CLEANER TIMES



Vol. 6, No. 5

U.S. Environmental Protection Agency

May 1977

EMSL On The Front Line: The Catalyst Study

Five years ago most of us had never heard of the catalytic converter. Now it's a household word.

Catalytic converter: it reduces emissions of carbon monoxide and hydrocarbons--cutting down on pollution from our automobile.

But shortly after adoption of the converter, concern was expressed about sulfuric acid emissions from catalyst equipped cars. Even though the catalyst reduced some harmful emissions, questions arose about the public health impact of $\rm H_2SO_4$ emissions.

That's when the Environmental Monitoring and Support Laboratory (EMSL) began one of the most extensive field studies ever undertaken--the monitoring of auto emissions on the Los Angeles freeway.

Charles E. Rodes has been the project officer on this 2 1/2 year study and EMSL recently arranged a two-day symposium where scientists from all over the country came to discuss the results.

Most importantly, data from the Los Angeles Catalyst Study (LACS) indicate that sulfate contributions from freeway traffic are substantially less than originally expected and do not appear to present a problem at this time. Other results from the LACS study indicate that emissions of carbon monoxide, lead, and particulates have decreased along the freeway by approximately 25 percent from 1975 to 1976. Background levels of these pollutants have remained essentially constant, although the study has shown a significant decrease in background levels of sulfates in the L.A. area.

The resulting decrease of CO and particulates are attributed to the catalyst, while the use of unleaded gasoline has caused the reduction in ambient lead. (continued on page 2)

The SASS Train

By Bill Kuykendal/Dorothy Rose



Jim McLean and Wayne Fowler

The SASS Train--does that conjure up visions of Xmas and a model train running around the tree in between the presents? Well, EPA's new SASS Train isn't a toy. It's a primary component in EPA's environmental assessment program.

In the next several years, a number of promising new energy conversion techniques will be developed and demonstrated. Many of these techniques will make use of our abundant fossil fuel resources and hold great promise toward alleviating the nation's reliance on foreign sources of energy. These same energy conversion techniques, by virtue of the fact they are new, pose an unknown potential environmental impact. Faced with the task of determining the extent of this environmental impact, the Industrial Environmental Research Laboratory (IERL) currently has underway a number of environmental assessment programs whose goals are to characterize the total emissions from specific processes.

Because conventional sampling and analytical methods were not suited for the comprehensive requirements of (continued on page 2)

(SASS TRAIN (continued from page 1) environmental assessment studies, IERL's Process Measurements Branch has developed a new approach.

The SASS Train has the primary function of sampling stacks which are the major source of air emissions in most processes. Since the idea behind the SASS Train is to detect all emissions, the system was designed to separate the sample into three basic fractions: particulates, organic vapors, and inorganic vapors.

The SASS Train extracts a sample using a conventional sampling probe heated to 200°C to prevent condensation. The particulate fraction of the sample is removed by three cyclones and a filter. This approach gives four particulate size fractions which is useful information in evaluating particulate collection device efficiencies. These four size fractions are selected in order to separate the particulate into respirable and nonrespirable size fractions which is also useful information from a health effects standpoint.

After removing the particulate, the filtered sample is cooled to 20°C and passes through an organic sorbent trap. This sorbent material has a very high affinity for organic vapors and effectively removes them from the gas stream for later analysis. The final element in the SASS Train is a series of four impingers placed in an ice bath. These impingers remove acid gases, vapor phase metals such as mercury, and water vapor.

A key element in the success of the SASS Train lies in the large volume of samples processed through the train. Since 30 cubic meters of sample are drawn through the system, it is possible to detect very low concentrations of any of the components of interest. Analysis is performed on each of the three fractions of the sample using techniques including spark source mass spectrometry, gas chromotography, low resolution mass spectrometry, atomic absorption, microscopy, and bioassay.

This approach is expected to yield the most comprehensive data to date to characterize the total emissions from stationary sources.

The SASS Train is commercially available from Aerotherm Division of Acurex Corporation and is built to IERL's specifications. High collection efficiencies for particulate, organic, and inorganic components have been demonstrated which makes this a very valuable tool in implementing a phased environmental assessment program.

Thank you Leona Colglazier for the following suggestion:

X - RATED

Giving Blood is for the mature only.

17 and up admitted without parental permission.

Call Public Affairs, ext. 2952.

SPEAKING ENGAGEMENTS

Vandy Duffield, HERL, spoke to a 9th grade social studies class at Githens Jr. High School May 10, on EPA/RTP.

Robert McCrillis, a mechanical engineer in the Metallurgical Processes Branch, IERL/RTP, presented an overview of EPA's program for research and development of technology for controlling air and water pollution from the iron and steel industry at the American Society of Mechanical Engineers Fifth National Air Pollution Control Symposium held in Pittsburgh, Pennsylvania, May 11-12.

Dr. Tom Wagner, HERL, will give a general overview of EPA in North Carolina to the Chapel Hill Kiwanis Club on May 31.

On October 17, Dennis Drehmel and James Abbott, IERL, will attend an ECE Fine Particle Symposium in Austria. They are co-authors of papers on Joint US/USSR tests of a hot-side ESP at Duke Power Company's Allen Plant and Joint US/USSR tests of a venturi scrubber at the Nikopol ferroalloy plant.

'Tis a Hard Day's Night

Someone has figured out that we move in our sleep on an average of once every 15 minutes. A person weighing 100 pounds, changing position 4 times an hour, would move 400 pounds an hour. If he spends 8 hours in bed, he will move 3200 pounds every night.

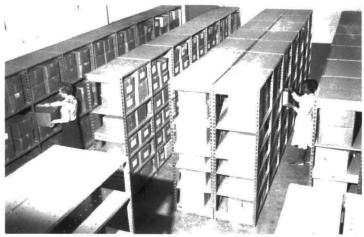
EMSL ON THE.... (continued from page 1)

By contrast, the background contribution of oxides of nitrogen increased 50 percent, from 38 to 56 micrograms per cubic meter, in the same time period. However, the catalyst was not designed to control for NO_{ν} emissions.

Charles said that Southern California was chosen for the study site because of the heavy traffic volume; total sulfur emissions from non-automotive sources are relatively low compared to the rest of the nation; and California's stricter standards for automotive emissions have resulted in a larger percentage of catalyst equipped cars on the highway.

Dr. Thomas Hauser, Acting Director, EMSL, said, "This study has provided the only EPA active information base specifically designed to monitor the impact of catalyst-equipped cars. The range of measurements coupled with the extensive quality assurance programs during the sampling and analysis processes will also assist EPA in examining a variety of equally important issues such as oxidant control strategy and establishment of a lead standard."

Operation Records Disposition



Storage and Retrieval System

Are you being inundated with mounds of memos, letters, and reports that are literally pushing you out of your office? Don't grieve--store and retrieve!

Are you aware that EPA has a comprehensive storage and retrieval program administered by Stacy Blackman, GSD/OA?

In a very simple manner you can make a cleansweep in your office. David Westmoreland has boxes in the warehouse. All you need is a standard supply requisition.

C. J. Snyder keeps a list of numbers for the boxes.

Once you have the boxes and a number, fill out a request for moving services and forward to John Bayer for box pickup.

In a large room in the Beaunit R & D Annex, lined with row upon row of shelves, your box of records will find a home in its proper numerical sequence.

Under the Freedom of Information Act, this room must be kept locked at all times. There is only one key available which is kept by Stacy. Once your materials are stored and you then find it necessary to retrieve a report, Stacy is only a phone call away.



C.J. Snyder (left) and Naomi Teasley (right)

North Carolina Legislation:

Bottle Bill Update



The Bottle Bill (H B #697, a bill to reduce litter and solid waste attributable to beverage containers at the source) was introduced April 1st by Rep. Charles Webb and sent to the House Committee on Water and Air Resources.

As we go to press, we find the bill has been killed. Each year in North Carolina, over 75 million beer and soft drink containers are littered on roadsides, beaches, parks, shopping areas, and private property. Laid end-to-end they would stretch from the Atlantic coast to the Tennessee border and back again five times.

These containers and their related materials comprise 20-60% of total litter depending on how it is counted. Cans account for 77% of the container portion, throwaway bottles 19%, and refillables only 4%.

In a recent speech EPA Administrator Costle said, "EPA is concerned with the conservation of resources essential to our well-being. Resources on which we depend, such as essential minerals and metals and energy from fossil fuels, are ultimately non-renewable, yet we consume—and throw away—these materials as though they were unlimited. In our hearts, we know that our "throw away" habit is not sustainable."

For a status report on bills in the North Carolina Legislature, call Raleigh, 733-7779, and ask for legislative information.

SHUTTLE BUS SERVICE

The Shuttle Bus Service has been in existence for approximately nine months and has been well received. As many as 50 people have used the bus in one day. Lewis Quinn, the driver, maintains a tight schedule and gets people where they want to go, when they want to get there. More people are encouraged to take advantage of this excellent service.

The CLEANER TIMES is published monthly by Public Affairs, Office of Administration, U.S. Environmental Protection Agency, Research Triangle Park, N. C. 27711

Liz Martin Editor
Dorothy Rose Assistant Editor
Elaine Hyman Reporter

Produced with the assistance of the Word Processing Center; Graphics, Composition, Printing Sections, and Forms and Publications Center, GSD.

Personnel Corner

Every employee should be sure that benefits under retirement, Federal Employee's Group-Life Insurance, and leave laws will be paid in accordance with his wishes. From time to time, there may be changes in employee's family status--marriage, death, births--which might affect his or her preference as to who should receive these benefits following his death. If he has not already designated a beneficiary, the following order of precedence will apply for the payment of lump-sum retirement benefits, group-life insurance, unused annual leave, and unpaid salary:

- 1. To your spouse;
- If there is none, then to your child or children in equal shares, with the share of any deceased child distributed among the descendants of that child;
- If none of these, then to your parents in equal shares, or the entire amount to the surviving parent;
- If none of these, then to the executor or administrator of your estate;
- If none of these, then to the other next of kin entitled under the laws of the State in which you lived.

It is not necessary to designate a beneficiary unless you wish payment to be made in a way other than the order of precedence shown above. Make a review of your situation now. If you want to make any changes in designation of beneficiaries, contact the Processing and Records Office, Personnel Management Division, extension 1321.

Person-to-Person

The Sound of Carolina Chapter of Sweet Adelines, Inc., Cary, North Carolina, won the small chorus award and its director won the chorus director award. Competition was held in Charlotte, April 15-16. There were 21 choruses competing. Velma Gray, CMD/OA, sings lead in the chorus. Anyone interested in singing with these gals can visit the Sound of Carolina Chapter on Tuesdays at 8:00 p.m., at the First United Methodist Church in Cary. It's a lot of fun and you can meet and sing with a group of tenors, leads, baritones, and basses in region 14 which encompasses North Carolina, South Carolina, Maryland, Virginia, Tennessee and D.C. Open House for prospective new members is being held at the church May 24. So come on out and be heard!

Dana Lloyd, OA/CMD, and her husband, Ronnie, are the proud parents of a little girl, Melissa Lee, born April 14, weighing 9 lbs. 13 ozs.

Brain Teaser

By Frank Clay (Roving Reporter)

The last "Brain Teaser" in the <u>Cleaner Times</u> had a typographical error in it which made the puzzle impossible to solve. The last line of that puzzle referred to <u>Ms.</u> Othamar having received a French oven as a birthday present when it should have been <u>Mr.</u> Othamar who received the French oven as a birthday present. (I'm a victim of Womens' Lib.) At any rate, here is a nearly identical puzzle.

Ms. Smith, Ms. Yancey, Ms. Baker, Ms. Idol, and Ms. Lancer all went shopping at Macey's. They bought a copy of Snoopy and the Red Baron, a pair of shoes, Oriental cookware, a riding crop, and a pair of water skis. Each lady bought only one item and went directly to the floor that sold the item that she bought. Everyone got on the elevator at the first floor except Ms. Lancer. A lady who was returning to get the car keys that she had left in the bathroom on the third floor also got on the elevator as well as an attractive young woman with long beautiful hair. The only married lady in the group bought a riding crop on the fourth floor while the lady who bought the Oriental cookware got off the elevator with the lady who left her car keys in the bathroom. Ms. Idol got off the elevator with the attractive young woman with long beautiful hair, while Ms. Smith was the last person to leave the elevator. If books are sold on the first floor; shoes are not sold on the fifth floor, and Mister Yancy received the water skis as a birthday present, what did each of these women buy?

To find the answer, simply list the names of the women in a column in the order given in the problem.

Then list the items purchased in a column beginning with the last item first. The item each lady bought will appear to the right of the lady's name.

Speakers Bureau Kit

The Public Affairs Staff has prepared a Speakers Kit to assist EPA employees who go out on speaking assignments. The Kit contains a general speech about EPA nation-wide and North Carolina in particular; a list of quotations and suggested openings; a film brochure and addendum; a "Request for Speaker" card and brochure describing Speakers Bureau; an evaluation form; a bibliography; and samples of selected handouts.

The Kit, designed as an aid to anyone making a presentation, is available to all EPA employees. Just drop a line to the Public Affairs office, MD-31, or call ext. 2951.

Dr. Norbert Jaworski, IERL/RTP, was the first speaker to use the kit and he said it was a big help. He said the students at N. C. State University were interested in the various publications; however, he thought they were more interested in careers at EPA.

State-of-the-Art

John Silvasi of Control Programs Development Division, OAQPS, has recently been elected secretary of the Durham-based North Carolina Lyric Opera, Inc. (NCLO). He and his wife, Kathy, have been actively associated with the NCLO since its creation over a year ago. They have served as advisors, photographers, writers, publicity assistants, and warm bodies.

John became interested in NCLO through his former violin instructor, Jerrold Posner, who is the general manager and a co-founder of NCLO. Jerry's wife, Katherine, is artistic director of the NCLO and a former national winner of the Metropolitan Opera auditions, perhaps the highest award that can be bestowed on an aspiring singer in the United States.

Opera is perhaps the most expensive and comprehensive of the performing arts. It combines drama, music singing, and even dancing in some cases, along with the visual arts such as in costumes and sets, and poetry. Will the fledgling opera company survive? So far, the company has had very limited resources to pursue operatic ventures, but NCLO is banking on the increasing popularity of opera. To quote from one of NCLO's proposals:

"Opera is catching on in America. There are now some 1400 locations in the United States where opera is given regularly. There are college and university productions, community and professional productions. Thousands of people, including an increasing number of young people, are fast becoming enthusiastic opera-goers...In an era when people want a sense of personal contact with the performing artist, it is not surprising that opera has become increasingly popular."

Last May, the NCLO staged its first production, Puccini's "Sister Angelica," an opera about a nun who has had an illegitimate child prior to entering the convent. John recalled that the performances were very moving. "My wife, who was taking photographs during the rehearsal, cried at the end of the rehearsal and at the end of each of the two performances," he reports.

Between 500 and 600 persons attended the two performances. The local newspapers gave very favorable reviews and hailed the arrival of the new opera company.

Although the NCLO has not yet undertaken a second production, a proposal for a mammouth project is currently under consideration for funding--the establishment of an annual summer festival of opera by 1978. The festival would combine performances of several operas accompanied by orchestra with an apprenticeartist program. The program would afford young artists an opportunity to study and perform in a highly professional environment with performers and stage direc-

tors from leading opera houses throughout the United States. The festival would employ the members of the North Carolina Symphony who are otherwise unemployed during the summer months.

The proposal has received enthusiastic endorsements from Governor Hunt; Sara Hodgkins, Secretary for Cultural Resources; John Gosling, Artistic Director and Conductor of the North Carolina Symphony and others.

NCLO has received a small grant from the North Carolina Arts Council to help defray costs while it seeks funding for the proposal.

John Silvasi and his wife have drafted portions of the proposal for the festival, which would have a first-year budget of \$500,000. "I have found that my writing experience in EPA has been of tremendous help in drafting material for the NCLO," John said. John's main responsibilities at EPA include drafting of regulations and guidelines concerning the state implementation plans required under the Clean Air Act. John has been with EPA since 1971, having spent his first year with EPA's regional office in Philadelphia before relocating to North Carolina.

THE STATE OF THE S

Merit Promotion Announcements

In order to provide up-to-date information about Merit Promotion Announcements, a special telephone number has been set aside where employees can call for information about the announcements that are open.

This service has been publicized by articles in the Cleaner Times, news releases to the local newspapers, publicized by an announcement EPA-Nationwide, and posted on bulletin boards. Despite these efforts, we are informed that not everyone is aware of the service. The number to call for information is extension 1339. The FTS number is 629-1339.

Although the service is intended to be supplementary to official bulletin board postings, it has complete and current listings. It's an easy way to be aware of promotional opportunities.

THE FOLLOWING AWARDS WERE APPROVED DURING APRIL 1977: QUALITY SALARY INCREASES:

William W. Rice - IERL

D. Bruce Henschel - IERL

Leslie E. Sparks - IERL

CONTINUED SUPERIOR PERFORMANCE:

Priscilla Smith - OAQPS/OAWM

Lillian A. Flanagan - HERL

Sara O. Pierce - IERL

PROFILE ROFILE Labeled Labeled

Linda Chaput

The old adage "You can't tell a book by its cover" is certainly true about Linda Chaput. Outwardly she is a very quiet,

reserved person but can become very intense when she thinks injustices are being performed. She will put as much effort into a program for Girl Scouts as writing a detailed technical report for her supervisor.

Linda graduated from the University of Florida with a B.S. in business education. Her first job was a library technician at NIEHS. From there she transferred to EPA as secretary to the Director, Office of Manpower Development, then became an education specialist in the Air Pollution Training Institute and presently is an environmental protection specialist in the Standards Development Branch (SDB), ESED/OAQPS.

Recently, Linda had an article published in the Journal of the Air Pollution Control Association on "Federal Standards of Performance for New Stationary Sources of Air Pollution: A Summary of Regulations." In SDB, she is currently working on a very interesting project concerning asbestos insulation and fireproofing which was used widely in the past on ceilings in schools and other buildings. There is a problem now as a result of deterioration of the sprayed-on material. Asbestos fibers, which are carcinogenic, are released into the air in buildings, creating a potential health hazard. SDB is investigating the problem and possible solutions.

Linda resides in Chapel Hill with her husband and two daughters, and is expecting another child sometime in October. She is a member of the Air Pollution Control Association and the OAQPS/Federal Women's Program Task Force. She was an alternate member of the FWP Advisory Committee. She has held the offices of Vice-President, Program Chairman, Legislative Chairman, and Representative to "North Carolinians United for ERA" in the Tar Heel Chapter of Federally Employed Women. In her spare time, Linda enjoys reading, crocheting, and knitting. She also serves on the Troop Committee of her daughter's girl scout troop.

Linda is a very positive person and in her own quiet way, she gets her point across and accomplishes her objectives.

Conferences

The National Conference and Exhibition on Technology for Energy Conservation will be held June 8-10, at the Sheraton Park Hotel, Washington, D. C. Papers will be presented from people and organizations who have had successes in conserving energy and can show significant energy...and dollar savings. Reliable estimates indicate that the country's energy needs could be reduced by 20 to 40% in residences and by at least 1/3 in industry. The presentations show how...NOW! Not in 1985 or 1990 but 1977. The Federal agencies will present their programs in energy conservation. They will discuss the internal measures as well as the millions of dollars in contracts and grants to develop and demonstrate techniques and systems to reduce energy consumption. Attendees will include local, state and Federal officials, manufacturers, architects, builders and retrofitting companies. For further information, contact the Public Affairs office, extension 2951.

اللاللاللاللاللا

An Urbanization and Pollution Seminar will be held May 29-31, at St. Jovite, Quebec, Canada, sponsored by the Quebec Section of the Air Pollution Control Association. Contact: Mr. Michael Farvacque, Canada Ciment Lafarge, 606 Cathcart Street, Montreal, Quebec, H3B 1K9, Canada.

اللاللاللاللاللا

The Manpower Technical Information Branch, OAQPS, is sponsoring two Fabric Filter Workshops, June 14-15 in Atlanta and June 28-29 in Philadelphia. For further information, contact the Registrar, Air Pollution Training Institute, MD-20, Research Triangle Park, North Carolina 27711.

22222222222222

EPA is seeking papers on the status, uses, problems, and needed improvements relating to emission factors and emission inventories for presentation at an Emission Inventory/Factor Workshop in Raleigh, North Carolina, September 13-15. Topics to be discussed include emission inventory procedures; emission factor development methodologies and applications; emission sources and factors; temporal and spatial relationships required for oxidant-related inventories and analyses or assessments related to the role of emission inventory activities in meeting ambient air quality standards for oxidants. Those wishing to prepare a paper should submit an abstract by June 1 to Emission Inventory/Factor Workshop, Air Pollution Training Institute, MD-20, Research Triangle Park, North Carolina 27711. Authors will be notified by June 15 of acceptance.

(Continued on page 7)



COUGH, COUGH: Federal Employees for Nonsmokers Rights are planning a class action lawsuit to force Uncle Sam to ban smoking in public areas of government buildings and enforce it where already banned. This article appeared recently in Mike Causey's column in the Washington Post.

Since the matter of smoking or not smoking in various areas is such a controversial one, the editors of the "Cleaner Times" decided to query some of our EPA employees. Seventy-five names were picked at random from the EPA telephone directory. We received 35 replies to the following questions:

- a. As a nonsmoker, how do you feel about people smoking in your presence?
- b. As a smoker, how do you feel about being restricted from smoking in certain areas, such as planes, elevators, cafeterias, etc.?

Here are some answers we received which we thought might interest our readers:

- l. "I am against smoking. I consider it a filthy habit that other people should not have to put up with that do not smoke. Breathing someone else's smoke to me is just as bad as smoking myself." anonymous
- 2. "As a former smoker, I respect the rights of others to smoke if they so desire. However, I think smokers should first ask if the smoke would bother those present before lighting up. I do not feel smoking should be allowed in certain areas such as planes, hospitals, elevators, and cafeterias." Naomi Teasley, OA
- 3. "It is common knowledge that nonsmokers very often smoke when in the immediate vicinity of those who are smoking. It is my opinion that, as a matter of courtesy, the nonsmoker should be given the option on the health of his/her lungs, and when asked 'Do you mind if I smoke?' should reply, 'Do you mind if I don't?' After all, the air belongs to everyone, and it hasn't been proven that clean air is bad for the respiratory system, or that cigarette smoke is good."

Barbara Quesnell, ESRL

4. "As a smoker, I can understand restricting smoking in certain areas. What disturbs me is the attitude certain people take in asking (telling) you not to smoke. If I'm around this type of person and not in a restricted area, I will light up just to irritate the individual." Marian Watson, ESRL

5. "I do not consider smoking obscene and do not object to anyone smoking in any place that does not have a fire or an explosive danger. If in fact smoking is a distinct danger to the health and well being of the smoker and the nonsmoker, why doesn't the government ban the sale of tobacco as it has DDT, Pot, etc. Overregulation is the first step to slavery!"

Frank Wilinski, HERL

6. "Smokers, while smoking, should be required to run, under their own power, at a speed sufficient that they meet the emission standards for automobiles."

Henry Fisher, HERL

 "I respect anyone's right to suicide, I just wish they didn't have to take me along for the ride."

John Bachman, OAQPS

8. "I smoke cheap (stinky) cigars and/or a pipe twice a day at work and never at home. Does this make me a smoker? Assuming so, I think smoking should be banned from areas with high population densities and poor-to-normal ventilation rates. This generally includes conference rooms, elevators, auditoriums, and the like. Cafeterias are often not in this category, but inhaling smoke, particularly cigar smoke, while eating is unpleasant; smoking in cafeterias should therefore be restricted or segregated."

Tom McCurdy, OAQPS

9. "In restricted places, such as elevators; small, crowded, or poorly ventilated public rooms, I believe it is fair to prohibit smoking. In larger areas, particularly areas which people occupy for extended periods of time, I believe it is fair to reserve special areas where smoking is prohibited for use by anyone who wants to use the special areas (this is, by the way, a fairly common practice). I do not believe it is fair (or wise) to attempt to prohibit 'smokers' from smoking without strong rationale. Most 'smokers' suffer discomfort if prohibited from smoking. Some (many?) nonsmokers suffer discomfort if exposed to smoke. In deciding which areas to classify as 'no smoking,' we must balance the rights (and degree of discomfort) of both groups." anonymous The overall score was:

<u>For</u>	<u>Against</u>	Neutral
3	18	14
CONFERENCES	S (cont'd from page 6)	

The 23rd I.E.E.E. Pulp and Paper Industry Technical Conference will be held June 14-17, at the Hyatt Regency Hotel in San Francisco, California.

The University of Michigan, College of Engineering, Ann Arbor, will be holding two summer conferences: "Physiological Systems for Engineers," July 11-15, and "Human Factors Engineering," August 1-12.

Centrex is Coming

By now all of you may have heard about our new electronic, computerized telephone system soon to be installed for all EPA and other government employees in the Research Triangle Park.

On June 9, EPA will convert from its present telephone system to centrex service. The familiar clicks of telephone switching equipment routing calls to their destinations will be a thing of the past.

With the flick of one switch from General Telephone Company's Parkwood offices, we will have the quietest, fastest and most error-free mode of telephone communication available in the world today.

Called a #2 EAX (Electronic Automatic Exchange), the \$2 million switch is the first of its kind in the world installed to provide centrex service.

Currently, businesses wanting direct call service without going through their switchboard need switching equipment located on their premises. The #2 EAX will eliminate that need by providing centralized electronic switching equipment which can be used by several customers within General Telephone's Parkwood central office.

The major advantage of this new phone system to EPA employees is that calls will come directly to an individual's extension from outside sources. So watch it—your voice will be showing! And, even more important, what you say and how you say it will reflect on the entire Agency and <u>All</u> employees. Other features of the system include: three way calling, outward dialing, and individual station billing. In order to acquaint users with the new system, a series of courses have been arranged at each major installation.

Most changes in service, which previously required substantial rewiring and adding of equipment, can be made by reprogramming the master control computer of the #2 EAX. This might sound like something from the space age, but this system can incorporate services like centralized dictation, automatic answering and recording, computer input, paging and public address—in as little time as it takes to reprogram.

Approximately 10 days prior to the conversion, General Services Division will issue a new telephone directory containing new extension numbers. It is imperative that all employees notify the telephone operators of any changes in location or telephone extension in order for the new telephone book to be accurate.

It is "out with the old and in with the new" and our telephone operators are very happy. Their present facilities, which appear to be no larger than a walk-in closet, are being expanded and individual consoles will be utilized.

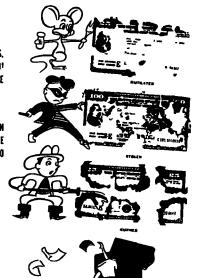
Research Triangle Institute, the first to switch over to the new system on April 16, indicated that the change was made without a single hitch.

U.S. SAVINGS BONDS are INDESTRUCTIBLE

THESE BONDS MAY LOOK WORTHLESS, BUT THEY RE AS GOOD AS GOLD! THE TREASURY REPLACES THEM FREE

IF YOUR SAVINGS BONDS HAVE BEEN LOST, STOLEN OR MUTILATED, SEE YOUR LOCAL BANK—OR WRITE TO

U S TREASURY DEPARTMENT BUREAU OF THE PUBLIC DEBT 536 S CLARK STREET CHICAGO ILLINOIS 60605



U.S. SAVINGS BONDS . . . NO SAFER INVESTMENT!

Consumer Protection "Hot Line" 800-638-2666

Worried about tris* in your child's sleepwear? Or perhaps you're wondering about the safety of a particular toy or bike or even your lawn mower. The Consumer Product Safety Commission has a toll free line to answer these and other questions—and they'll also take complaints along with any accolades you care to give them.
*Tris is used in clothing as a fire-retardant and may be cancer-causing.