



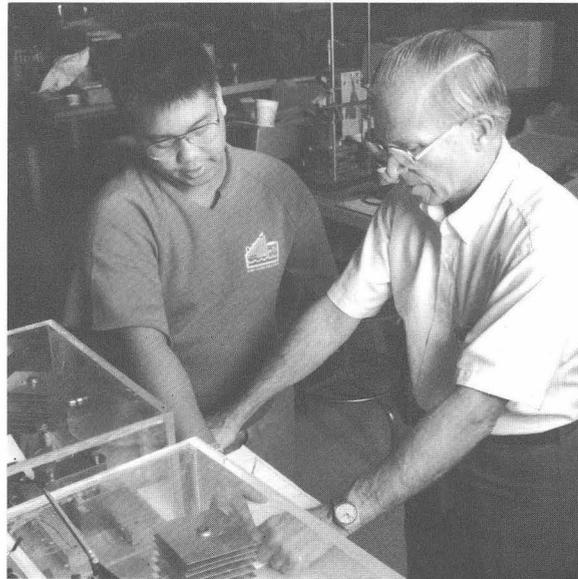
Working and Learning: A Technical Support Summer Experience

This year, Technical Support sponsored a summer employment program that enabled the Materials Development Lab to move ahead with valuable magnet design research, while it offered an exciting and rewarding educational opportunity for fourteen students and one science teacher.

These summer employees, representing eight different education programs, varied greatly in work and educational experience, but they all had one common goal. They came to Fermilab to work and learn, and under the guidance of program coordinator **Finley Markley**, they all achieved that goal.

According to summer employee Terez King (Morgan State University), "Fermilab has provided me with a channel to expand my knowledge of physics, engineering and success. It has been the best of opportunities!"

"You can feel the excitement when you walk into the Materials Development Lab," said **Paul Mantsch**, Head of Technical Support. "The place is hopping. It is a beehive of activity. Summer employees and staff are working



Finley Markley assists summer employee Oliver Corpuz with his experiment. Oliver is working on a stress relaxation experiment on superconducting wire. His experiment is part of the SSC magnet research being conducted by Technical Support. Oliver is part of the Illinois Department of Energy and Natural Resources Intern Program. The program was designed to develop energy awareness.

together, interacting, learning from one another. This is not a make-work activity. These summer employees are participating in real, useful research. They are benefitting from it and the lab is benefitting."

"That is one of the truly exciting parts about my summer job at Fermilab. I am doing something useful. It is vital, important work," said summer employee Batsirai Mutasa, student from Zimbabwe, who is currently attending Bennett College in North Carolina. "This has been a totally new experience for me. I am not just regurgitating what I have learned in school, I am being called upon to utilize it. I have to think. Finley makes me think! He asks me, 'What are you going to do next? What is your next step?'"

All the students and the science teacher involved in this program made the same statements about the Technical Support Section's dedication to making this summer employment oppor-

tunity a success. "It's fun." "It's challenging." "I'm learning." "It's important." "I'm thinking." "I'm applying what I learned in school." These comments epitomize the program.

From the perspective of staff members, **Mark Davidson, Jay Hoffman, Bill McCaw, Jose Poces, Bruce Herdt, David Muniz, Dan Rogers** and **Barb Sizemore**, there has been a desire and belief that the program could work and a commitment to making it a working, learning experience for everyone. "For many of the staff members, working with the students has provided a renewal of spirit. There is a lot of excitement and enthusiasm generated," said Finley.

What is the secret ingredient? How is productivity affected in a Lab with only eight full-time employees when 15 summer workers arrive on the scene? "It takes a certain amount of advance preparation, but the rewards are there," said Finley Markley. "First,

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(L. to R.) Chauncey Houston, Amy Lautenschlager and Oliver Corpuz review Chauncey's final project for the SIST Program. SIST is a summer internship program for college level minority students sponsored by the Fermilab Equal Opportunity Office. Amy is a "convert." A regular summer hire who has changed her college major to science after working at the Lab last summer.

Working and Learning continued

you have to think of the little things. Is there enough table space and enough equipment? Are there enough chairs? Then you have to look at the work that needs to be accomplished and break it down into smaller tasks that can be completed independently by the summer employees. I know that some people feel training summer employees is more work than it is worth, but Technical Support has not found that to be the case. One might say, 'I spent an hour teaching a summer student how to make a good solder joint and that was not a very productive hour.' But, you have to consider that after that hour was spent, the student went on for the next seven hours making good solder joints."

This summer, Technical Support is working on two vitally important projects. For the Main Injector dipole magnets, they are conducting tests that will enable them to develop a crack resistant epoxy insulation that will not experience shorts during temperature changes and differentials. They are also conducting tests to assure that the SSC coil designs have the necessary properties to reach and maintain a value of prestress adequate to insure that the coils will not move during use, which would cause heating and loss of superconductivity. These projects are ones that, according to Markley, can easily be done by

summer employees. "All the students are working on materials problems and the results of all the research projects give us the total picture of how the coils will behave."

"The summer employees are producing a lot of data that we would not otherwise be able to produce. The work done by the summer employees is important to the success of both projects," said Paul Mantsch. Aside from the obvious benefits to the Lab, Mantsch also see a greater benefit for the program sponsored by his section. "These students may not all become scientists or engineers, although some of them have made that decision after working at the Lab, but it exposes a broader population to technology. They

have a better understanding of science. In a world that is becoming increasingly more technical, this is important. A better understanding of science and technology makes for a better citizenry. For the future good of our country, we need an increased cadre of people who are technically literate and able to make good, sound judgments."

Jim Mashek, science and math teacher from Oakland, Nebraska, agrees with Mantsch's statement and feels his summer work experience at Fermilab will help him as an educator. "When a teacher gets the opportunity to do an experiment, to make a contribution, there is an excitement generated that is passed along to the students."

Mark Davidson (TS/ Materials Development) began his career at Fermilab as a summer employee. His advice to those coming to the Lab: "Come to Fermilab like a dry sponge and soak up everything you can. It will benefit you in the future." Davidson did just that and has made a decision to further his education as he pursues a career in physics.

Finley Markley and the Technical Support Section have set an important model and they plan to continue to develop and expand the program. Says Paul Mantsch, "The positive result - Success- has been obvious!"



(L. to R.) Jim McAdams and Laurent Stadler are installing a computer software program. The program will be used to acquire and analyze research data. Jim is a member of the Explorers, a scouting program at Fermilab led by George Wyatt. Laurent is a past participant in INTEC, a yearly science fair sponsored by the Corridor Partnership for Excellence in Education.

HEALTH AND SAFETY: A LABORATORY COMMITMENT

D.O.E. Embarks on Environmental Campaign

Shortly after taking office, Department of Energy Secretary James Watkins held a press conference outlining a 10-point program designed to move the Department and its contractors toward full accountability in the areas of environment, safety and health. He established that environment, safety and health (ES&H) objectives take precedence over production or research objectives and reiterated his conviction that adherence to high standards of environment, safety and health is fully compatible with accomplishing critical research and development efforts. This initiative is highly supported by both the Universities Research Association and the Fermilab management, which has, since the Lab's inception, been supportive and aggressive toward providing a safe and healthy environment for employees and the public. According to Director John Peoples in his message to all staff, "At Fermilab, we strongly adhere to these priorities. The way in which we conduct our research must never compromise the environment, safety or health."

The following article will outline one of the environmental safety concerns that exists at Fermilab and explain why this problem exists and how it will be handled. It is written in a question and answer format for ease of reading and is part of a series of articles that will appear in FermiNews regarding health, safety and environmental issues. The information regarding this issue was provided by Ken Weber and supplemented by Tim Miller, both of the Safety Section.

Laboratory Undertakes PCB Cleanup

Due to common manufacturing test procedures that took place during the seventies, Fermilab is faced with a costly, twelve year PCB cleanup of 65 pulse power transformers located at 24 service buildings around the main accelerator ring.

What is PCB?

PCB (polychlorinated biphenyl) is a

colorless liquid used as a dielectric (insulating fluid) in electrical equipment. It was widely used for this purpose during the seventies because it is not as highly flammable as other dielectric fluids. Later, it was learned that PCB was not the safety boon it was originally thought to be. Although it did reduce the risk of transformer fires, it was found to have toxic properties.

How did the contamination happen at Fermilab?

Prior to Fermilab use, the Main Ring transformers were factory tested using a PCB oil and drained. Fermilab then filled the transformers with mineral oil which later became PCB contaminated due to leaching of the factory test oil.

Between 1971 and 1979, the oil in each transformer around the Main Ring was tested for dielectric quality. Common contractor practice involved draining approximately one pint to one quart of the dielectric to flush out impurities before obtaining a test sample. The mineral oil was drained onto the ground and since it was contaminated by the PCB factory test oil, it also contaminated the surrounding soil.

What is the extent of this contamination?

There are 2 to 3 transformers at each service building. The ground around each transformer consists of limestone gravel, a variable amount of fill and clay. Past cleanup experience has shown that PCBs are stopped by clay and do not migrate rapidly through soil. It is expected that the majority of PCB contamination will be local to transformer drain/fill spouts and within 2-3 feet of the surface.

Sampling conducted by Accelerator Division personnel will determine the extent of PCB contamination at the service buildings. Joel Kofron, coordinator of the PCB assessment and Tony Leveling, providing sampling support, have obtained more than 200

samples at both the B3 and C2 service buildings. Samples indicate that the majority of PCB contamination remains in the first foot of soil which is easily removed.

How will it be cleaned up?

Plans include the clean up of two service buildings over the next 18 months. The actual clean-up operation for each area takes about 2.5 months and requires that the Tevatron be shut down for transformer removal. Once the transformers have been lifted from the concrete pad, the concrete pad is dismantled. The top soil, sand and about 6 inches of clay are removed and hauled as PCB waste in appropriate containers to proper burial sites. After the removal of the contaminated soil, compliance samples are then obtained to ensure that PCB levels are below the Environmental Protection Agency's (E.P.A.) standard of 10 parts per million.

Does the presence of PCB on the site pose a health threat to employees or people visiting the Lab?

The upper layer of rock cover that is present provides adequate protection from the contaminated soil surface, so access to the area would not pose a health or safety threat. Furthermore, the soil that contains PCB levels above that acceptable by the E.P.A. is limited to areas within the Main Ring which are not accessible to the public or most employees.

If a serious health threat is not posed, why is the Laboratory undertaking this cleanup?

The Laboratory has long had a commitment to providing a safe and healthy environment and is supportive of the initiatives of D.O.E and the E.P.A. guidelines.

If you have further questions regarding this or other health, safety or environmental issue, please contact the Safety Section.

Our Environment

SIMPLE THINGS YOU CAN DO

USE A CLEAN DETERGENT

Over half of the phosphates in our lakes and streams come from detergents.

Background. Phosphates, chemical compounds containing phosphorus, are found in most detergents. Manufacturers use them because they soften water and prevent dirt particles from being redeposited on clothes.

Unfortunately, there are severe ecological side-effects: As phosphates empty into streams and lakes, they cause "algae bloom"—i.e, they fertilize algae to the point where it grows out of control. When the algae dies (in its natural cycle), the bacteria that cause it to decay—a process requiring huge amounts of oxygen—use up the oxygen needed by other plants and marine life to survive. The result: lakes and streams can die.

Detergent Data

• You may be using a high-phosphate detergent without realizing it. Look on the side of your detergent box. It will list the amount of phosphorus "in the form of phosphates." But that's not the phosphate content; to get the

actual amount, multiply the percentage of phosphorus by 3. For example: 8% phosphorus = 24% phosphates.

• Phosphates aren't necessary. Many powdered detergents are made with different formulas—less than 0.5% phosphates for areas where phosphate use is regulated, and higher percentages where it isn't.

SIMPLE THINGS TO DO

• **Use a little less detergent.** According to *Consumer Reports* magazine, manufacturers recommend more detergent than necessary.

• **Use low-phosphate, or phosphate-free detergent.** Liquid detergents are generally phosphate-free.

• **Use a substitute.** If your water is soft, soap powder will work as well as a detergent. If your water is hard, you can try a combination of soap and washing soda. But don't try it until you get more details. Send a SASE to: The Ecology Center, 2530 San Pablo Ave., Berkeley, CA 94702. Ask for their detergent fact sheet.

Excerpt from: *50 Simple Things You Can Do To Save The Earth*, The Earth • Works Group

quite low, and a study published in 1982 claimed that self-quitters were two to three times more successful than people who sought professional help of some kind. But the new data show that self-quitters and program-seekers are basically similar in their motivations, in their ability (or lack of it) to break the habit and in their success rates at long-term abstinence. Go it alone if you wish, but don't ever forget that professional help and support groups do help some people—and you may be one of them.

Myth #2: A new drug controls nicotine withdrawal.

Clonidine, an anti-hypertensive drug, has been used to control alcohol and drug withdrawal symptoms, and although the FDA has never approved it for such use, some doctors have prescribed it to cut down cigarette cravings. But a study published last year failed to show that clonidine offered any benefits to people trying to quit. And a recent, exhaustive, scientific review of the experimental use of various drugs to combat nicotine withdrawal concluded that the only effective treatment currently available is nicotine itself, in the form of nicotine chewing gum. You need a prescription, and eventually you have to kick the gum habit. But nicotine gum combined with a stop-smoking program can be highly effective (close to a 50% success rate, according to some reports).

Myth #3: Heavy smokers can't quit.

There's been some argument about whether the failure rate is higher for heavy smokers (more than a pack a day) who try to quit, compared to light smokers (less than a pack a day). As reported in a recent issue of *American Psychologist*, investigators monitoring data on over 5,000 smokers found that light smokers were twice as likely to quit and stay cigarette-free as heavy smokers. But if you're in the multiple-pack-a-day category, don't despair. A new study from the University of Kentucky Medical Center in Lexington followed 108 heavy smokers enrolled in a hospital-based program that provided group sessions and nicotine gum. At the end of one year 45% of

Wellness Works

SPECIAL REPORT

A Quitter's Profile

There's no room for debate about the link between smoking and death. Smoking definitely contributes to heart disease and cancer, and is the major cause of premature, preventable deaths in America. But if you quit smoking, your risk of heart disease begins to decline almost at once, and in a few years your cardiac risk will be almost the same as if you had never smoked. Your cancer risk will decline too, though not so dramatically.

There is room for debate about the next topic—how do you quit? There's no easy answer to that question. In January 1987 we ran an article with the best advice we could gather. But if you've quit and are battling relapse, if you can't quit or if you have a friend or family member who can't, you'll be interested to hear that recent research has identified some misconceptions about smokers and ex-smokers.

Myth #1: Go-it-aloners do better.

In the past, 95% of the millions of people who quit were thought to have quit on their own. Abstinence rates for formal programs were alleged to be

WILSON HALL RECYCLING PROGRAM EXPANDED

"All occupants of Wilson Hall can now participate in a program that will not only accrue individual satisfaction, but in a larger sense, impact our future quality of life. It is enough to say that each ton of recycled paper saves about 17 tree s."

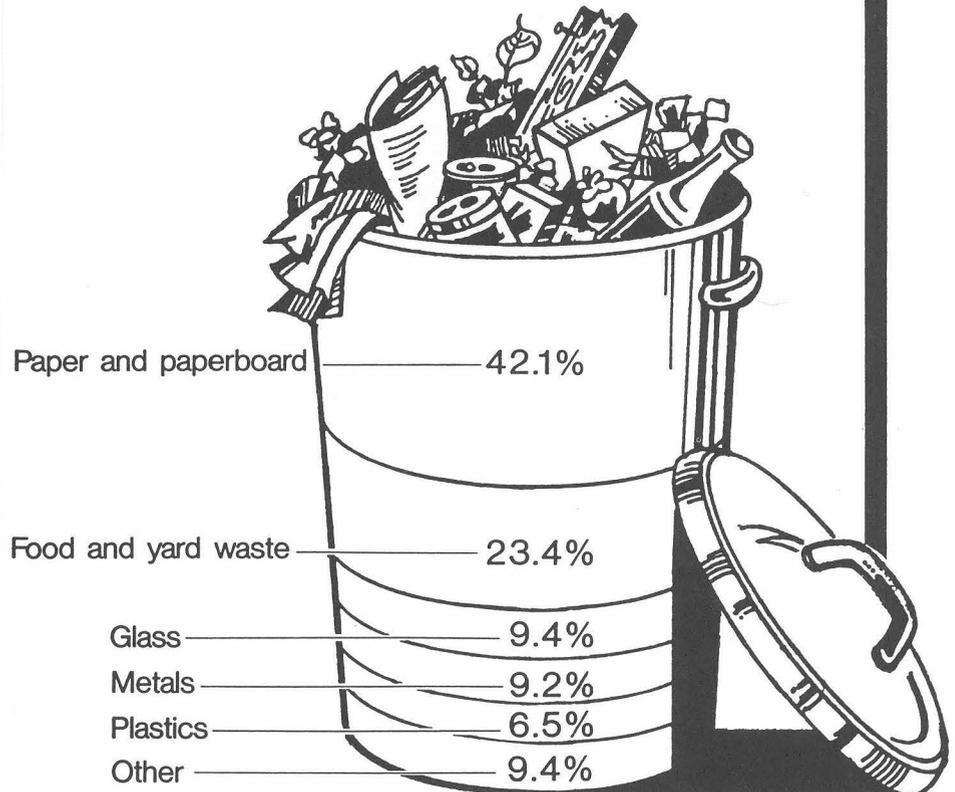
— Jim Finks, Head of Business Services.

After a successful 3 month pilot program, the Business Services Section is now ready to expand the white office paper recycling program to all occupants of Wilson Hall. Dick Auskalnis (Purchasing) and Kent Collins (Buildings Management) are coordinating the recycling project. "The pilot program gave us an opportunity to gauge the level of participation and to coordinate a successful collection and pickup plan. We knew from the start that we wanted to expand this program, but we began with a pilot program to work out the logistics," said Auskalnis. After the Wilson Hall program is in place, other locations will be considered. According to Auskalnis and Collins, "There is a lot involved in the coordination of the project and each expansion, if it is to be successful, must be taken one step at a time."

The Wilson Hall recycling program will officially begin August 21. Woodgrain-finished corrugated boxes will be distributed to each floor and placed at each person's work station. All employees are invited to participate by placing all recyclable papers (bond, calculator, letterhead/stationery, photocopy, typing and white scratch paper) in this box. Employees are asked to periodically empty their boxes into the larger plastic container which will be located on each floor. (The location of the plastic containers will be determined by the occupants of the floors.)

The plastic intermediate containers will then be emptied as required by the custodial staff and sent to a disposal service for recycling. The intermediate containers will contain plastic bags to facilitate sorting and weighing. The clear plastic bags will also prevent the contamination of an entire lot by the inclusion of unacceptable papers. (The plastic bags will also be recycled.)

Profile of the nation's 'wastebasket'



National Waste Profile

Source: Franklin Associates, Characterization of Municipal Solid Wastes in the United States, 1960 to 2000, Prepared for the U.S. Environmental Protection Agency, 1984.

To insure the continued success of the recycling program and to involve as many people as possible, Business Services is organizing a list of floor coordinators. The coordinators will be trained to assist with the program and answer employees' questions. The training session for floor coordinators will be held on August 20 in 1 West. The session will be conducted by a representative from Fox Valley Disposal, who will distribute literature, explain the importance of the project and answer questions regarding the recycling program.

Employees who would like to volunteer to be a floor coordinator, who have any questions or suggestions, or who would like to help in other ways are encouraged to call Dick Auskalnis x4167 or Kent Collins x4753.

Although the current collection program is limited to Wilson Hall, Lab employees located at other sites may participate on a voluntary basis by bringing their recyclable paper to the collection area located in Wilson Hall on the southwest side of the ground floor.

Quality Corner

An erroneous assumption is that quality originates in the quality department.

Two Cut Shop operations suggestions were received by the QA office. The following is a response prepared by Dave Carlson and Frank Cesarano regarding these suggestions.

Suggestion: ... it would be helpful if the metal and plastic sheets now being cut into 4' x 4' pieces were left intact....also a "free use" scrap area for smaller pieces currently being thrown away monitored by the Cut Shop would result in a substantial savings.

Response: Stock Dimensions. Sheet and plate stock and acrylic sheet stock do not come in one standard size. The sizes vary from 3' x 8' to 4' x 20'. Determining which sizes would benefit all customers would be difficult. Nevertheless, the primary reason we order sheet and plate stock in either 3' x 4' and 4' x 4' sheets is the lack of storage space. The Cut Shop is filled to capacity with metal stock and machines. There is some space outside, but that raises security problems.

Another factor to consider is the rack system used to store the sheet and plate stock. The racks are not adjustable and are set for a maximum dimension of 4'. Changing the size of the sheet and plate stock would require changing the racks used to store the material. New racks would be expensive.

A further consideration regarding stock dimensions is material handling ease. The larger the item, the harder it is to handle safely.

Lastly, the Cut Shop is not set up to handle larger sizes of sheet and plate stock on a regular basis. New equipment would have to be acquired to enable us to deal with the larger sizes. Needless to say, the necessary funds are not available.

Most of the vendors we buy materials from sell sheet and plate stock by the pound. We pay for what we get. If a larger piece of metal is required, it would be more economical for an order to be placed (via Purchase Requisition) requesting the exact size needed.

Response: Free Cut Shop Scrap First of all when we "scrap material," it does not mean that the material is thrown away. The Laboratory receives fair market value for all the scrap metal by selling it under a contract with a scrap dealer in the area. Almost all of the scrap pieces from the Cut Shop are sold through this means.

We discontinued the free metal stock for at least two reasons: 1) People misunderstood the meaning of "free stock." They thought that it was free to take home and use. Free stock means for Government use only. In a free stock situation, we have very little control over who uses the material and its intended use, even if we control access to the area. There would be no documentation of withdrawal, as there is in the case of normal stock transactions. 2) We found that maintaining a free stock area was very time consuming. The area was always a mess. It is possible the labor expended to keep the area somewhat orderly and safe offsets the savings to the Laboratory of using the scrap pieces of metal rather than selling them to our scrap dealer.

If you have a suggestion on how to improve the quality, efficiency, reliability or effectiveness of a Laboratory service or operation, please send it to Mark Bodnarczuk, MS 200 or BIT-NET Bodnarczuk @ FNAL.

IMPORTANT NOTICE

The Illinois General Assembly enacted a new law which prohibits landfills from accepting landscape waste (i.e. grass clippings, leaves, brush, etc.) effective July 1, 1990. The law prohibits any person from knowingly mixing landscape waste, which is intended for collection or disposal at a landfill, with any other municipal waste.

Hence, cans or dumpsters containing mixed landscape waste **cannot** be picked up or emptied by Fermilab's contracted trash removal service. If waste is found, it must be removed by us before our contractor will take the trash.

The effort to separate such waste by Laboratory employees is very costly. Dollars expended on such avoidable work come from Laboratory operating funds. It should be noted that improper actions of this kind, which result in costs to the Government, will not be tolerated. Costs associated with these actions reduce the funds available to carry out the overall mission of the Laboratory. — *Jim Finks*, Business Services

From the Front Desk

Now on sale at the Front Desk, NAL-REC has Fermilab mugs for \$5 and bud vases at \$7. Also, a fresh supply of T-shirts featuring the new logo has arrived. —*Connie Kania*

... Harper's Index

Number of automobiles that have been discarded in the United States since 1946: 288,324,898

Applause Applause Applause

BILL HUGHES REPRESENTS U.S. IN CONTROL-LINE WORLD CHAMPIONSHIPS

Bill Hughes (RD/Cryo Department) has recently returned from France where he represented the United States in the 1990 Control-line World Championships. A model airplane enthusiast for twenty years, competing in this competition was for Bill the fruition of a long held dream. Two years ago, the Control-line World Championships was held in Kiev, U.S.S.R. Bill attended as a spectator. This year he was a participant.

The Control-line World Championships are held every two years and are hosted by various participating countries. This year, thirty countries were represented in the competition held July 9-14 in Bednod Les Pont A Mousson, France. Each country participating may field one team in each of the four competitive disciplines which include: Precision Acrobatics, Team Racing, Combat and Speed. Bill was a member of the U.S. Speed Team. He qualified for this competition by placing third in the United States Federal Aviation International (F.A.I) Speed Team Trials held September 8-9 in Dayton, Ohio and September 30- Oct 1 in Los Angeles, California.

In preparation for the competition, Bill travelled to Ohio to do some test flying with team member Carl Dodge and then participated in two midwest competitions. A week before the Championships, Bill took his plane to Rockford for final pre-competition practice. During his final practice flight, Bill's number one airplane crashed. He was faced with rebuilding the plane with only six days left before departure.

Bill left for France on July 3, accompanied by his wife Ruby and his father. They arrived in Frankfurt, Germany on July 4th and were united with all 20 members of the U.S. Control-line Team. This was the first time the entire U.S. Team had assembled. On July 5, the team drove to Nancy, France which



Members of the U.S. Speed Team were (L. to R.) Bill Hughes, John Newton and Carl Dodge. The U.S. team placed third in the international competition. The U.S.S.R. took first place in this event and Great Britain finished second.

was the largest city near the competition site. "It was really a thrill once we arrived in France. In the United States, flying model airplanes is a hobby. In Europe it is considered a sport and we were treated in the same manner as professional athletes are treated in the U.S. There were a lot of spectators, press coverage and autograph seekers."

Team members spent the three days prior to the competition doing unofficial testing. On July 10, the official testing was held. During this time, each team was allowed only one hour on the field. That evening, Bill received his official competition schedule and the next day, the World Championships began.

During the Speed event, each individual on the team competes in three rounds. In each round, the flier is given two attempts to make an official flight. If an official flight is not made, the flier receives a score of zero. If an official flight is made, the plane's clocked speed is the score. If both attempts result in an official flight, score for that round is the fastest of the two times.

In order to make an official flight, the participant has three minutes to start the plane, move into the circle and into the proper hand position in the pylon. If this is not completed within three minutes, the flight does not count. Once the flight position is assumed, the plane makes two laps before the official time is taken. An official timed flight is for 10 laps, which is one kilometer.

During the 1st and 2nd rounds, Bill experienced fuel feed problems and was unable to make an official flight. Everything rested on his last round performance. This time things went smoothly. The fuel problems had been solved and Bill made an official flight on his first attempt, clocking 167 miles per hour. This score placed Bill 18th individually, and gave his team the third place standing.

"The awards ceremony was like the Olympic's," said Bill. "It was really an impressive experience." Participants were awarded individual and team medallions. As for future goals, Bill is setting his sights on the World Championships, 1992.

Classified Ad\$

Miscellaneous:

1 Set of McGregor Golf Clubs, 2-9 w/wedge, 1-3-5 woods, w/bag, \$125. 1 Set of Hogan Golf Clubs, 2-9 w/wedge. 1-3-5 woods, w/bag, \$125. Call Ron at x3095 or 708-406-1342.

Hardwood Country Table with 6 Chairs, \$350. Murray 20 in. Lawn Mower, \$100. Sears Craftsman Snow Blower, 3 hp, electric starter, \$250. A. O. Smith Water Heater, 40-gallon, \$250. Jenkins Upright Piano, \$350. Console Humidifiers (2), 8-gallon output, @ \$25. All in good working condition. Call Dan at x4605, E-mail FNAL::KAPLAN or evenings at 815-756-6558.

Black & Decker Electric Lawn Mower, \$25. Westinghouse 9.0 Cubic Chest Freezer, \$50. 82" Sleeper Sofa, new upholstery, \$350. Antique Wood Burning Stoves (2), @ \$100. Call Barb at x3492 or 859-8699 after 5 p.m.

Motorized Vehicles:

1985 Pontiac 6000, V6, 80,000 miles, A/C, reclining seats, AM/FM stereo, \$4,500. Call Dan at x4605, E-mail FNAL::KAPLAN or evenings at 815-756-6558.

1987 Ford Bronco II Eddie Bauer 4x4, auto, fully loaded, red & tan, North Carolina truck, no rust, \$11,500 or best offer. 1989 Sunbird Corsica, 18 ft, 130 hp, inboard/outboard, w/trailer, convertible top & cover. red & white, \$9,000. Call Jean at 898-1083.

1979 XS-400 Yamaha Motorcycle, mag wheels, new rear tire, HD battery, asking \$425. Call Chuck at x3075 or 232-6787 after 5 p.m.

1975 Ford Torino, runs fair, \$300. Call Bob at x3095.

1978 Volvo Wagon, auto trans, power steering, power brakes, AM/FM cass, trustworthy, \$1,900 or best offer. Call 879-1001 evenings.

WHO:

NALREC invites you and your family to attend

WHAT:

TASTE OF FERMI

WHEN:

Today, August 17, beginning at 4:30 p.m.

WHERE:

Village Barn Area

WHY:

Fun, Camaraderie, Food, Games, Prizes, Rides, Dancing

DON'T MISS IT !!!

Quitter's Profile continued

them were verified as nonsmokers (the others had relapsed or dropped out). Three years later 80% of those who had managed to stay off cigarettes for a year were still off them.

Myth #4: When you've been a nonsmoker for over a year, it's safe to have an occasional smoke. It's true that a few people can smoke a cigarette on a Saturday night and not get hooked again. But it's also true that some people, according to the study of 5,000 smokers and quitters, "cycle from smoking to nonsmoking and back again" most of their lives. Having "just one" is never worth the risk. If you're tempted, remind yourself how hard it was to quit, and review the benefits you've enjoyed as a nonsmoker: "I've saved money, I don't cough all the time, I'm proud of myself, I don't burn my clothes," and so on.

FermiNews page 8

Myth #5: Quitting is simple. All it takes is willpower.

True grit is essential but not sufficient in itself. According to the report in *American Psychologist*, quitting is "a dynamic process, not a discrete event." That is, if smoking is central to your life (and for most smokers it is), you have to do more than just quit. After you've won the battle with acute withdrawal symptoms, you'll have to plan new activities and new ways to relax that don't depend on nicotine. You may have to change your eating and exercise habits to keep from gaining weight. At first, you may need to steer clear of friends who smoke. All that takes advance planning and sustained effort. Simple it ain't.

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