With every issue of ESF Engineer we have much to share and this issue continues that tradition of keeping our alumni informed on the latest EREFG news.

First and most important, our program is 30 years old, and we're planning a celebration. Please refer to the related article and keep Nov. 9, 2001, open. You'll be receiving more information about this event as plans are finalized.

Second, our faculty and students have received several honors. Please see the related articles on Bob Brock being named a Fellow of the American Society for Photogrammetry and Remote Sensing, and my award in Albany. My wife and I were both invited, and I needed a new suit, tophcoa and shoes, and she of course needed a new dress and matching shoes. All in all, it turned out to be the most expensive free meal I've ever had.

Third, we are now fully staffed. We've added three new people to our group. I'm sure you'll be impressed with their credentials, and I think we can now make progress in several areas.

Fourth, we continue to seek ways to improve our undergraduate program. We had a very successful meeting with representatives of firms who've employed our students, and, as a result, we formalized a strategy to incorporate communication skills throughout our program. We've created a Communications Handbook, and we'll document student work in electronic portfolios.

Fifth, our faculty is as busy and productive as ever. Please see the listing of completed graduate students and faculty activities. I'm sure you'll agree that, for a small unit, we've accomplished a lot in the last year.

Sixth, President Murphy has initiated a collegewide strategic planning effort. I'm on the College Council, as is Teri Frese, our departmental secretary. Dr. Spuches' article provides more details of this important effort.

Finally, our efforts to keep in touch with our friends and alumni have uncovered some glitches in the college's alumni database. If you've missed either or both of the first two issues of the newsletter, please let me know and I'll mail them to you.

Thanks again for your feedback. We enjoy hearing from all of you, and look forward to seeing many of you on Nov. 9.
Upon completion of the graduate degree, the graduates undergraduates who stayed on for graduate work. could be ERE, or ERE-FEG. If the code was the former, were recoded from FEG to ERE. The ERE designation Alumni Relations’ database, especially regarding the names and addresses were not included in the newsletter. We went back and checked all the names mailing labels we requested. coded as ERE, and had Alumni Relations recode our graduates to ERE-FEG. Therefore, some of you are by going to the college Web site at www.esf.edu and we’ll mail you the first two issues.

Seniors in FEG 489, “the capstone” design course, students benefit from interactions with off–campus clients, while the students’ efforts provide a valuable service to the clients. This year’s projects were based on problems encountered by the State of New York Canal Corporation, the City of Syracuse, and Houghton College. These include:

- The Mohawk River/Barge Canal, which is managed by the Canal Corporation. The project focused on flooding, resulting in property loss, risk of damage to sedimentation. In addition, a pedestrian footbridge with insufficient stream channel clearance needed to be replaced. One project team designed a bridge constructed from glue–laminated beams and pressure–treated lumber. Wood was the preferred material of construction because of its strength, its ability to blend into the environment of the campus and its affordability. A second team designed bank stabilization measures incorporating rip–rap and live plantings to reduce erosion and bank failure.
- Fulmer Creek in Herkimer, N.Y., is a tributary of the Mohawk River/Barge Canal, which is managed by the Canal Corporation. The project focused on erosion controls and proposed a land reclamation process. Like many urban centers, the City of Syracuse collects, hauls and disposes of leaf and yard waste debris generated in the city. The student design team evaluated alternative leaf and yard waste composting processes, and developed a preliminary site design for a win–down composting facility to manage approximately 40,000 cubic yards annually. The teams presented the project designs on May 1 to an audience comprised of peers, faculty, friends and alumni. In particular, we thank the following people for their support of the student projects: Anthony Ilicacqua, commissioner of public works, City of Syracuse; John Dengisits, P.E., Director, Environmental Management and historic Preservation Bureau, New York State Canal Corporation; and Dorsey Lawson, director of facilities, Houghton College.

What Employers Say About ERFEG

The ERFEG faculty solicited advice from leaders of Syracuse’s professional engineering agencies and businesses regarding the inclusion of professional preparation opportunities in ESF’s undergraduate curriculum. Businesses represented included Moffa & Associates (recently merged with Brown and Caldwell), Blasland Baukew & Lee, O’Brien & Gore, Barton and Loguidice, Onondaga County Soil & Water Conservation District, Syracuse Research Corp., and Clough Harbor Associates. These participants were selected for their history of hiring ERFEG alumni and their status as alumni and professional engineering leaders. Feedback was received from several small focus group discussions, and was then shared among the whole audience of faculty and business leaders gathered at a private meeting room of Coleman’s Authentic Irish Pub. Dr. Charles M. Spuches, associate dean for educational outreach, instructional quality improvement and instructional technology, guided the focused discussions toward questions of:

- What qualities of recent graduates are currently most important in an engineering firm’s decision to hire entry–level employees?
- In what areas is improvement needed to satisfy these qualities? and
- What challenges and opportunities face the ERFEG program?

While there were more questions on the agenda, these were the only ones addressed before the meeting ended at noon and participants broke for lunch.

Given the breadth of experience of attendees, and the openness of the questions, consensus was not necessarily achieved on ranking of suggestions. There was, however, a general agreement upon a common list of advice.

Regarding important qualities, the advice included: technical expertise of engineering practice, strength in scientific disciplines underlying engineering, demonstrated business and organizational skills, strong communication and teamwork skills, and personal initiative and ethics.

For the more probing question on areas ESF can improve, individual leaders suggested emphasis was needed in the aforementioned areas.

The age group of those providing the advice, as might be predicted, could generally stratify advice to our students and curricula. Younger members suggested students learn specific engineering applications or techniques, reflecting the current tasks of the recent hires. Those with five to 15 years of work experience suggested the curricula focuses on unifying general principles. The details, they said, could be taught on the job, likely the domain of project managers. More senior managers suggested more management, economics, personnel training, and which would address common tasks at that level. It was joked that those approaching retirement would recommend more curricular attention to humanities and classics, providing enrichment for an engineer with idle time.

For the question of challenges, leaders were complimentary of the program’s technical preparation and accreditation to handle the future. Specific and helpful advice was offered. Included was the suggestion students get more internships and co–op experience; that they develop portfolios of illustrative work for demonstration during interviews, and that the school consider the perceived competitive disadvantage of a “forest engineering” degree title compared with a more generally understood “environmental engineering” degree. Your feedback as ERFEG alumni is also welcome on this topic.

Questions asked of the group were intended to reveal our program’s weaknesses and strengths, as perceived from the vantage of the professional community. The intent is to fit the feedback into our curriculum as best we can. While it was clearly helpful, our curricula have only limited room for additional courses, after satisfying requirements of the Accreditation Board of Engineering Technology, criteria of the SUNY general education initiative, and ESF and faculty professional and academic expertise.

Additional opportunities for incorporating the professional suggestions were acknowledged, and in many cases were already in place but not formally identified. These include:

- Design class projects that promote technical, interdisciplinary, teamwork, budgetary, project planning, and oral and written communication skills;
- Use of the students’ nonclass time, via clubs, internships and independent work, to listen to professionals, visit projects and learn skills; and
- Production of a booklet reminding students where they can find professional development within their curricula and other programs on and off campus.

The faculty has already scheduled a follow–up work session to prepare a booklet providing undergraduates with the specific and targeted wisdom imparted by these professional engineering experts. It is sound advice, and it comes from those that care for our students after graduation.

Do You Read Me?

We’ve discovered a few glitches in the Office of Alumni Relations’ database, especially regarding undergraduates who stayed on for graduate work. Upon completion of the graduate degree, the graduates were recoded from FEG to ERE. The ERE designation could be ERE, or ERE-FEG. If the code was the former, the names and addresses were not included in the mailing labels we requested.

The problem was discovered this past winter when local alumni asked why they hadn’t received the newsletter. We went back and checked all the names coded as ERE, and had Alumni Relations recode our graduates to ERE-FEG. Therefore, some of you are receiving this as your first issue. If so, let us know and we’ll mail you the first two issues.

Alumni can update address information online, by going to the college Web site at www.esf.edu and following the links to the Alumni page.

By James M. Hassett
One of the most significant projects addressed by SUNY-ESF's capital plan has been the much needed renovation of Baker Laboratory. The renovation is scheduled to occur in three phases over several years due primarily to the need for surge space and funding constraints.

The first phase started in March 2000 with the award of an $8.5 million contract to Mun-nane Building Contractors. This phase, expected to be completed this summer, has focused on the rehabilitation of the one-story section of the building to house laboratories, classrooms and temporary department and faculty offices for the Faculty of Construction Management and Wood Products Engineering.

Also it will contain a 134-seat lecture hall, an 84-seat lecture hall and a 32-seat class-room. These areas will be outfitted with the latest in instructional technology; the 84-seat lecture hall also will be equipped for distance-learning applications.

The one-story wing also will house three temporary classroom/clusters for Academic Computing and temporary equipment repair shops for Analytical and Technical Services.

The completion of the first phase project will enable the college to vacate all but the first floor of the four-story portion of the building, using the newly renovated one-story wing as surge space for the other occupants.

The second phase project, currently in the "design development" phase of planning, is scheduled to be bid in February 2002, with work expected to begin by April 2002. This part of the project focuses on rehabilitating the exterior shell of the four-story building and will include installing new mechanical service towers, replacement of the exterior wall system and installation of a new main entrance and atrium on the north side of the building, facing Syracuse University's Hendricks Field. Approximately $3.4 million in the current capital budget is dedicated to the second phase project.

Although the schematic design of the entire project was accomplished in the first phase project, the detailed design and construction of the third (and final) phase of the renovation of Baker Laboratory is dependent upon funding in the college's next five-year capital plan through the State University Construction Fund. Receipt of that funding is anticipated in the 2002-2003 fiscal year.

The third phase project will gut and rehabilitate the interior of the four-story building to establish permanent facilities for Academic Computing, Construction Management and Wood Products Engineering, Analytical and Technical Services, and the Faculty of Environmental Resources and Forest Engineering.

Also included in the final phase will be reconfiguration of the temporary spaces in the one-story wing and first floor to accommodate permanent laboratories and classrooms once the temporary occupants can be relocated to their permanent facilities. SUNY-ESF anticipates the third phase project will cost $15 to $17 million and expects to complete this work by 2007.

By Brian D. Boothroyd, Physical Plant

**SHORT TAKES**

Our newly minted alumni (classes of 2000 and 2001) have begun to make their mark on the world. Following is a list of some of their activities.

**AUGUST 2000**


Major Professor: James M. Hassett and Siddharth G. Chatterjee

**Susana McIntyre,** Master of Professional Studies.

Major Professor: Douglas J. Daley

**DECEMBER 2000**


Major Professor: Paul F. Hopkins

**Geoffrey Graeff,** Master of Professional Studies.

Major Professor: Robert H. Brock, Jr.

**Joseph Salinas,** Master of Professional Studies.

Major Professor: Paul F. Hopkins

**MAY 2001**


Major Professor: James M. Hassett


Major Professor: Douglas J. Daley


Major Professor: Charles N. Kroll

**Adilfo Lemus–Pineda,** Master of Science. Thesis title: "Evaluation of Food Scraps–Derived Compost for Ornamental Crop Production."

Major Professor: Douglas J. Daley

**ERFEG Students Capture Awards**

A number of ERFEG students have been recognized for their academic accomplishments this year. Joana Luz, an ERE Ph.D. student working with Dr. Charles N. Kroll, was awarded a fellowship by the Brazilian National Council of Scientific and Technological Development. This is the highest award for graduate study given by Brazil, with only 200 awarded in 2001 for study throughout the world. Luz’s dissertation topic is “An Investigation of Improvements in Low Streamflow Prediction.”

Karen Ann Sinks was recognized at the May Convocation as the top graduating forest engineer. Sinks, who earned a 3.94 GPA, is from the Syracuse area. She graduated from Bishop Lud-den Junior–Senior High School in 1997 as the school’s salutatorian, and entered ESF that fall.

Joana Luz

While here, Sinks worked as an undergraduate research assistant with Dr. Kroll. Three 2001 Alumni Scholarships were awarded at the Forest Engineering Club Banquet, held in April. This year’s winners were senior Thomas DeJahn, junior Enrico Ochiai, and sophomore Edward Myers. We congratulate these individuals and look forward to their continued academic and professional excellence.

The Central New York Region of the ASPRS sponsors a Student of the Year Award, issuing first- and second-place prizes to both undergraduate and graduate students. This year, students from ERFEG received both the top prizes. Cheng Zhu, a Ph.D. student working with Paul F. Hopkins, received recognition for her scholarly activities including a recent presentation at the national ASPRS conference on using satellite radar imagery to improve forest classification. Enrico Ochiai, a junior, won the award as the top undergraduate student in the region. Ochiai plans to apply her photogrammetry and remote sensing skills to issues relating to flood control. Both students received a cash prize and a one-year membership to ASPRS.

**Alumni Reception**

While alumni reception was held on campus April 20, coinciding with the spring meeting of the ERFEG Advisory Council. The reception was attended by Provost William P. Tully and SUNY-ESF President Cornelius B. Murphy, Jr. who addressed attendees. We were happy to touch base with numerous alumni, and hope the turnout to future events will increase.
Imagine ESF in the Year 2020

“A Strategic Plan has been described as a "Navigational Tool" which assists the College to chart its path through minefields of distractions toward a vision that paints a picture reflecting the aspirations of the College Community,” states SUNY–ESF President Cornelius B. Murphy, Jr. in his strategic planning handbook introduction.

ESF’s strategic planning initiative is appropriately named Daring to Dream and is a way of finding the best future for ESF and the best path to reach that destination.

This process entails self-assessment, developing a better understanding of what the internal and external members of our college community value, and developing a vision for the future that builds upon our strengths, revitalizes our mission, and serves our students, funders, and other stakeholders.

Our process is planned in the five phases. In the first phase, Getting Organized, we explored barriers and benefits to planning at ESF, adopted a planning model and approach, and outlined specific activities.

The second phase, Taking Stock, began in April 2001 and will be completed in December. An important aspect of our approach is the Strategic Planning Council (SPC). The SPC will take shape and become active during this phase. The SPC is comprised of college employees as well as individuals who represent key stakeholders.

Specifically, one or more individuals will represent each of the following groups:
- Academic and Administrative Leaders
- Alumni
- Board of Trustees
- Classified Staff
- College Foundation
- Faculty/Faculty Governance
- Graduate Assistants
- Graduate Students
- Professional Staff
- Research Assistants
- Undergraduate Students

According to Dr. Murphy, “Bottom line—we need to move ahead with passion; we need to paint the picture; we need to articulate the vision; and we need to start now!”

Ideas and information generated from our efforts are available at the Daring to Dream Web page at http://www.esf.edu/ideas/html/daring_to_dream.htm. Or you may access it directly from the ESF homepage (www.esf.edu); click on the Daring to Dream logo at the bottom of the page. Please feel free to e-mail any comments to us from the Daring to Dream Web page or daretodream@esf.edu or direct comments to James Hassett at jhassett@esf.edu.

Dr. Charles M. Spuches, Associate Dean for Educational Outreach, Instructional Quality Improvement and Instructional Technology

Bob named ASPRS Fellow

Robert H. Brock, Jr. was named a Fellow of the American Society for Photogrammetry and Remote Sensing (ASPRS) at a reception in St. Louis, Mo., April 26. ASPRS is a nationwide association aimed at advancing knowledge and improving understanding of the mapping sciences.

Brock was one of only two people in the nation to be elected to the prestigious rank of Fellow this year. The award is given to active Society members who have performed exceptional service in advancing the science and use of the mapping sciences.

Brock began teaching at Syracuse University in 1959 and joined the ESF faculty in 1967. During his career, Brock has taught more than 2,000 students at the undergraduate level and 500 students at the graduate level.

Throughout the more than 40 years he has worked in the mapping sciences, Brock has written numerous journal articles, papers and reports in the areas of image analysis, image measurement, analytic mapping systems, system calibration and global positioning systems. His work also has resulted in several patents.

Brock Named ASPRS Fellow