

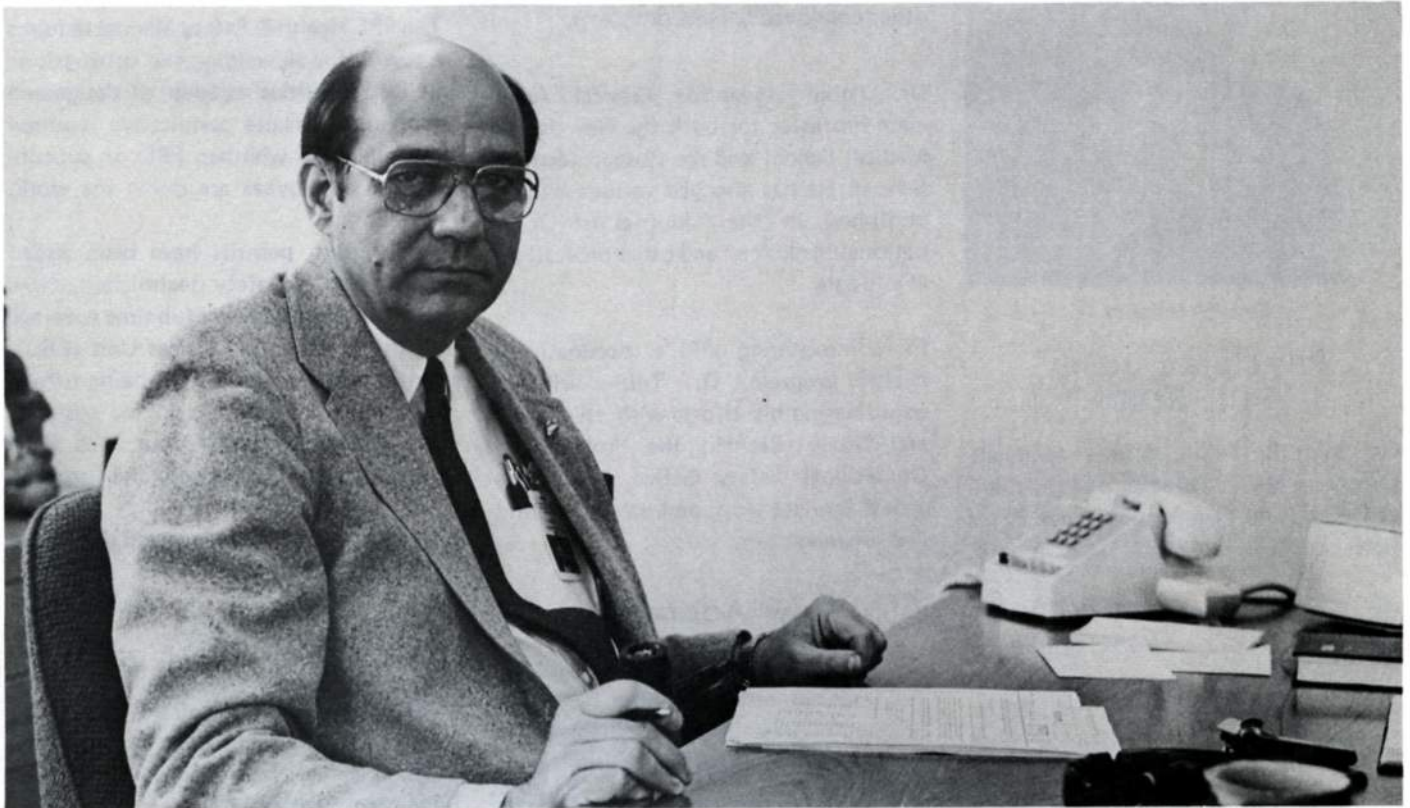


# HOTLINE

PRINCETON PLASMA PHYSICS LABORATORY

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## New Deputy Director

J. R. Thompson, former Associate Director for Engineering at NASA's Marshall Space Flight Center, became PPL's Deputy Director for Technical Operations on April 5.

Born in Greenville, South Carolina, Mr. Thompson received his B. S. in aerospace aeronautical engineering at Georgia Tech. He earned his M.S. in mechanical engineering at the University of Florida, and did advanced graduate work in fluid mechanics at the University of Alabama.

After his discharge from the Navy, Mr. Thompson worked on the development of the first liquid oxygen (LOX)/hydrogen rocket engines for the Pratt-Whitney Aircraft Corporation. NASA "caught my eye" in 1963, and during the next

10 years he headed the engine system component design and performance analysis program for the Saturn 5 launch vehicle. He also managed astronaut interface activities for the Skylab space station, for which he received NASA's Medal for Exceptional Service in 1973.

In 1974, Mr. Thompson took over the management of the Space Shuttle main engine project. He was responsible for the design, development and production of the high-performance, reusable LOX/hydrogen rocket engines that powered Space Shuttle Columbia through five successful flights. His efforts earned him NASA's Medal for Distinguished Service.

While at NASA, Mr. Thompson also worked on the Space Telescope. He

became Chief Engineer at Marshall Space Flight Center following Columbia's second launch.

He came to PPL because "fusion is something I have a lot of interest in. It's totally new, with high technology and big technical challenges. It may be a new field for me, but there are some principles...and engineering problems that are similar to those in aerospace. And I get the most fun out of solving difficult problems!"

Mr. Thompson's new responsibilities will include budget and schedule oversight on all present PPL projects, as well as concrete planning on future laboratory experimental projects.



*Dr. John Tobin*

## Physician Joins PPL Staff

Dr. John S. Tobin, former Associate Corporate Medical Director of the American Cyanamid Company, became PPL's first medical director last month.

Dr. Tobin graduated from the Temple University School of Medicine and did his post-graduate work at the University of Michigan School of Public Health. He has been certified in occupational medicine by the American Board of Preventive Medicine. He is presently involved in organizing a draft medical program for laboratory employees, in accordance with a mandate from the Department of Energy.

"We'll be looking at whether people are physically able to do the work they were hired for," Dr. Tobin explained, "and ensure that they're not being adversely affected by their work. If there are adverse effects, we also want to discover them as soon as possible." He emphasized that he will not be replacing an employee's family physician.

Dr. Tobin is no stranger to company medical programs. In addition to his work with the General Motors Corporation and the International Harvester Company, he served as Health and Safety Director for the Agricultural

Chemicals Group of the FMC Corporation from 1966 through 1975. He joined American Cyanamid in 1975, and was appointed Associate Corporate Medical Director there in 1977. He supervised the corporate headquarters medical clinics and plant medical programs for Cyanamid, and provided medical supervision to insurance and other employee benefit programs.

Dr. Tobin serves as Clinical Associate Professor for both the New Jersey Medical School and the Rutgers Medical School. He has also had various articles published in the "Journal of Occupational Medicine" and other professional journals.

In administering PPL's occupational health program, Dr. Tobin will be coordinating his efforts with the Health and Safety Branch, the Project and Operational Safety Office, the Emergency Services Unit, and other staff and line organizations.

## New Address

Millie (Willerton) Lefler, a PPL employee who retired last year, now has a new mailing address. She asks all those who have been corresponding with her to send their letters to 13203 Prospect Drive, Sun City West, Arizona, 85375.

## High-Powered Warning

Employees working around high voltage equipment may sometimes find a safety tag attached to the equipment, cages or bins. These tags are affixed for a purpose: to protect personnel involved with the equipment from any harm. When a tag is attached, the equipment becomes the responsibility of the person using the tag. Only that person may authorize the tag's removal and return to the Power Dispatcher.

Anyone finding a tag not attached to equipment should promptly inform either the Power Dispatcher at ext. 3080, or the person whose name appears on the tag.

## Safety Note

PPL employees whose high voltage rubber insulating gloves have not been tested this year should contact the Health and Safety office to make arrangements for testing the gloves.

## Fire Permits

The PPL Health & Safety Manual requires a permit for all welding and cutting done in PPL facilities outside of designated shop areas. These permits are required regardless of whether PPL or subcontractor employees are doing the work.

In the past, permits have been issued by Health & Safety technicians. Now that the laboratory has full time coverage by the Emergency Services Unit (ESU), the issuance of permits is being turned over to that group. As in the past, advanced notification of your need for a permit will help speed the process.

Permits should be requested from the ESU on ext. 3166.

## Obituary

PPL employee John J. Hirthler, 43, died March 13 in Mercer Medical Center. John joined the laboratory as an electrical technician in November of 1965. During his 17 years of service, he worked his way up to the Senior Lab and Shop Staff. He handled a wide range of electrical work in the power and control areas of PPL's various projects. His leadership abilities were ably demonstrated by his supervision of the technicians who ultimately brought the first TFTR MG set into operation.

His concern for the welfare of his co-workers led to his involvement with PPL's fire brigade and heavy rescue squad. John was a former PPL fire chief, and was an asset in helping organize the brigade.

His value to the laboratory, both as an employee and as an individual, is well known to anyone who was associated with John. He will be missed.



## Faces and Places



*Helen Livernoche*

The laboratory's work force swelled in March as six new employees joined PPL's ranks. Three employees received promotions and two more were transferred during the same period.

Helen Livernoche was promoted to staff assistant in Accounting; Marilyn Hondorp became head of NBI network operations, Facilities and Support; and Betty Cary was promoted to the administrative staff, PLT Experimental.

Mykola Dereka was transferred to master instrument maker, FOM Vacuum in March, and Harry Matousek was transferred to experimental machinist in the same department.

Among new hires in March were Nancy Atkins, technical secretary, Theory; Frank Beane, administrative staff, Technology; Elizabeth Hukill, E&S staff, CICADA Computer; Kurt Jaehnig, E&S staff, Spectroscopy; Tara Rogers, staff assistant, Director's Office; and John Tobin, occupational physician, Dispensary.

Congratulations to all!

### "REAPS" Listing

The Department of Energy has instituted a new computerized system called

REAPS (Reportable Excess Automated Property System). As a result, PPL now receives two large computer listings detailing excess property.

To ensure timely review by PPL personnel, one copy of the REAPS report will be available in the new book section of the C-Site library. The other will be kept in the Excess Property Office, Room 215, Building 1-E.

Copies of the Defense Property Disposal Listing will be distributed in the same manner.

## Benefits Books Available

The Personnel Office has made the pamphlets "The Social Security Law -- More Money for You" and "What You Should Know About the New Tax-Saving IRA Accounts" available to laboratory employees. Anyone interested in either pamphlet should send their request to Mary Bersch, 209 Sayre Hall.

### Locker Changes

Due to the sizeable increase in the use of limited locker facilities throughout the laboratory, it has become necessary to terminate all permanent locker assignments. All lockers, including those in Room S116 and A112 will now be available for daily use only; no overnight locks will be allowed.

The lockers and locker rooms will be cleaned each Friday afternoon. Any articles found in the rooms or lockers will be deposited in Module 1, Room M127.

At present, space limitations preclude adding additional lockers within the existing rooms. Employees with ideas on how to expand or improve C-Site locker and shower facilities are urged to contact Bob Smart with their suggestions.

### Parking Warning

Please do not drive or park on the grass anywhere on the Forrestal campus unless authorized to do so by Security. The ground is too saturated with moisture to support a vehicle. Employee cooperation will be appreciated.

## Holiday Calendar

Although the names have been changed, employees will have the same number of days off under the new University holiday calendar.

Since New Year's Day falls on a weekend in the 1983-84 fiscal year (which begins in October), one of the two designated holidays usually given at that time has been eliminated. An additional optional holiday has been substituted in its place, keeping the total number of holidays equal to this year's calendar.

Four-day weekends have been built around Thanksgiving and Christmas, with November 24 and 25, and December 23 and 26 scheduled as designated days off. The remainder of the holiday calendar includes laboratory closings on July 4, September 5, December 30 and May 28.

### Personnel Notes

A co-ed aerobics class is being planned for PPL employees. Definite hours have not yet been established, but classes may be held during lunch hours. Those interested should contact Meg Gilbert at ext. 2036.

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Personnel Services is again offering discount tickets for Great Adventure's 1983 season. The tickets are available from Meg Gilbert Sayre Hall, B-Site.

### PPL Open House

Do your neighbors or friends ever ask, "Tell me again -- what do they use those tomahawks . . . er . . . I mean tokamaks for?"

If the answer to this question is "yes," recommend that they attend one of PPL's newly instituted monthly Open Houses. The program includes a presentation, a question and answer period, and a tour of TFTR.

The next Open House will be held on Monday, May 23 at 7:30 p.m. Advance reservations are required, and may be made by calling Pat Stephens, ext. 2750. Pass the word along to your friends and neighbors.

## TFTR Parking

Prior to first plasma, the construction parking lot at TFTR was restricted to construction personnel only. Since that time, the number of construction personnel has decreased, making it possible for PPL personnel to utilize the lot.

PPL employees may park in the construction lot if their vehicles bear a valid Forrestal parking decal. However, laboratory personnel are NOT permitted to park in the area between 6 and 9 a.m. daily. Regulatory parking signs have been posted at all entrances to the lot.

## Jogger Safety

While their enthusiasm for health and fitness is commendable, joggers can present a safety problem on PPL roads. When joggers run down the center or the road, or jogging groups of two or three stretched across the roadway, it becomes difficult for vehicles to maintain a normal traffic flow. The danger increases when a large vehicle (like a PPL shuttle) is following a driver, unable to pass yet blocking the runner from the view of drivers attempting to pass the larger vehicle.

In order to prevent an accident, joggers are being asked to run in single file facing oncoming traffic. The security guards have been asked to see that this request is followed.

The Health and Safety staff applauds your attempts at fitness -- and wants to see you stay healthy enough to run.

## PPL Softball

It's not too late to join the PPL Intramural Softball League! Teams compete each Wednesday from 5 to 9 p.m. on the softball fields behind the C-Site parking lot.

At least 10 members are required for each team playing in the league. Team members should be from the same department or division; however, departments and divisions may be combined if a team is short a few players. A roster of

team members, designating the team captain, should be sent to Ed Bush, Building 8-1, B-Site as soon as possible.

For more information about the league, call Ed at ext. 3309; Frank Wasiewicz at ext. 3572; or Ralph Izzo at ext. 2291.

## Contact Caution

A shipyard worker was wearing safety glasses over his contact lenses when he opened a 440-volt box to connect a welding cable. When the circuit breaker was opened, the breaker arced and a flash occurred. When he later tried to take out his contact lenses, large areas of dried cornea came off his eyes with them. Doctors were unable to save his sight; the contact lenses had concentrated the heat of the arc flash onto the cornea of the eye.

Contact lenses should not be worn, even under safety spectacles, in areas where flashes could occur.

## Safety News

Faulty telephone line transformers, installed by the telephone company to power dial lights on some phones, could become a fire hazard. The transformers are small, box-shaped units manufactured by AULT, Inc. for Western Electric.

Consumers should check all electrical outlets for the units, which can be identified by information printed on the transformer casing. If you discover a suspect unit, contact the telephone repair service immediately for free replacement of the transformer.

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A recall of 11,500 electric motors, housed in attic ventilators sold by Sears Roebuck & Co., is being conducted by the Consumer Product Safety Commission and Emerson Electric Co., the motors' manufacturer.

The motors on the \$70 roof mounted ventilators may potentially set the roof on fire. The ventilators, which were sold through Sears stores and catalogues in

1980 and 1981, have a light gray molded polyvinyl hood and an identification plate on the motor. The model number for the units involved in the recall is 758.648360.

The Emerson Electric Co. is arranging for servicemen to replace the motor on recalled units free of charge. For more details on the recall, contact the Commission at 1-(800)-638-8326 or 1-(800)-325-4130.

## Benefits Handbook

A new PPL Employee Benefits Handbook is available to all employees. If you would like a copy, please stop by the Personnel Office, Sayre Hall, Room 215 and pick one up.



What makes someone run into a burning building when everyone else is running out? What allows someone to aid a maimed person without panicking into inaction? It's a concern for others, a concern shared by every member of PPL's Emergency Services Unit (ESU).

The ESU provides fire protection and emergency medical care to the Forrestal campus. The unit is currently seeking volunteers to staff both the fire brigade and medical services unit.

If you have previous firefighting, first aid or rescue skills, or are willing to learn these skills, then the ESU needs you. Training in all aspects of firefighting, as well as first aid and rescue, is provided by the unit. As a member of the ESU, you can learn valuable skills while providing a meaningful service to the laboratory.

If you are willing to show your concern for others, please contact Jack Anderson at Emergency Services Headquarters, ext. 3166.

## Liason Needed

The Princeton University League is seeking a person to act as liaison between the League and the Professional Job Roster. The job would require some participation at meetings. Those interested should contact Alessandra Mazzucato at 924-8275 for more information.

## Social Relocates

The Wine and Cheese Social, which formerly met monthly in Fine Hall tower, is now meeting for happy hour at Prospect House on Wednesdays.

Prospect House features piano music, an inexpensive bar, complimentary hors d'oeuvres, and a beautiful setting for socializing. PPL employees attending the social should park in Area 5 on Washington Road, then follow the yellow flyers to Prospect House.

For further information about the Wine and Cheese Social, call ext. 4097.

## Van Pool

Save money! Join PPL's only van pool, commuting from the Mount Holly area via Florence, Bordentown and points north. Contact Gene Colburn at ext. 3683 or Len Thomas at ext. 2052 for further information.

## Thank-You

PPL United Way campaign coordinator Len Thomas expressed his thanks to the 45 employees who served as area organizers in this year's fund drive. "Because of special folks like these," he pointed out, "others can better help themselves. Without their help, it couldn't have worked; thanks to them, it does!"

Area organizers include John Anastasio, Suzen Bayer, Sherry Berson, Joyce Bitzer, Michael Brooks, Elizabeth Carey, Betty Cary, Larry Corl, Judy Duffy, Lee Ellingham, Leigh Ann Fares, Elsie Ferreras, Meryl Finkelstein, Mel Gensamer, Betty Graydon, Trudie Grenier, Kathy Haney, Linda Harmon,

Jean Hurley, Steve Iverson, Leon Jackson, Betty Klank, Joyce Lawton, Joe Malinowski, Ann McKee, Pat Melsky, Hank Moreau, Barbara Nini, Ann O'Day, Mike Pereira, Helen Pesce, Bill Pointon, Helen Quinn, Ange Raimo, Barbara Sarfaty, Greg Schmidt, Carol Sherbert, Roland Snead, Grace Taliaferro, Gregg Tompkins, Marilee Thompson, Bill Walker, Jerry Williams, Roseann Wurst and Pat Zeedy.

## Outdoor Volleyball

Volleyball started April 26 and will be played each Tuesday and Thursday until late fall. The action starts at 5 p.m. and continues until it gets dark. Both experienced players and beginners are welcome.

The volleyball nets are located in the large field by the air strip, where the annual picnic is held.

For additional information, call Tim Bennett at ext. 2574, Anne Golden on ext. 2444 or George Cutsogeorge at ext. 2119.

## C.U. Share Drafts

Share draft accounts are now available through the Princeton University Employees' Federal Credit Union. Similar to checking accounts offered through banks, share drafts can be used as you would use checks. However, a share draft account also pays monthly dividends on the account balance.

A minimum balance of \$400 is required for a share draft account. While the first ten checks written on the account each month are free, there is a 10 cent charge for each additional check each month. The current dividend rate on share draft accounts is 6%.

The credit union has also lowered the interest rate on all loan categories to levels equal or lower than those offered by other lenders. For more information on share draft accounts, or on the new loan rates, call the credit union at 452-5038.

## Summer Sports Camps

If you're looking for a place to sharpen your youngster's sports skills, chances are the University has a summer sports camp for you.

Camps have been established for baseball, squash, swimming, lacrosse, tennis, women's field hockey and women's soccer. Adult 'camp' sessions have also been scheduled in tennis and squash.

For further information on any camp session, contact Cindy Horr at the University's Center for Visitors and Conference Services.

## Relocated

Personnel benefit counselor Eleanor Schmitt's Tuesday morning 'office hours' have remained the same — but her office hasn't. Eleanor, who is available from 9 a.m. to noon each Tuesday to answer benefits questions, can now be found in the computer conference room, Room A117, first floor of the Administration Wing in C-Site.

## Volunteers: People People

*The following volunteer listing was provided by the Voluntary Action Center for Somerset County. For further information, contact the VAC at (201) 560-9380.*

Volunteer as a Pal-for-a-Day at the Special Olympics, to be held April 30 at Bridgewater-Raritan High School West's athletic field. This one-day event allows various handicapped individuals to come together for athletic competition.

Serve from 7:30 a.m. to 3 p.m. matched one-on-one with an athlete, helping him get to the right event at the right time. Volunteers should attend one of the orientation sessions, scheduled at 4 and 7 p.m. in the Bridgewater-Raritan High School West auditorium April 27. Join in the fun of this 'special' day!



# ppl people

## Tinkering for Fun and Profit



*The beautiful result of Don's meticulous restoration.*

Imagine working long tedious hours for days on end, concentrating on the complexities involved in building the world's most advanced fusion test reactor. When you finally have some free time, what would you do to relax? Well, three men from the laboratory go home and work on another "machine". In each case the "machine" is the engine of a classic older model car, each lovingly restored by men who just can't stop "tinkering".

Recently laboratory employees viewed the video film of first plasma. On it, they saw a jubilant Don Grove, jumping for joy and giving a great hurrah! If you think he was happy then, just ask him

about his 1967 365 California Ferrari and you'll see real elation. The car, one of only 14 ever made, was bought initially for 10K. Thanks to a lot of tender loving care, it's now a mint condition collectors' item worth nearly ten times that amount.

Don bought his Ferrari in 1971, using it for seven years as his everyday car. At that point, the car was beginning to show its age.

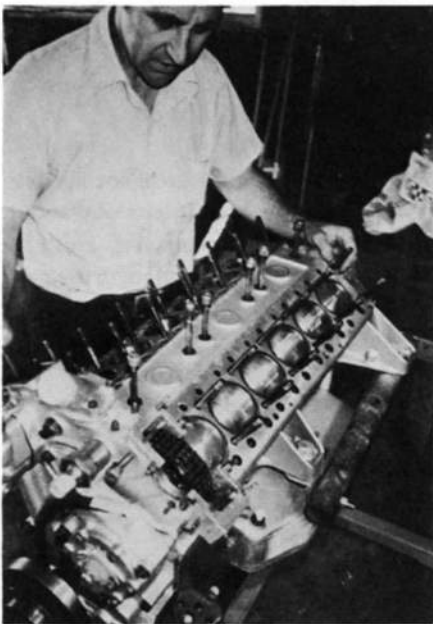
"I started out just intending to do a few necessary repairs," Don admits, "but I ended up making the decision to go for it and restore it totally. "With the help of a dedicated craftsman at Motor Car Company in Cranbury, Don

worked for the next year and a half to produce the Ferrari racing red gem that is clearly his pride and joy. "The fellow at Motor Car did the cosmetics and I worked on the engine," he points out.

He and his wife then began painstakingly refinishing the Ferrari's white leather interior in their basement. They used a process known as the Clauson technique, which is similar to the process used in refinishing furniture. Stripping it down to its bare finish, cracks in the leather are filled in by applying many thin layers of wax. The technique also restores the suppleness of the leather. "It's beautiful now, brand new, soft, not a crack in it," beams Don.

When asked if his wife gets to drive the Ferrari since she helped with the restoration, Don says slowly "Well . . . she doesn't particularly like to drive it. It's not really easy to drive."

With the road conditions being what they are and the Ferrari being a substantial investment, Don no longer uses it for his everyday car. If you want to see the car in action, you'll have to catch it on its Sunday afternoon drive.



*Milt's Classic Ferrari 12 cylinder engine is now in A-1 shape.*

Milt Machalek is an old hand at car restoration. His first effort involved rebuilding the engine and automatic transmission of a 1957 Jaguar sedan. Next came the total restoration of a 1966 Volvo P-1800. "I did everything on that car," Milt recalled, "engine, paint job, interior, carpeting, upholstery — the works. When I had the car in absolute mint condition, I sold it for about a thousand dollars more than I originally paid for it and put a down payment on a worn out, tired Ferrari."

After seeing a picture of a 1965 Ferrari 330GT 2+2, Milt bought the car from a man in Chicago. This car has the classic 12 cylinder (V12) Ferrari engine. "In

25 years only about 10,000 12 cylinder engines were ever made," Milt enthused. "This is the engine that won all the Grand Prix races back in the 50's and 60's. In fact, the engine design is what I really love most. It's simple, elegant and combines all the best features of engine design. There is nothing exotic about it, the engineering practices are simply very good. It's an exceptionally smooth and and exceptionally powerful engine. Even in street trim this car has a top speed of over 150 mph. The engine is 4 liters (242 cubic inches) and can deliver over 300 horsepower." Milt has been working on the engine for about two years. Although presently the engine is still on a stand in his garage, "it's now in A-1 shape, back up to all the original specifications, and ready to be put back into the car."

Finding parts for an older Ferrari can be an adventure unto itself. Milt belongs to both the Ferrari Owners Club and the Ferrari Club of America and subscribes to the bi-weekly Ferrari Market Letter. The network of Ferrari enthusiasts is helpful in providing leads on where a

part can be found, since cars and some parts are becoming so rare you can't buy them anymore. It has become a trader's market, and unless you've got something that someone else wants, you can wait a long time for a part.

At times the search for parts can sound like a 'round the world trip. Milt has had to rely on a custom piston manufacturer in California to have 12 specially designed pistons made. A two year search for a bumper ended recently in Italy. Ferrari built only engine and chassis, which were then sent to a "Carrozzeria" or coach works, where the bodies were constructed around them. Pinninfarina (the famous Italian coachworks that designed and built the body for Milt's car) had one copy of the exact bumper Milt was looking for. After a combination of international maneuvers through banks, shipping lines and agents, the bumper recently arrived at the shipyards in Philadelphia.

When the car is finished Milt plans to drive it everyday. "This one I'm definitely going to keep and use."



*Milt gets some expert help from his son Tom.*



*Charlie poses proudly with his 1957 T-Bird Classic.*

Although he's always been a car buff, Charlie Ancher got into car restoration for a slightly different reason than Don and Milt. As he tells it, his wife always admired those "cute little" Thunderbirds. As a result of a casual remark over lunch, Charlie learned such a car was available at McCafferty Ford in Trenton. It was love at first sight for Mrs. Ancher and after she got behind the wheel, Charlie never stood a chance. They have been

the proud owners of a 1957 Ford T-Bird Classic ever since.

The car really was the "cat's meow" in its day, boasting power steering and brakes, electric windows and seats, and a signal-seeking AM radio as original features. Although the T-Bird has a hard top, it can be lifted off and switched to a soft convertible top. Under the hood is a 292 cubic inch engine with a 4-barrel holley carburetor.

For the past fourteen years, the sporty little auto has been driven to work by one Ancher or the other. On the weekends Charlie has tinkered and pampered with both the car's engine and the cosmetic body restoration.

Charlie belongs to the Classic Thunderbird Club International, and finds membership in the club a big help when working on engine problems. "There is a 'car es Pondence Clinic' column in the club's bimonthly publication The Early Birds, that you can write to with any question," he says. "I've found that particularly helpful at times; I actually received a four page letter in answer to one of my question!"

There are also several excellent car restoration dealers he's found out about in California. "Via catalogues, you just call a toll free number, tell them the part you need, give them your Visa card number and it's in the mail," he explains.

When he first bought the car, it had so many layers of paint on it that Charlie had to have it stripped down to the bare metal. Over the past fourteen years, the car has been bronze, white, then bright red. It's currently soft yellow with a white top, and is destined to be per-simmon in the future. Charlie smiles alot when he talks about that car.

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*The PPL Hotline is issued by the Princeton University Plasma Physics Laboratory, a research facility supported by the U. S. Department of Energy. Correspondence should be directed to PPL Information Services, Module 2, C-Site, James Forrestal Campus, ext. 2754.*

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