U.S. Department of Energy
Office of Science (SC)
Stanford Site Office (SSO)
Stanford Linear Accelerator Center (SLAC)
2575 Sand Hill Road, MS-8A
Menlo Park, CA 94025

April 14, 2003

Dr. Jonathan Dorfan
Director
Stanford Linear Accelerator Center
2575 Sand Hill Road, MS-75
Menlo Park, CA 94025

Dear Dr. Dorfan,

In accordance with the requirements of the DOE contract with the Board of Trustees for the Leland Stanford Jr., University for the management and operation of the Stanford Linear Accelerator Center (SLAC), enclosed is the DOE FY2002 Annual Performance Assessment of the Laboratory.

The **FY 2002** overall rating for **SLAC is OUTSTANDING**. You and your staff are recognized for earning the highest overall rating of "*Outstanding*" for the *fifth* consecutive year. We would like to commend SLAC for your continued Outstanding performance in Science and Technology (S&T) Programs (e.g. B-Factory is meeting its luminosity goals and increasing physics *publications*, SPEAR 3 construction is proceeding in an exemplary manner, and is on time and within budget, the Research Office Building was completed on time and within budget, construction of new SLAC User Lodging Facility is making excellent progress, LCLS is proceeding well, GLAST is making good progress, and SLAC continues to lead NLC R&D). Business Management (Including ES&H) was rated Outstanding for the first time. Of the eleven Business Management areas evaluated, five had no change in ratings from FY 2001. Equal Opportunity & Affirmative Action, Personnel Management, Financial Management, Technology & Intellectual Property Management, and Environmental Safety & Health all had increased ratings from FY2001. Safeguards & Security had a decreased rating from FY 2001.

The FY 2002 scores continue to demonstrate the effectiveness of SLAC's leadership in High Energy Physics and Synchrotron Radiation. The spirit of cooperation and teamwork that exists between SLAC and DOE is a strong foundation on which to ensure our continued success in support of DOE's missions and national goals. Please extend our congratulations to the Laboratory for this sustained level of performance. Should you have any questions regarding this report, please contact me at (650) 926-3208.

Sincerely,

John S. Muhlestein
Director
Stanford Site Office

Enclosure

cc: Distribution

SLAC FY2002 Annual Performance Report Distribution

DOE-SC/HQ

Dr. Raymond L. Orbach, Director SC-1
James F. Decker, Principal Deputy Director SC-2
Milt Johnson, SC-3
Jeffrey Solomon, SC-3
Antoinette Joseph, SC-7
Diane Pero, SC-7
John Labarge, SC-7
Stephen Buswell, SC-7
Roland Hirsch, SC-73
Patricia M. Dehmer, SC-10
William Oosterhuis, SC-13
Paul Smith, SC-14
Pedro Montano, SC-14
Stan Staten, SC-14
William Millman, SC-14
Peter S. Rosen, SC-20
David Goodwin, SC-20
Robin Staffin, SC-20
David Sutter, SC-22
Glen Crawford, SC-22
John O'Fallon, SC-22
Kathy Turner, SC-22
Robert Woods, SC-22
Aesook Byon-Wagner, SC-22
William Lewis, SC-30
Anne Marie Zerega, SC-32
John R. Clark, SC-60
John Alleva, SC-64
Aristides A. Patrinos, SC-70
Leah Dever, SC-80
Daniel Lehman, SC-81
John Yates, SC-82
Van T. Nguyen, SC-83
(33 copies)

SLAC

Dr. Jonathan Dorfan, Director
Daisy Asinas, Internal Audit Div
Ewan Paterson, TD
Greg Loew, Deputy Director
Jerry Jobe, BSD
Keith Hodgson, SSRL
Irene Boczek, ESH

Lee Lyon, HR
Mimi Chang, BSD
Neil Calder, PAO
Sue Von Gee, AAO
Persis Drell, RD
Ziba Mahdavi, BSD
(13 copies)

DOE-OAK

Aundra Richards, CAPD (3 copies)
Camille Yuan-Soo Hoo, NNSA LSO Manager
Doug Ash, COS
Henry DeGraca, AMENE
James Hirahara, NNSA Director
Dan Nakahara, LEPD
Duan Gordon, Actg. SSD
Eileen Rountree-McLennan, BEPD
Henry DeGraca, OEPD
John Belluardo, OPA
John Gonzales, EFMD
Ralph Kopenhaver, ES&H
Sharon House, Acting BUD
Sheryl Boutte, HRM
Dru Burks, IMD
(15 copies)

Matrix Member at OAK

Alice Flintory, BUD
Barry Savnik, EFMD
Clemonce Heard, HRMD
Dan Dea, FIN
Dean Decker, ES&H
Edwin Njoku, ES&H
Gary Drew, IPLD
Galvin Brown, BUD
James Chwang, ES&H
John Morgan, CAPD
Karen Payne-Jones, IMD
Larry Mcewen, WMD
Lauren Martinez, OPA
Lee Williams, CAPD
Mark Clark, EFMD
Margo Triassi, HRM
Melna Jones, IMD
Paul Sibal, BEPD
Richard Couture, EM
Richard Haddock, ES&H
Rosemary Gourley, CAPD
Sharon Adams, IMD

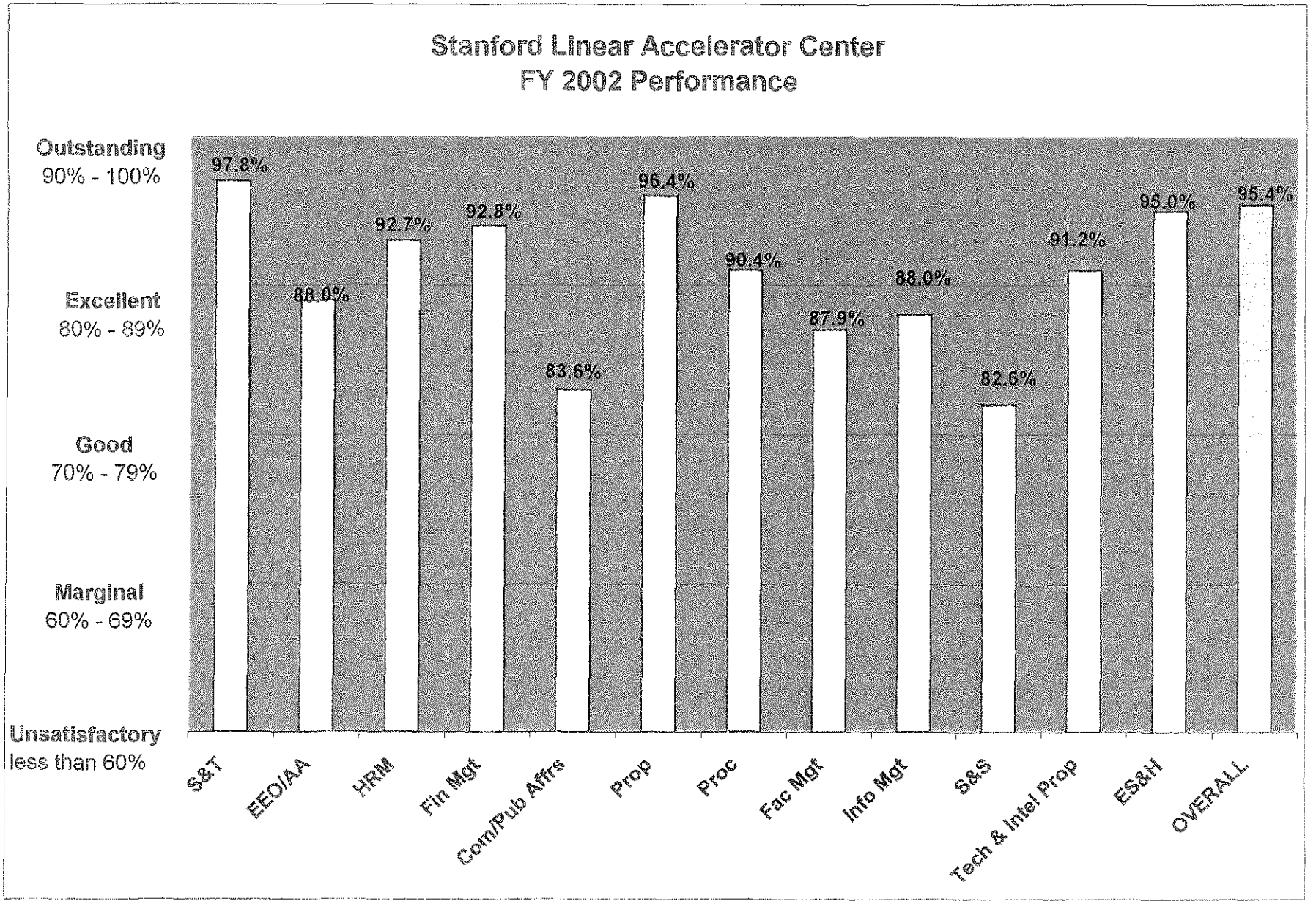
Shaun Kesterson, EFMD
Steve Black, ES&H
Tom Brand, EFMD
Tony Sy, EFMD
Walter Cyganowski, LSOD
(27 copies)

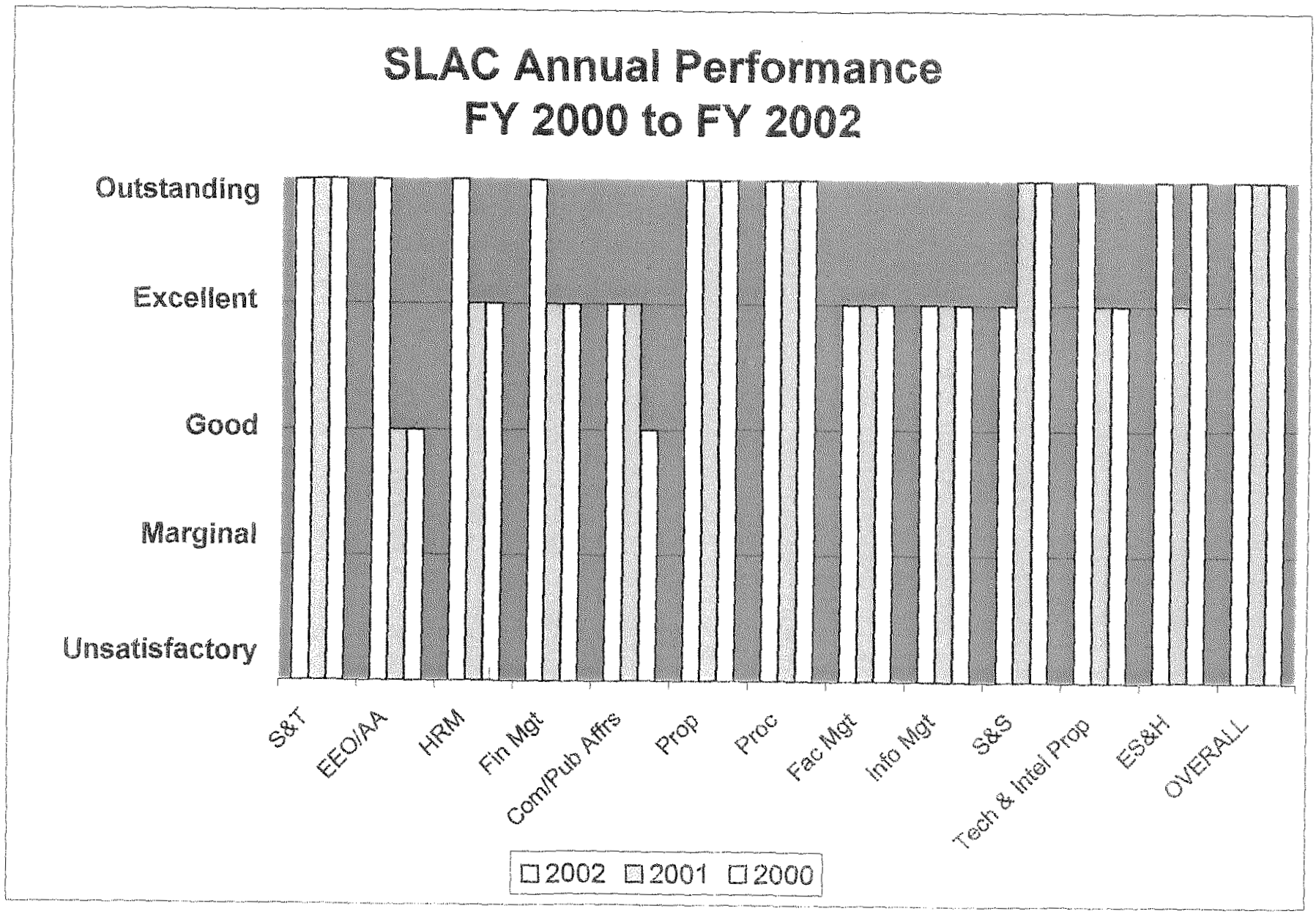
SSO

Amy Pensinger
Charles Lee
Ev Valle
Dr. Martin Molloy
Dave Osugi
Hanley Lee
John S. Muhlestein, Director
Katherine Woo
Tyndal Lindler
(9 copies)

Other

Jean Peterson
Office of Inspector General
LLNL
Mail Stop L-368
(1 copy)


Stanford Linear Accelerator Center
FY 2002 Performance
Outstanding
90% - 100%
Excellent
80% - 89%
Good
70% - 79%
Marginal
60% - 69%
Unsatisfactory
less than 60%
97.8%
88.0%
92.7%
92.8%
83.6%
96.4%
90.4%
87.9%
88.0%
82.6%
91.2%
95.0%
95.4%
S&T
EEO/AA
HRM
Fin Mgt
Com/Pub Affrs
Prop
Proc
Fac Mgt
Info Mgt
S&S
Tech & Intel Prop
ES&H
OVERALL


SLAC Annual Performance
FY 2000 to FY 2002
Outstanding
Excellent
Good
Marginal
Unsatisfactory
S&T
EEO/AA
HRM
Fin Mgt
Com/Pub Affrs
Prop
Proc
Fac Mgt
Info Mgt
S&S
Tech & Intel Prop
ES&H
OVERALL
2002
2001
2000

EXECUTIVE SUMMARY

I. PERFORMANCE-BASED ASSESSMENT PROCESS

This report is produced by the U.S. Department of Energy (DOE), Office of Science [High Energy & Nuclear Physics (HENP), Basic Energy Science (BES), Basic Energy Research (BER)], the Stanford Site Office (SSO), and Oakland Service Center (OAK/NNSA), to evaluate the Stanford Linear Accelerator Center's (SLAC) overall performance for FY2002. The evaluation areas are: 1) Scientific Research Programs and Technology Development; and, 2) Business Management (including ES&H). This evaluation is based upon an objective performance measurement system, validation of the Laboratory's self-assessments, scientific peer reviews, and ongoing operational awareness.

The period of performance for this Fiscal Year 2002 Annual Performance Assessment Report is October 1, 2001 through September 30, 2002. **The rating is based upon a system evaluation, which provides for previously agreed-to measures with ratings expressed as percentage beginning this year. Previous years, ratings were associated in point assignments and accumulated to determine the overall adjectival rating for SLAC.** The rating characterization continued to be five tier, like last year, (Outstanding, Excellent, Good, Marginal, and Unsatisfactory). The Scientific Research Programs and Technology Development section is weighted 60%, while the Business Management section (including ES&H) is weighted 40%. **Appendix A** of this report provides the methodology for the rating. **Appendix B** of this report provides detailed scores and ratings for each functional area.

The overall SLAC performance rating for FY2002 is OUTSTANDING. The Science and Technology Program summary rating of Outstanding is based upon input provided by Raymond L. Orbach, PhD, Director, Office of Office (SC). The Summary Rating combines performance evaluations from the Office of HENP, BES, and BER. The Business Management summary rating of outstanding evaluation covers: Communications & Public Affairs, Environmental Safety & Health, Equal Opportunity & Affirmative Action, Facilities Management, Financial Management, Human Resource Management, Information Management, Personal Property, Procurement, Safeguard & Security, and Technology & Intellectual Property Management. A summary chart of the scoring and rating in each area is provided on **pages 5 and 6** of this Executive Summary. Full text of the FY2002 Performance Assessment is provided under the Detailed Assessment Results.

II. SUMMARY OF SIGNIFICANT ACCOMPLISHMENTS

This Executive Summary highlights noteworthy SLAC FY 2002 performance achievements and recommended areas for improvement, rather than reiterating the scoring and adjectival ratings for each of the functional areas contained in the body of this report. There were no S&T or Business Management recommended areas for improvement in FY2002.

A. SCIENCE AND TECHNOLOGY

Stanford University manages and operates the Stanford Linear Accelerator Center (SLAC) as a National User Facility for the US Department of Energy (DOE). SLAC conducts research, design, construction, engineering,

testing, training, education, and technology transfer on behalf of DOE, in a manner that maintains a vigorous, forward-looking program. SLAC's mission is the generation and expansion of scientific and technical knowledge in High Energy Physics, Basic Energy Sciences, Biological and Environmental Research, and all appropriate areas of natural sciences, engineering, and related disciplines. High Energy Physics (HEP) includes accelerator, experimental, particle and theoretical physics, and astrophysics and cosmology. Basic Energy Sciences (BES) includes synchrotron radiation research in chemistry, materials sciences, physics, and other disciplines. Biological and Environmental Research (BER) includes synchrotron radiation research in structural molecular biology and medical sciences. SLAC has been established as a National User Facility for the conduct of unclassified research, providing a unique resource for the DOE Office of Science and related User communities.

The very nature of scientific inquiry, its complexity, duration, and examination of the unknown, mitigate against the establishment of purely quantitative criteria for evaluating the results of this research. In recognition of this difficulty, a system utilizing the review by scientific peers has proven its worth in influencing the direction of, and establishing standards for scientific research. In keeping with this tradition, this peer review process is used to evaluate the science and technology programs and projects at SLAC.

For Fiscal Year 2002, the overall performance rating for the Stanford Linear Accelerator Center on Office of Science (SC) Science and Technology Programs is Outstanding. This rating is based upon characterization of Outstanding, Excellent, Good, Marginal, and Unsatisfactory scale. It is a weighted average of performance evaluations provided by each SC Program Office utilizing the budget for each program at SLAC as the weighting factors. This summary rating combines overall performance evaluations by the SC Offices of High Energy Physics, Basic Energy Sciences, and Biological and Environmental Research.

Overall S&T was rated: Outstanding for FY 2002. The breakdown is:

High Energy Physics = Outstanding
Synchrotron Radiation = Outstanding

Last year, FY 2001 overall rating was also Outstanding.

High Energy Physics Performance Evaluation

Office of High Energy Physics (HEP)

The Stanford Linear Accelerator Center currently operates a cutting edge program in High Energy Physics based on the B-Factory, small scale "Fixed Target" experiments done with the electron beam from the 2-Mile Linac, the construction of a space-based astroparticle physics experiment (GLAST), and theoretical physics in addition, groundwork for a long-range future program is being developed today, with accelerator research towards the design of an energy-frontier linear collider.

Quality of Fundamental and Applied Science

B-Factory (PEP-II Collider and BaBar Detector): The B-Factory continued its impressive performance. PEP-II delivered 101 fb^{-1},of which the BaBar Detector recorded 96 fb^{-1}. The BaBar Collaboration promptly published the latest and world's best result of CP violation $\sin(2\beta) = 0.741 \pm 0.067 \pm 0.034$ Analysis in other areas such as rare B decays, $B - \overline{B}$ mixing, τ decays, and charm decays was completed. Thirteen papers were submitted for publication in FY 2002. More than 25 papers were presented at international conferences, with publication planned for the near future. BaBar is a large (600 member) collaboration with members from 74 institutions in 9 countries. There are approximately 150 graduate students and 110 postdoctoral researchers receiving training on BaBar.

Fixed Target Experiments (SLAC 2-Mile Linac): The E-158 Experiment to measure parity violation in Moeller scattering completed its commissioning and moved to physics data taking. This small experiment, which measures electroweak mixing at an energy scale far below the Z boson mass, is testing for new physics.

Particle Astrophysics (GLAST): SLAC is the host laboratory for the Large Area Telescope of GLAST (Gamma-ray Large Area Space Telescope), an astroparticle physics experiment to detect gamma rays in space. This experiment utilizes detector technologies, such as cesium iodide electromagnetic calorimeters and silicon-microstrip trackers, to study the physics problem of how high-energy gamma rays are produced in space.

Theory: The SLAC theory group works in a variety of areas, ranging from the development of fundamental theories to detailed calculations and tests of theories directly relevant to high energy physics experiments at SLAC and elsewhere. At the HEP Annual Review, their work was evaluated to be outstanding, with significant impact on the field.

Relevance to DOE Missions and National Needs

DOE Mission and Program Priority: The Laboratory's priorities are well aligned with the DOE mission and the national HEP Program.

Next Linear Collider R&D: SLAC leads the Next Linear Collider (NLC) R&D Program, focusing on development of critical technologies such as klystrons and solid-state modulators, redesign and test of high gradient structures, re-examination of final-focus requirements, and an aggressive R&D program in the NLC Test Accelerator. The work on the physics case for the Linear Collider continued, with emphasis on how to use the unique capabilities of the linear collider environment, such as beam polarization, highly efficient heavy quark tagging, and the possibility of backward-scattered photon beams.

Advanced Accelerator R&D: SLAC also carries out an excellent advanced accelerator research program with a wide variety of topics covering: performance enhancement of current accelerators, research and design for near-future facilities, research in fundamental aspects of accelerator and beam physics, and accelerator physics and technology on high gradient acceleration and advanced concepts.

Effective and Efficient Research Program Management

Research Program Management: The SLAC research program is well managed, and the scientific productivity is high, in spite of difficulties from the tightly constrained budget.

The effectiveness of SLAC management is best demonstrated by the integrated luminosity records at the B-Factory in FY 2002, collecting the largest high energy physics data sample ever produced. Not only did the PEP-II Collider and the BaBar Detector operate with outstanding efficiencies, but also all upgrade and maintenance activities during the planned Annual Shutdown were accomplished on schedule — the result of effective planning and management.

SLAC has managed to deliver sufficient computing resources for BaBar by effectively managing its computing resources, as well as successfully coordinating with major European agency-funded computing centers in Europe. An increase in management oversight by the directorate helped the GLAST Project overcome its initial difficulties, and resulted in an approval of the Project Baseline, a successful formation of an International Agreement, and a signed agreement in place between DOE and NASA.

Research Program Leadership: The position of Associate Director of Research was successfully filled in April 2002, and the new Associate Director is providing strong management oversight in all areas of the High Energy Physics Program.

The SLAC Director is serving as the chair of the U.S. Linear Collider Steering Committee, providing strong leadership for the National Linear Collider efforts in the U.S. The SLAC Deputy Director is serving as the chair of the International Linear Collider Technical Review Committee, and is leading the effort of producing the Committee's review report.

Success in Construction and Operation of Facilities

B-Factory Operations: As noted above, SLAC continued to improve the performance of the B-Factory. The peak luminosity achieved in FY 2002 was 4.602 x 10^{33} cm^{-2} sec^{-1}, which is over 1.5 times the design peak luminosity of 3.0 x 10^{33} cm^{-2} sec^{-1}. The operation of both the PEP-II and BaBar Detector was efficient and effective, with record integrated luminosities being achieved. The best 8-hour shift was 108 pb^{-1} delivered to BaBar. Records were also set on day, week and monthly time scales. The total integrated luminosity delivered to BaBar since May 1999 is 101.2 fb^{-1}, and BaBar logged about 96% of delivered data, making it the world's largest high energy physics data sample. During the planned 4-month shutdown of the B-Factory, work geared toward further luminosity increase and stable operation for PEP-II was successfully completed. Maintenance and improvement activities for the BaBar Detector were also carried out successfully during this shutdown period.

Fixed Target Experiments: In FY 2002, the E-158 Experiment (Moller Scattering) carried out final commissioning, and successfully operated for 5 weeks at full design luminosity. The machine delivered a stable 16 coulombs of charge to the experiment, which will produce the anticipated error on the physics asymmetry measurement of 23 parts per billion.

GLAST Project: Considerable progress was made toward the final instrument design and development of production methods for the construction of the GLAST LAT Detector.

Construction Projects: The new Research Office Building was completed on time and within budget, and the construction of a new User Lodging Facility is making good progress.

Synchrotron Radiation Research Performance Evaluation

Office of Basic Energy Sciences (BES), and Office of Biological and Environmental Research (BER)

Quality of Fundamental and Applied Science

SSRL and User Research: The FY 2001 BES review of SSRL indicated that the quality of the research performed by staff and Users is outstanding; the number and quality of science publications are impressive; and staff scientists are competent, enthusiastic, and creative. BES Division of Materials Sciences & Engineering (DSM&E) supports the outstanding work of Z-X Shen, who has made considerable advances in understanding the mechanisms of high T_c superconductivity. The addition of Jo Stohr is welcomed, and strengthens the research that is being carried out by SSRL scientists by adding new areas, including microstructure of magnetic materials as well as polymeric materials.

Outstanding new nanoscience efforts funded by BES in FY 2001 on the Stanford Campus have resulted in closer ties with materials science activities at SSRL. Dr. Arthur Bienenstock became the Director of the Geballe Laboratory for Advanced Materials (G-LAM) on the Stanford Campus, which is now formally linked to SSRL. In

FY 2002, there were two new Nanoscale Science, Engineering and Technology (NSET) Initiative Awards to the SSRL/G-LAM. This total effort holds the promise of providing a strong, coherent research program in strongly correlated electronic materials, and in magnetic materials.

Other activities supported through the SSRL include:

- the collaboration with University of Texas at El Paso to enhance the participation of Hispanic students in x-ray scattering;
- the Sub-Picosecond Photon Source (SPPS) effort to study short-pulse x-ray science, in preparation to the Linac Coherent Light Source (LCLS);
- the LCLS and the free electron laser (FEL) collaboration with other laboratories;
- the microbeam technique development, and;
- the research by John Miao, which seeks to obtain structural information from single molecule diffraction.

All of these are felt to be of great importance to the goals of DMS&E, and are being performed at an outstanding level.

BER Comment: SLAC/SSRL has an outstanding staff in Structural Molecular Biology, recognized worldwide for their research into new technology, and for their collaborations with external scientists to solve complex structural problems. Noteworthy progress has been made in developing and implementing automated, robotic systems for improved efficiency in the use of available beam time.

Relevance to DOE Missions and National Needs

DOE Mission and Program Priority: The research carried out at SSRL is strongly supportive of the DOE missions; and, the operation of the SSRL fills the stewardship role for the Nation as a DOE-supported User Facility.

BER Comment: SLAC/SSRL is highly successful in developing state-of-the-art experimental stations for Structural Molecular Biology, stations that provide the latest technologies for solving the most complex structural problems. The User facilities are outstanding, and attract a large and growing community of scientists from academic, government, non-profit and industrial institutions. Beamline 9-2 ranks fourth in the number of new protein structures published during 2002 (through September), out of more than three dozen stations devoted to protein crystallography worldwide.

Effective and Efficient Research Program Management

Research Program Management: Management of science and facilities operation is outstanding. The leadership by SSRL management to embrace G-LAM was creative and will benefit SSRL, SLAC, and Stanford.

BER Comment: SLAC/SSRL manages its structural molecular biology staff and facilities in an outstanding manner. Users receive a high level of support, beamline equipment is well maintained, and downtime is rare. This is particularly noteworthy, since much staff effort is simultaneously being devoted to the SPEAR3 Upgrade Project.

Success in Construction and Operation of Facilities

SPEAR2 Operations: SSRL has been operating in an extremely productive manner over the past year. A 95 percent availability beam time is outstanding, and is indicative of quality accelerator staffing. Users are very satisfied with the operation at SSRL. SSRL has excellent staff support for Users, and the interactions with Users serves as a model for other facilities.

SPEAR3 Upgrade Project: The SPEAR3 Construction Project, headed by Tom Elioff, is proceeding in an exemplary manner. It is on time and within budget. The Project team has worked with SLAC and vendors to overcome some very difficult problems that have arisen during the Project.

LCLS (X-ray FEL) Project: The Linac Coherent Light Source Project has successfully completed the Conceptual Design. The Project is well staffed, and ready to enter the engineering design phase.

B. BUSINESS MANAGEMENT

Introduction: Overall Business Management was rated Outstanding for FY2002.

Of the eleven functional areas evaluated, 5 had no change in ratings from FY2001 to FY2002:

- Communications & Public Affairs.....Excellent
- Personal Property.....Excellent
- Procurement.....Outstanding
- Projects/Facilities Management.....Excellent
- Information Management.....Excellent

Functional areas increased rating from FY 2001 to FY 2002:

Equal Opportunity & Affirmative Action .....Good to Excellent
Personnel Management.....Excellent to Outstanding
Financial Management.....Excellent to Outstanding
Technology & Intellectual Property Management..... Excellent to Outstanding
Environmental Safety & Health..... Excellent to Outstanding

One functional area decreased rating from FY 2001 to FY 2002:

Safeguards & Security.....Outstanding to Excellent

Rather than reiterate the scoring or adjectival ratings for each of the functional areas contained in the Detailed Assessment Results, this summary highlights the five success areas of achievements at SLAC in FY 2002.

Functional Areas Increased Ratings:

Communications & Public Affairs: The overall rating significantly increased from **Good to Excellent** for FY02. This improvement can be attributed to the following achievements: mid-year modifications made to the performance measure focused on short-term actions that were critical and reasonably attainable; and, Self-Assessment highlighted the good faith efforts committed to by the Laboratory for the appraisal period.

Personnel Management: The overall rating increased from **Excellent to Outstanding** for FY02. The improvements are attributed to the mid-year modification of the performance measures served to align DOE/OAKs performance management with the goals and priorities of SLAC's Human Resources Department, adding value to the process and allowing HR to maintain its focus on its strategic objectives. SLAC's areas of interest for FY02

included examining the employment process to ensure HR was recruiting effectively, eliminating undue burden on the supervisor to screen irrelevant resumes, and responding expeditiously when a selection has been made. In addition, SLAC further scrutinized the employment process by testing a streamlined approach to the hiring of "critical" positions, reducing the time to fill from an average of 119 days to 33 days for the designated positions. In another attempt to validate its responsiveness to the recruitment/retention needs of the Laboratory, HR identified the total compensation of three positions to that of three external comparators within the local market, finding that despite SLAC's struggle with budgetary constraints, it has succeeded in maintaining its competitiveness in the necessary areas, and even leads the market. HR's success in FY02 in meeting the needs of the Laboratory were further culminated through its overall rating of 1.9 under its annual customer survey, an increase over FY01's 2.2. SLAC's HR staff if to be commended for its efforts and successes in FY02.

Financial Management: The overall rating increased from **Excellent to Outstanding** for FY02. This is the first year Financial Management has attained an Outstanding rating. During FY02 SLAC had no delinquencies over 180 days and therefore no receivables had to be referred to the U.S. Treasury. SLAC Accounting made process improvements in the following four major areas: 1) payroll, 2) labor, 3) commitments, and, 4) allocations. SLAC has two reports in place to ensure costs and commitments stay within DOE funding levels and there were no reported violations. During FY02, SLAC reported travel cost of $1.5M and did not exceed the administrative ceiling of $2.35M. SLAC made process improvements in the areas of labor, commitments, and indirect allocations that contributed to their ability to deliver their reports on time with the right content. SLAC audited financial statements prepared in accordance with DOE requirements. Lastly, there were no audit findings to financial statements from integrity checks and preliminary reviews.

Technology & Intellectual Property: The overall rating increased from **Excellent to Outstanding** for FY02. The Laboratory's Office of Technology Transfer was productive, with competent staff targeting industrial sectors, with a continued focused on software. SSO records for FY2002 show OAK approval of 2 CRADAs and 3 Work For Others (WFOs) covering hardware and software projects, and analysis of satellite astronomy data. Both CRADAs were with small businesses, involving HQ-SC Small Business and Innovative Research (SBIR) grants for critical technology R&D on photocathodes for electron guns and accelerator feedback control software. All three WFOs were with U.S. Government agencies, NASA and National Institutes of Health. For CRADAs, DOE Intellectual Property & Law Division (IPLD) in FY01 requested SLAC's Office of Technology Transfer (OTT) to create a laboratory CRADA model. OTT and IPLD/SSO is in the final stage of approving the model.

Environmental Safety & Health: The overall rating increased from **Excellent to Outstanding** for FY02. This rating is based upon the combined evaluation of SLAC's performance on the ES&H outcome measures and the Integrated Safety Management System (ISMS) process measure. In FY 2002, SLAC performed at an outstanding level in the following areas: 1) exposure to ionizing radiation with no unplanned exposures or ORPS reportable events of skin or clothing contamination, 2) control of radioactive material with no reportable incidents of loss of control of radioactive materials, 3) fire department response time anticipated 95% in pre-fire plan and exceeded to 96%, 4) fire department building inspections conducted 95% of required building inspection, and, 5) radioactive waste was managed within DOE Order 435.1.

III. RECOMMENDED AREAS FOR IMPROVEMENT

A. SCIENCE AND TECHNOLOGY

None.

B. BUSINESS MANAGEMENT

Safeguard & Security:

- S&S rating **decreased from Outstanding in FY01 to Excellent** rating in FY02.
  - The performance measures were significantly re-written.
  - This reduction is attributed to the following:
    - 1) untimely submission of updated Site Security Plan (no revisions in updated plan) and,
    - 2) SLAC's theft rate increased for the first time since FY00 and no corrective plan was developed.

Communications & Public Affairs:

- SLAC should participate in more external activities with the community including more involvement with local high schools.
- Development of a 3-year Community Relations Plan is recommended.

Personal Property:

- In measuring cost efficiency/effectiveness, quantifiable data should be provided to show how much cost/savings has been realized by the improvements.

Procurement:

- Delivery of Good & Services should be increased to meet the 85% benchmark set by Balance Score Card goal.
- Percentage of transactions placed by alternate procurement method under the Rapid Purchasing Techniques (RPT) should be increased.

Projects & Facilities Management:

- For several tasks, SLAC's Self Assessment need to better reflect accomplishments and identified performance.
- Meet Quarterly Progress Review.

C. OBSERVATION:

Stanford Internal Audit conducted a review of the SLAC Purchase Card Program as part of the Department-wide review of Federal and contractor purchase card programs on August 26, 2002. This review was a follow-up to a pilot review performed in June 2002 at six Departmental sites that disclosed a number of internal control, policy and operational weaknesses. The audit report stated that SLAC's internal controls over Purchase Cards were comprehensive, adequately documented, and adequate to provide reasonable assurance that all purchase card transactions and costs incurred and charged to the Contract were allowable and in compliance with Departmental guidance and SLAC Purchase Card policies in all material respects. There were several recommendations, which if fully implemented will further strengthen the existing internal controls.

Of a total nine Corrective Actions, six have been completed, and three are open and estimated completion by FY03.