assistant Archivist, gave an overview of the SLAC Archives and History Office website, with a particular focus on recent changes and additions to the site. These presentations well represented the achievements of the AHO. They covered the ongoing

effort and were well planned, thorough, clearly presented, and extensive. A report by Karen Kruger on SLAC records management was followed by Joe Anderson of AIP discussing their study of Multi-Institutional Collaborations in Science.

The Committee took a walking tour of the SLAC visitor center, the klystron historical exhibit, and the SLAC archive storage area. The last report of the day was given by Patricia Kreitz, the head of TIS. This talk was a brief review of the recently completed Communication Committee Report with emphasis on the possible impact of its recommended changes on the AHO effort. An executive session followed in which possible issues to be included in the report were discussed.

The second day started with Jean Deken responding to a request to discuss the needs of the AHO for the immediate future. An executive session followed in which the issues for the Committee report were formulated and discussed. A draft report was written by the entire Committee.

## **Overall Appraisal**

The Committee praised the effort to preserve and make available the scientific history of SLAC. The Committee was very complimentary of the program and the laboratory for its support of this program. One archivist on the Committee stated the lab was a leader and an example of how other labs should archive their history. Overall, the SLAC effort is a very strong program.

Jean Deken is particularly to be commended for her accomplishments and the effective approach she has brought to the task. Jean Deken and Pat Kreitz are to be congratulated for their excellent work, for defining issues, and setting out problems, questions, issues for the future and for defining the goals of the archive effort.

The AHO Review Committee's first report (1999) recognized the leadership role that SLAC has taken among DOE labs in supporting and maintaining an archive program, and it commended Jean Deken and other staff for "defending their mission" and creating an effective program. The Committee also recognized the foresight and pioneering work of David Leith in establishing this program at SLAC. The report especially emphasized the creative work done by the AHO and the BaBar team to document this experiment from its inception and noted that this effort represents a national model for the preservation of science records.

At the same time, the Committee also recognized that SLAC was going through a period of reduced resources and institutional change, and that it was important for the AHO, which is still a young and emerging program, to clarify its mission to the SLAC community, develop a clear focus, and set priorities. Since the expectation of additional staff and resources for the AHO was unrealistic, developing and clarifying priorities was especially important, and the first report recommended that the staff's time in assisting users - which then took roughly half their work time - be sharply reduced, and that more resources be devoted to the core archival activities of organizing and appraising records and scheduling them, using the new DOE records schedule (see page 3 of 1999 report). Our assessment at that time was that much of the work in assisting users consisted of time-consuming service work that could more appropriately be done by the users themselves. The Committee also recommended that Jean attempt to find outside funding for processing collections like the Richter and Drell papers.

During the second Committee meeting, we've been impressed by the clear progress that the AHO has made in setting priorities, and especially in the effective use that has been made of

the Committee's first report as a mandate for change. It appears that AHO staff have exceeded the original goals in focusing on core archival activities, and having sharply reduced the amount of time spent in assisting outside staff in using the archives resources, preparing exhibits, etc. At the same time, they have succeeded in not alienating these former clients by posting on the web the Committee's recommendations and using the recommendations as a means of both defining the AHO's purpose and of clarifying its role to the SLAC community. In the past year, the AHO has created a photo site and other resources that make the collection more accessible.

Outside funding, in the form of a grant from the American Institute of Physics (AIP), has been obtained since the first Committee Meeting, and has been used to fund the processing of the papers retired to the AHO before the year 2000 of Dr. Burton Richter, SLAC's second Director. The work on the Richter Papers Project is proceeding well -- and the grant from the AIP is being effectively used. A new technique, developed by Jean Deken and her associates, of using a "virtual sort" in order to easily examine alternative organization of the papers, is interesting and well done.

Overall the Committee has seen a program that was still struggling to define itself in a changing institutional environment develop over one year into a significantly more focused program that has a clear sense of direction and is ready to help set medium and long-term goals in preserving SLAC's history.

## **Priorities**

The mission of the SLAC Archives is defined as providing SLAC with a reliable, accessible, and dynamic institutional memory that captures its scientific history while meeting DOE/NARA contract requirements.

The core work of an archive falls into four areas: Finding and Appraising, Organizing, Assisting Users, and Providing Intellectual Capital. The Priorities list of the last report should be retained, and if possible, the effort devoted to 'assisting' the community should be reduced and held to a low level.

#### **Recommendations: General**

- 1. Continue to work to integrate overall records scheduling and historical preservation into SLAC's institutional infrastructure, reducing reliance on personal connections.
- 2. Because of the significant backlog of valuable scientific activity at SLAC that has not been properly identified and organized, the Committee feels strongly that for the near-term, at least, the priority given to the four functions **should change**. The **first priority**of the Archives needs to be the **collection** and **preservation** of records that document SLAC's history. The preservation of materials through accession is the most important function of the Archivist at this time.
- 3. If SLAC wants to keep the all of the Archives collections on site, additional funding and space must be made allocated. Alternatives include transfer of records for temporary or permanent storage. It is recommended that a NARA staff member from the Modern Records Programs Life-cycle Management Division be invited to the Committee's next meeting, so that members can be briefed on issues and costs involved with the use of NARA facilities and services.

4. 50th Anniversary warning. The SLAC Directorate should begin soon to plan for the 50 year anniversary of SLAC (2011-2016). Some of the possible celebratory elements, such as an official history, anniversary celebration, anniversary exhibition and or film, require several (approximately 3) years to develop and write, and must be started early.

### **Recommendation: Babar**

The Committee is concerned that the project to archive the BaBar collaboration has apparently lost momentum. It is critical that this documentation effort not flag just as BaBar itself is beginning to yield its first experimental results. Unfortunately, given the limited resources of the AHO relative to its responsibilities, combined with the normal disruption caused by personnel changes, there is a danger that the AHO's efforts may dissipate as the office moves on to planning archival management for NLC and GLAST.

The Committee recommends strongly that the AHO renew its commitment to documenting BaBar as the project unfolds.

BaBar provides the AHO, and SLAC, with two major opportunities. First, as the Committee emphasized last year, the AHO's work on BaBar promises to become a pioneering exemplar of how to document a multi-institutional collaboration in progress. As such, BaBar provides archivists worldwide a model for creating archives of large-scale scientific experiments as they take place, and it will eventually offer historians of science and other researchers a resource of immense value. Second, given the currently pressing need for developing a system to preserve electronic records at SLAC, the BaBar archive project could also serve as a test project for establishing mechanisms to preserve such materials before they are lost.

As discussed elsewhere in this report, the need to formulate means of preserving electronic records is extremely urgent. Although the DOE has yet to set a standard for long-term storage of electronic records, given the ephemeral nature of these materials, an interim solution is required. BaBar could provide the AHO an opportunity to focus its efforts and, in collaboration with BaBar, SLAC Computer Services, and other interested parties, develop the technical and institutional mechanisms for archiving electronic records at SLAC.

#### **Recommendation: Electronic Records**

There has been little progress made in the US in defining how to best identify, collect and preserve access to electronic records since the Committee's report of last year. No one in the US is dealing adequately with this question. The committee's recommendation of last year that the AHO not take a leadership role still stands - SLAC should not risk putting itself in the position of pursuing a "BETA" solution when a "VHS" solution may ultimately prevail. However, the AHO should take some interim steps to ensure the preservation of electronic records. These steps include:

- 1. Identify a protocol(s) to preserve the most important electronic records in the laboratory, such as the electronic records of the BaBar and GLAST collaborations.
- 2. Following the successful BaBar model, the Archivist should get involved at an early stage in working with the GLAST Collaboration in implementing the protocol(s) necessary to preserve the electronic records of the Collaboration.
- 3. Keep abreast of the DOE and NARA policies and guidance and implement those that are feasible. Ensure solutions pursued do not conflict with the direction being taken by DOE or NARA.
- 4. Establish a metadata policy with SLAC management that will allow automatic harvesting of web-based electronic records.
- 5. Establish a policy with SLAC management regarding the identification and harvesting of email records for selected SLAC staff.

The above steps will require active participation, assistance, and support of SLAC senior management, Technical Information Services, and SLAC Computing Services.

## **Recommendation: Collection Review**

In light of space considerations and the approach of 50th anniversary dates, the Committee recommends the AHO undertake a two-year collection review and user study.

The collection review should:

- 1. Determine if identifiable holes exist in the documentation of SLAC's history.
- 2. Attempt to determine how holes may be filled either through collection of actual documents or by conducting oral history interviews or perhaps through the collection of object/realia. (It is highly recommended that outside funding be pursued for these efforts.)
- 3. Prioritize areas that need attention.
- 4. Review current/incoming documentation for completeness and coverage (e.g. the work on documenting the BaBar project will be key in this area).
- 5. Project growth rates factoring in past growth patterns, including projections for documentation coming in as part of the retrospective collection development effort.
- 6. Attempt to anticipate growth in resource needs to deal with collection growth, particularly as the 50th anniversary needs are considered.

The User Study, conducted in conjunction with the Collection Review, should research;

- 1. Patterns of use: internal vs. external; amount of use; type of use.
- 2. Do collections adequately respond to needs of users?
- 3. What are project use needs for 50th anniversary, and for other projects?
- 4. Retrieval of offsite records, analyzing such issues as cost, true need, and convenience.

Recommendations and outcomes of the Collection Review and User Study will include determinations of:

- 1. What collection areas need attention, with priorities established for each area.
- 2. Need for outside funding.
- 3. What moves should be made toward more effective use of space. Possibilities include a split of the collection between onsite and offsite storage, with a recommendation to management for the move of part of the collection offsite to deal with space issues. What part of collection should go offsite would be based on results of User Study. Storage practices must comply with DOE/NARA guidelines and be sensitive to NARA issues.
- 4. Consideration of projections in growth of collections and issue of need in growth of resources.

## Recommendation: Web History / SLAC History

An important role for the Archive and History Office is the maintenance of historical records of the unique elements of SLAC's past. The Committee recommends that two particular elements of SLAC's history be given special consideration.

The first is SLAC's role in the development of the World Wide Web. As the first web site in the U.S., and the site of the web's first "killer app" - the SPIRES HEP database, SLAC has had a pivotal role in the development and popularization of the web. At present, the AHO is a repository for records about this early stage of the web. However, the widespread popularity of the web, and its interactive nature, calls out for a detailed web-based exhibit on SLAC's role in the early web. Therefore the Committee recommends the creation of an interactive web exhibit on the history of the World Wide Web. We imagine that a set of web pages documenting the content of the early web, and in particular its particle physics origins, and providing a simulation of the initial text only browsers, would be a site of much popular interest. We recommend that the Associate Director, in consultation with the AHO and local

web "wizards", initiate a task force to create a web history exhibit. The Committee recognizes that the AHO does not have the resources to create such an exhibit itself, and recommends that both alternative funding sources and collaboration with Stanford University or others be explored to create a web history exhibit.

The second element of SLAC's history which we would like to emphasize is the lab's role in the development of particle physics and accelerator instrumentation. The Committee commends the AHO for its excellent work in preserving the written records documenting SLAC's history, and in particular the ongoing Richter papers project. However, since much of the history of particle physics is written in equipment, we recommend that the AHO develop a plan, over the next two years, to acquire a selective collection of museum quality detector and accelerator objects. In addition, we recommend that the AHO maintain written, photographic, and physical records which will provide a resource for future historical exhibits or celebrations of SLAC's contributions to particle physics.