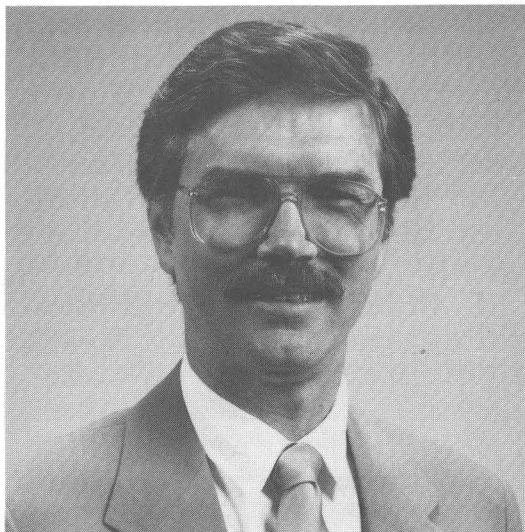


## Stanfield Confirmed as Deputy Director

The Department of Energy (DOE) has concurred with Fermilab Director John Peoples' appointment of Kenneth C. Stanfield as Fermilab's Deputy Director, effective July 1, 1989.

Stanfield, who received his Ph.D. in physics from Harvard University in 1969, is an experimentalist who led a number of investigations at the Argonne National Laboratory ZGS and at Fermilab. He joined the Fermilab staff in 1977 as a physicist in the Proton Laboratory, where he addressed the problems associated with preparing that group for the era of Tevatron experiments.

In his letter to Andrew Mravca, DOE Batavia Area Office manager, seeking DOE concurrence of Stanfield's appointment, Peoples noted that Stanfield's "work on the Wide Band Beam was particularly valuable as it became one of the four major beams built as part of the Tevatron II project. The Laboratory quickly recognized his management skills, and he was appointed in succession to the position[s] of Associate Department Head of Proton, Department Head of Proton, and Head of the Experimental Areas Department. . .



*Kenneth C. Stanfield*

[where] he was responsible for merging the three experimental areas. . . into a coherent single department. . . He carried out the merger very smoothly and successfully. The large powerful fixed target experiments are sufficient testimony of the effectiveness of the merger. In this work he had to use his very fine skills as a communicator and persuader to make the disparate coherent."

In the fall of 1983, Stanfield became Head of the Business Services Section. In 1984, he was appointed Head of the Research Division, where, again quoting from

Peoples' letter, he "refin[ed] the organization of the Research Division to meet the challenges of the changing experimental environment. . . Of particular note was his creation and subsequent strengthening of the Research Division support departments and the integration of the two large collider collaborations into the fabric of the Laboratory."

In addition to, as Peoples put it, being "my backup in every way when I am absent," Stanfield will also be the Lab's primary contact with the DOE Program Office in Washington, D.C.; will be responsible for the initial fielding of requests for help from Fermilab generated by the SSC Laboratory; will resolve major issues between Fermilab and experimenters; and will direct the preparation of long-range plans, such as the Lab's 15-year plan and Fermilab's annual budget request to DOE.

"I believe," wrote Peoples, "that Ken together with [Associate Directors] Rich Orr and Dennis Theriot, will give the Directorate balance and strength in administration, technology, [and] planning and thus enhance our chances for a long prosperous scientific future."

## Summer Intern Program is a Historic Success

Fermilab has been investing in the futures of bright, qualified scientists for nearly 20 years, through its Summer Internship in Science and Technology Program. Administered by the Fermilab Equal Opportunity Office (EOO), the Program brings promising minority

undergraduates in physics, engineering, and computer science to the Lab each summer.

Students spend 11 weeks at the Lab, working with a supervisor on an on-going research project. The supervisor may assign an individual project or a small piece of a

larger research project. Finley Markley (TS/Engin.), chairman of the Program committee, emphasized that whatever the students work on must contribute positively to their education. "We expect the students to be productive and helpful in their

**Cont'd on page 5**

## Chamber Music Series Subscriptions Go on Sale

Outstanding musicianship, innovative programming, and good value await subscribers to Fermilab's fifth annual Chamber Music Series. The Fermilab Auditorium Committee has worked extra hard to assemble three stimulating ensembles who have caught international attention. Look what we've arranged!

**New York Woodwind Quintet**, Saturday, November 4, 1989, at 8:00 p.m.: It's the first chamber concert of our season, the first time we've featured a woodwind quintet, and a first-class ensemble! Recognized as one of the world's pre-eminent chamber ensembles, the New York Woodwind Quintet performs the music of Beethoven, Francaix, and Mozart with "technical acumen and virtuoso interpretation, and... with love."

**Leipziger Bach Collegium with Ludwig Guttler**, Saturday, January 13, 1990, at 8:00 p.m.:

Highlighting an evening of Baroque ensemble music by the seven-member Leipziger Bach Collegium is the ensemble's conductor and trumpet soloist, Ludwig Guttler. These are the comments typical of the critics: "Guttler's outstanding musical personality expresses itself through his perfect and poetic trumpet playing" and "I have heard fine Baroque trumpeters... but Ludwig Guttler, the contemporary phenomenon from Leipzig, puts all of them, to date, in the shade!"

**An Die Musik - The Composer's Composer**, Saturday, April 7, 1990, at 8:00 p.m.: "To Music" translates their name, and "to composers" toasts An Die Musik. Musical themes of past composers have inspired Dave Brubeck and Andre Previn to write new works for An Die Musik, and this unique program will feature both these new works and the music on which

they were based. The five members of An Die Musik (oboe, piano, and strings) have been described as "endearingly energetic and intimate" and possessing "authoritative command and beauty of tone and style."

Take advantage of the special series subscription price of \$27 and ensure the seats of your choice by purchasing your Chamber Music Series tickets immediately. Subscription orders are available by mail only and will be filled in the order they are received. Single tickets are not available until October 1st. Your canceled check will be your receipt, and your tickets will be mailed to you. For further information, phone ext. ARTS weekdays between 10:00 a.m. and 12:00 noon, or 1:00 and 4:00 p.m. Please remember that no subscription orders can be taken by phone.

- Tammey Kikta

---

## Participants Sought for "Making Strides" Against Cancer

"Making Strides," an American Cancer Society event "to raise money and awareness to beat cancer," will take place at Fermilab on Saturday, September 16, 1989, rain or shine.

"Making Strides," a non-competitive "move-along-athon" around the Main Ring Road, is a chance for everyone, including cancer patients, recovered cancer patients, and their families and friends, to raise funds while celebrating the hope that cancer can be beaten.

Whether you run, walk, ride a bike or a wheelchair, skateboard, roller skate, or dribble a basketball, you're welcome to join in at your own pace. Because "Making Strides" is a non-competitive event, you

don't have to finish the course. Everyone is a winner!

Ask your friends, relatives, and co-workers to make a donation in honor of your efforts, regardless of the distance you cover. Please be sure to bring your collected donations and \$5 registration fee with you when you register. Checks should be made payable to: American Cancer Society/"Making Strides."

In addition to exciting door prizes, music, and free food and drinks, all registrants will receive "Making Strides" shoelaces. Those who collect \$50 in donations will receive a "Making Strides" T-shirt; those who collect \$150 in donations will receive a "Making Strides" sweatshirt.

Also included in the events will be an exhibit by the Fermilab Neutron Therapy Facility, with staff on hand to answer any questions, and displays by Service and Rehabilitation and Public Volunteers.

For more information, call (312) 879-9009 or 1-800-942-6985.

Registration will be outside Wilson Hall from 9:30 a.m. to 10:30 a.m. Starting time will be from 10:30 a.m. to 11:00 a.m.

---

## The Film Society...

... presents the 1983 Australian comedy *Man of Flowers* on September 22, 1989, at 8:00 p.m. in Ramsey Auditorium. Admission is \$2 for adults, \$.50 for children.

# Drawing the Line on Waste

Look around. Sometimes, in spite of our best efforts, it seems that our depredations against our environment get worse instead of better. We no sooner make headway against auto emissions than we must be concerned about depletion of the ozone layer and the Greenhouse Effect. We begin to see progress toward cleaning up our water, and up springs the problem of finding adequate space for our waste products.

Now look around a little closer, at your work place, for instance. Are you really thinking about the materials and products you use each day? Are you making the best choices possible, not only in terms of getting the job done, but also in consideration of our environment? For example, many of us use freon to clean metal parts. It's a great solvent and it's non-flammable. It's also harmful to the ozone layer. Look around for a substitute, a detergent, something like Simple Green, which is biodegradable.

Congratulations, you've just become an active participant in Fermilab's waste-minimization program, the latest salient in the war for the preservation of our environment. Fermilab achieved a 17% reduction in hazardous waste production in 1988 as compared to 1987. We hope to continue this downward trend in 1989 with your help. As part of our compliance with the reporting requirements under the Superfund Amendments and Reauthorization Act (SARA) of 1986, the Fermilab Safety Section is compiling a list, and an inventory, of chemicals used here at the Lab. The list will be submitted to the county chairmen in DuPage and Kane counties to assist them in preparing their emergency response plans. The inventory will be used to further reduce the generation of hazardous waste at Fermilab.

(A word about hazardous waste. Hazardous waste is construed in the Superfund legislation to include such substances as solvent, battery acid, and other items found in manufacturing and research, and even in households and garages. These are the hazardous-waste products most prevalent at Fermilab.)

We will all derive another benefit from the aforementioned inventory: improved safety. The Safety Section, together with Division/Section safety groups, will review the list of chemicals in order to pinpoint potential hazards and recommend safer alternatives. The Occupational Safety and Health Administration has required that material-safety data sheets (MSDS) be sent to customers along with any purchased chemical. The Safety Section asks that you forward copies of any MSDS's you receive to your Division/Section's safety

officer. This will afford the responsible safety personnel an opportunity to keep track of chemicals in use and help them help you avoid potential problems. MSDS's are also forwarded to the Safety Section for distribution to other Divisions/Sections.

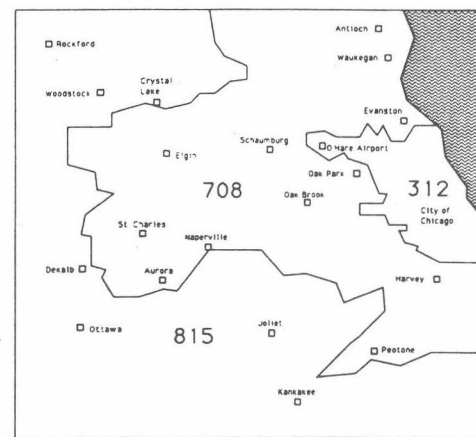
Your safety officer can help you find answers to questions about the safety of a particular chemical before you use it, and can also help you avoid inadvertently ordering or using a hazardous material. But obviously, they can't help if they aren't included in your plans. Remember, the safety personnel at the Lab really do want to help you work safely and assist you in furthering Fermilab's commitment to waste minimization.

- Sam Baker

*Next issue: Controlling chemical hazards*

## Notice to Telecom Users

Fermilab's area code is changing from 312 to 708 on November 11, 1989. Individual 7-digit telephone numbers will not change, nor will FTS numbers. Users receiving non-FTS calls can still be accessed from outside the 708 area code by dialing 1-708-840-present extensions. Please advise appropriate business contacts outside the Lab, and reflect the new number in business cards and other correspondence as necessary. The illustration to the right shows the geographical area affected by this change. - Carolyn Hines



## Barnstormers Will Rally

The Fermilab Barnstormers will host the fifth annual Giant Scale Rally Fun Fly on Sunday, September 10, 1989. The event will be held at the Barnstormers' flying site, north of the Pioneer Cemetery. These are the largest radio-control

aircraft, flown by some of the most experienced people in the Midwest.

Pilot registration opens at 8:30 a.m., and the flying begins at 9 a.m. Spectators are welcome and tasty refreshments will be available.

- Jim Zagel



## Alert! Site-Wide Emergency Drill Is in the Offing

The office of Emergency Services has scheduled a site-wide emergency drill for the week of September 18th, 1989. The Fermilab Emergency Plan requires that such a drill be conducted annually as both a training exercise and an evaluation measure.

The primary purpose of the drill is to determine the adequacy of the emergency plans and the readiness of participants to carry out their responsibilities under something approaching actual conditions. A drill is pre-planned and announced, whereas a test is generally a surprise event.

The scenario for this month's drill is as follows: An accident in-

volving a non-Fermilab chemical tank truck crossing the site will be staged on "D" road. The tanker is believed to be carrying hazardous material. A cloud or "plume" results from the spill and is carried downwind necessitating the evacuation of some buildings in its path.

This scenario will demand a variety of different responses and actions from those involved: traffic control; initial determination of the type of cargo and the nature of the hazard; activation of the Emergency Operation Center; notification of emergency responders; medical response; call-in of mutual aid agencies; evacuation; personnel control and accountability; and cleanup. The

entire drill will be monitored, discussed, and evaluated.

Emergency Services, including the Fire Department, the Security Department, the Communications Center, and the Road and Grounds group, will play a major role in the drill. In addition, there will be active participation by the Laboratory's Safety Section, various senior safety officers, and local emergency wardens. Personnel in the areas to be evacuated will also be involved.

The blockage of "D" road east and west of the Industrial Area for about two hours will be the major impact for employees not directly involved in the drill.

- Barbara Lach

## New Book in Public Info

*From Quarks to the Cosmos: Tools of Discovery* is the title of the latest book available for purchase (\$32.95) at the Public Information Office.

Leon Lederman and David Schramm of the University of Chicago are the co-authors of this handsome book whose theme is the relationship between particle physics and cosmology.

The authors describe the key experiments and the fundamental theoretical predictions of the infinitesimally small world of "inner space" and the incredibly large world of "outer space." Written with elegance and eloquence, *From Quarks to the Cosmos* . . . vividly portrays the excitement of current researchers' attempts to develop a "theory of everything." A vivid collection of illustrations and photographs - many from Fermilab! - accompany the text. - Barbara Lach

Length of the entry for the word "set" in the 1989 Oxford English Dictionary, in pages: 60

## In the Library

### Preprints

Now available on the FNAL Cluster is the weekly list of preprints received in the Fermilab Library. The current display of preprints is changed on Tuesdays. Usually, the FNAL list will be updated on Thursday nights.

\$ Setup Preprints

\$ Preprints

### SPIRES Help

Online HELP is now available on the FNAL Cluster for SPIRES and QSPIRES.

\$ Help Spires

\$ Help Qspires

### Online Databases

The Library has access to numerous databases providing references to literature on a wide range of subjects. Results of these searches - in the form of bibliographies, often including abstracts - can be sent to your FNAL account.

For more info, contact Paula Garrett, ext. 3401, or FNAL::PGARRETT. - Paula Garrett

## Benefits Notes

### Open Enrollment (Medical Plan Election) -

It's that time of year again when employees have an opportunity to choose which medical plan they want for their medical coverage. This year, the Laboratory continues to offer the Connecticut General Plan, Anchor/Access, Dreyer HMO, HMO Illinois (HAP), and Cigna/Access. A summary and comparison of the medical options will be mailed to employees' mail stations. Employees should review the information with their families.

The HMO representatives are scheduled to meet with employees in Ramsey Auditorium on Wednesday, September 13, 1989, at 8:00 a.m. and 10:30 a.m., and Thursday, September 14, 1989, at 1:00 p.m. and 3:00 p.m. Employees considering an HMO should attend one of these meetings. Spouses are welcome. - Paula Cashin

Portion of all U.S. coastal waters that are too polluted for commercial shellfishing: 1/3 - Harper's Index

### **"Intern" cont'd from page 1**

program," said Markley, "but we also expect the reverse. That is, the supervisor should also be helpful and productive in the students' efforts to acquire some knowledge about science. We want them to participate in a research project."

In addition to the research project, students attend weekly lectures and prepare a final paper and presentation based on their project. Dianne Engram, of the EEO, sees the lecture series as particularly beneficial. Each lecture addresses a different area of research taking place at the Lab. "While they're here," said Engram, "they're not just exposed to the one area that they work in, but throughout the ten weeks they get a fuller understanding of the scope of the research at a laboratory of this size." Markley added that the final presentation and paper are also very important aspects of the program. "Both the paper and the oral presentation give students some experience doing the kinds of things they're going to have to do during their professional lives."

Aggressive recruiting ensures that the top students participate in the program each summer. A committee of approximately seven Fermilab staff visit campuses across the country every fall and winter, interviewing students recommended by their departments. Committee members target schools with high minority enrollments throughout the nation and Puerto Rico. But, as Markley points out, if the committee hears of a single interested and qualified student at a particular university, "we will still certainly try to make contact. We'll do whatever is necessary to find good students."

Jim Davenport, Chairman of the Physics Department and Professor of Physics at Virginia State University, coordinates the Summer Internship Program. Davenport has been involved in the program since its beginning in 1970. In addition to advising students on educational and scientific issues, he serves as a link between students and their supervisors, and recruits

Fermilab staff to give the weekly lectures. As a member of the program committee, Davenport also recruits new students in his area of the country.

Regardless of course of study, the students enrich and enliven the Fermilab environment. Said Markley, "With the students you get things done that you otherwise would not have considered tackling. You may have to work a bit harder to both advise the student and get the work done, but it does get done, and wouldn't have otherwise." The energy and enthusiasm of the students also contribute to the working atmosphere of the Lab. "Just having a lot of bright, eager young minds around, asking questions of people and stirring things up, gives us a little bit of the kind of excitement that you would find on a university campus," said Markley.

Spending a summer at the Lab may lead to permanent employment, as Geraldine Royal Hopkins discovered in 1978. Hopkins had recently graduated as a physics major at Dillard University in New Orleans. She had been interested in Fermilab ever since reading a magazine article about a female postdoc at the Lab.

"At the time," explained Hopkins, "I was interested in the environmental aspects of physics, so I was assigned to the Radiation Physics Group. I collected silt samples and did spectrometry analysis on them, checking radioactive exposure to the environment. The experience motivated me to try and stay on at Fermilab."

Shortly after her internship ended, Hopkins began work in the Accelerator Division Operations Group. Her internship gave her a heightened awareness of safety issues on her new job. The internship also increased her confidence in her abilities and gave her "an overall picture of the functioning of the Lab." Hopkins currently works in the Accelerator Division Controls Group.

Hopkins said she would definitely recommend the Summer Internship Program to others. "From what I hear among the people working currently with the program, and from the newer

students in recent years, the program has gotten even better since I was in it. There seems to be an even closer networking between the students, Jim Davenport, and the supervisors."

The Summer Internship Program also serves as a direct conduit for the Universities Research Association Graduate Minority Fellowship. URA Fellowships are awarded to physics students who show potential as scientists and who have participated in the Summer Internship Program. The amount of the Fellowship varies, but "the Fellowship is intended to give the student enough money so that they will not have to work while going to school," said Markley. The Fellowship ensures that the student can dedicate himself or herself exclusively to course work and research.

Feedback on the Summer Internship Program has been consistently positive, both from the professors of participating students and from the students themselves. "Their professors specifically see an improvement in the students' understanding, and an improvement in their attitude," said Markley. "Also, it is almost unanimous that when the student goes back enthused about the exciting scientific summer he or she has had, the next year we are almost overwhelmed with students that want to come and join Fermilab." - *Christine Grusak*

### **Hospice of DuPage Seeks Volunteers**

On Tuesday, September 19, 1989, Hospice of DuPage will begin its fall training class for volunteers. The classes will continue on Tuesday evenings from 7:00 p.m. to 9:30 p.m. for nine consecutive weeks through November 14, 1989.

Hospice volunteers are an integral part of the team providing support to terminal patients and their families.

If you are interested in learning more about hospice volunteerism, please call Hospice of DuPage at 469-5556.

## ✿ NALREC News

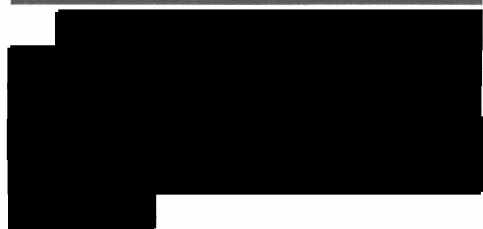
Wow! What a party that Taste of Fermi was. I believe everyone had a perfectly grand time except the poor folks serving the tacos. (Why didn't someone tell me that *everyone* would want a taco?) Everyone seemed to agree that Taste of Fermi is much better than an all-day picnic. We probably will do it again next year, but it will be bigger and better because NALREC learned a lot this year. Those of you that came, plan on attending next year, and let those that didn't show up know how much fun it was.

Gary Smith is chairman of the **September Social Hour** to be held on September 29, if everything goes well. He is still recovering from the party mentioned above so he does not have any solid plans as yet. If you have any suggestions, please call him at ext. 3878.

John Satti is chairman for NALREC's version of **October-fest**. Watch *FermiNews* and the posters for more information concerning this party

That's it for now. A big "thank you" to all the folks who made Taste of Fermi a great success. - *Trudy Kramer*

## ✿ Congratulations to:



Rank of the works of the Disney Company and V. I. Lenin, among those most widely translated: **1, 2**

Number of butterfly parks in the U.S.: **3**

Percentage of all animal species worldwide that are beetles: **40**

## ✿ Activities Office

### The Recreational Facility -

Are you mentally exhausted but unable to sleep? Do you avoid stairs even for one or two flights? Does unexpected exercise such as mowing the lawn or painting a room leave you achey or tired the next day? Do you suffer from backaches or headaches? Are you dissatisfied with your figure? Do you need a holiday to feel restful and invigorated? At the end of a tiring day, do you sit slumped in a chair, exhausted and left with the feeling you're not getting as much out of life as you should?

If your answer to only one of these questions is yes, you could benefit from daily exercise. Once you start to devote 10, 20, or even 30 minutes a day to an exercise program, you will begin to reap the benefits. You will feel less tired, look younger, the little aches and pains will disappear, and you will be able to better meet the demands of your busy life.

At the Fermilab Recreational Facility, you will find exercycles, an eight-station Universal machine, a free-weight system, Nordictrack, Concept II rowing machine, aerobic classes, karate lessons, basketball and volleyball leagues, tennis, and much more. The Facility is open to members 24 hours a day, 7 days a week.

Memberships will go on sale for the new year on September 11, 1989, in the Activities Office, WH1E. Memberships are \$35 per year, \$20 for students. For more information call Jean Guyer, ext. 3126. - *Jean Guyer*

*FermiNews* is published by the Fermilab Publications Office, P.O. Box 500, Batavia, IL, 60510 (312)840-3278 - Fermilab is operated by Universities Research Association, Inc., under contract with the United States Department of Energy.

## ✿ Cla\$\$ified Ad\$

### FOR SALE Motorized Vehicles

1979 HONDA ACCORD LX, 2-door, 129K, some rust, manual trans., runs well, new exhaust and radiator, good tires. \$400 or best offer. Call Leigh at ext. 2116 or 406-9144 evenings.

### Miscellaneous

SNOW BLOWER, 4 h.p., 2-stage, needs minor repair, \$60. TWIN-SIZE BED with bookshelf head board, \$50. GAS STOVE, 30 inch., \$50. COFFEE MAKER, single-cup drip, \$10. Call Ron L. at ext. 3011.

WEDDING RING/ENGAGEMENT SET, traditional, solid white gold with 6 excellent quality diamonds. Engagement ring has 1/4+ carat center diamond and 2 7-pt. side diamonds. Wedding band has 3 7-pt. diamonds. Purchased at \$1500 - selling for \$750 or best offer. Serious inquiries only. Laura or Ann at ext. 3049 and ext. 4444.

QUEEN-SIZE OAK WATERBED with 6-drawer pedestal, includes insulating liner and heater. \$200 or best offer. 8-TRACK players, 2, one with FM stereo, both free to a good home. Call Jim Zagel at ext. 4076.

B-FLAT CLARINET, Selmer Signet, resonite with case, includes cleaning brush, swabs, cork grease and lyre, \$95. Call Merle at ext. 3958 or after 6:00 p.m. at 964-0185.

THOMAS ORGAN, 2 manual plus 1 pedal keyboards, plays but needs work, \$100. DIABLO (Xerox) TYPEWRITER terminal with special table, \$125. DOG CRATE, German Shepard size, \$10. DOG CRATE, Husky size, \$10. CHAIN SAW, \$20. SCHWINN 20-in.-WHEEL GIRL'S BIKE, pink, training wheels, \$30. LADY'S SCHWINN BIKE, \$10. REFRIGERATOR, white, 9 yrs. old, \$100. 2 JACK STANDS, \$12. AUTO RAMPS, \$12. STEEL SHELF UNITS, \$10. BRASS LAMP, w/shade, \$15. Call Roy at ext. 3144.

6-IN. REFLECTOR TELESCOPE, with 3 eye-pieces, \$300 or best offer. Must sell! Contact Greg at ext. 4737.

FOOD DEHYDRATOR, \$40. VICTORIA STRAINER, \$20. STAR WARS DRAPES, \$15. COMMODORE 64 with disc drive and tons of software, \$150. 140 CANNING JARS, \$20. Call Greg at ext. 3011 or 557-2523.