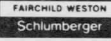




**FAIRCHILD WESTON  
SYSTEMS INC.**

FAIRCHILD WESTON SYSTEMS, INC.  
DATA SYSTEMS DIVISION  
P.O. BOX 3041  
SARASOTA, FLORIDA 33578



VOL. VII, NO. 8

SEPTEMBER, 1985

## **PICNIC FUN FOR ALL SET FOR OCTOBER 19**

It's Family Picnic time. Saturday, October 19th is the date, from noon to 5 p.m., at Elks Park in Sarasota.

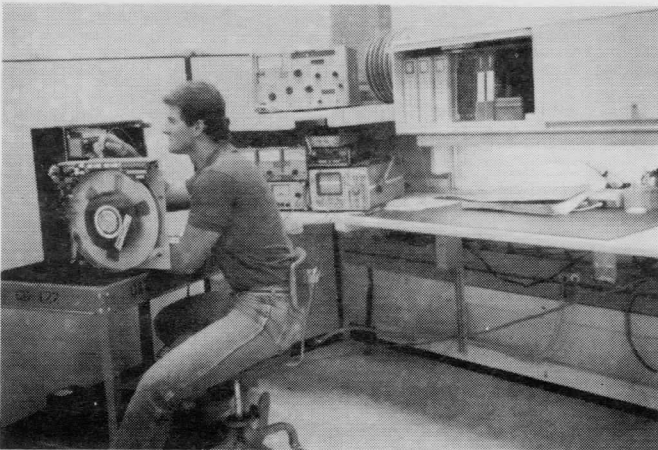
Volleyball, horseshoes, tug-of-war, diaper derby, carnival for the youngsters, greased pole, Bingo, food, beer, music, prizes -- fun for all.

On the menu for the company event are barbecued spareribs and chicken, hamburgers, baked beans and potato salad, roll and butter, soft drinks, coffee and beer.

All Data Systems Division employees, Retirees, and their immediate families are cordially invited to join in the festivities. Please be sure to request your tickets well in advance, through Personnel.....SEE YOU THERE !

## **IMPROVED WORKSTATIONS IN RECORDERS TEST AREA**

New improved workstations, installed in our Recorders Test Department, have enhanced the appearance of the area and given the Test Technicians more efficient work space. This improvement is part of our ongoing renovations program throughout our facility.



*Technician Keith Smith demonstrates how the new workstation in Recorders Test provides more efficient work space as he tests the Model 80TA Instrumentation Recorder.*

## **\$\$\$ OCT. 15 IS THE DEADLINE TO RETURN SAVINGS FORM**

Have you returned your election form for the Data Systems Savings Plan? DEADLINE IS OCTOBER 15.

Now is the time to decide how you wish your account balance to be invested -- for both the employer and employee contributions -- and also for your 1986 future contributions.

Your choices are:

FUND A - Fixed Income Investment Fund

FUND B - Diversified Fund

FUND C - Schlumberger Common Stock Fund

Employees who wish to elect the pre-retirement liquidity option should check FUND A. This applies for employees aged 50 and above who are planning to retire. A one-time election can be made to move all your accounts into FUND A, the Fixed Income Investment Account, if you wish.

This is also the time to indicate if you wish to increase, decrease, or maintain your contribution level for 1986. Eligible employees may contribute 1% to 10% via payroll deductions. Your next opportunity to increase or decrease the amount of your contribution will be November, 1986. Employees may discontinue contributing at any time.

Our improved Data Systems Savings Plan now includes the 401(k) tax-saving benefit.

Employees are notified that they are eligible to join the Savings Plan after completing one full year of service. After you are eligible, the company will contribute 1% of your annual base salary into your Savings Plan account annually. In addition, for participating employees, there is a company matching contribution of a minimum of 25¢ for each dollar the employee contributes. Last year's company contribution to the Plan was 65¢ for each dollar contributed by the employee.

If you have questions about the Savings Plan, or your Fund election, or your contribution, please call Alma Sanger of our Benefits Office, EXT. 5526. And remember to send in your form before October 15th.

**AN EQUAL OPPORTUNITY EMPLOYER M/F/H/V**

## COMPLEX NAVY SUBSYSTEMS SHIPPED DURING SEPTEMBER

Two double-bay racks containing sophisticated subsystems were shipped to Control Data Corporation during September for integration into a Navy Automatic Checkout system. A third double-bay system is scheduled to be shipped in late September.

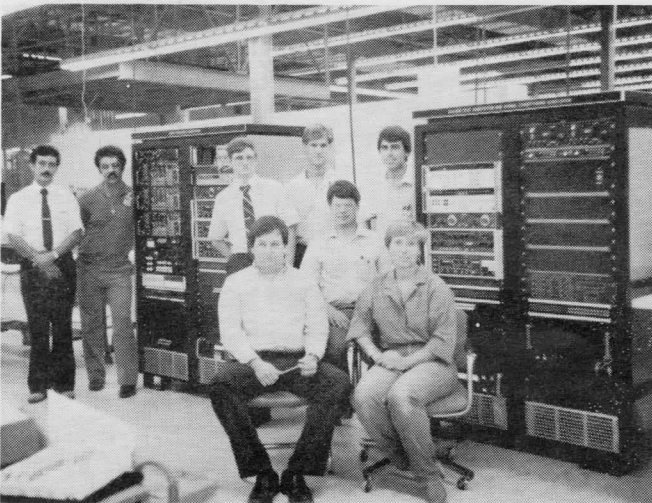
The systems produced here will be part of the Navy's D5 SACE program. SACE stands for Shorebased Automatic Checkout Equipment and will be used for checkout of the Trident II weapons systems.

FWSI is providing three of the subsystems for the Telemetry Processing System. They are the Radio Frequency Subsystem, the Signal Conditioning Subsystem and the System Test Subsystem. This cost-plus-fixed-fee contract is valued at over \$2 million.

Extensive use of outside purchased equipment, non-standard parts, and stringent documentation and fabrication requirements called for extraordinary efforts by Purchasing, Drafting, Assembly and Fabrication Departments.

"In spite of the special requirements and extraordinary circumstances, the first equipment was accepted by CDC in Sarasota and shipped on schedule and on budget," said Frank Hurlburt, Telemetry Program Manager. "Congratulations to all for a job well done."

Special design work on this contract included a custom VLSI chip for Event Multiplexing and Processing (EMAP) and four specially-designed Multibus cards. Contract employee Chuck Miller, based in Sunnyvale, Calif., participated in the special design work, in addition to our in-house Systems Engineering team.



*Pictured with some of the Subsystems shipped to CDC are: Program Manager Ed Rogers, Technician Fuad Ali, Engineer David Buckwalter, Engineer Laszlo Bardos and System Engineer Mike Weed. Seated are Technician John Schilling, Engineer Chuck Miller, and Technician Nancy Vranesh.*

The VLSI (Very Large Scale Integration) chip contained 26,000+ transistors. Each EMAP chip replaced one 7 x 15 inch printed circuit card. Also included in the Signal Conditioning Subsystem is a 60 x 40 electronic switch matrix for routing various signals throughout the Telemetry Processing System, and additional printed circuit cards for system setup, control and status display.

## ANNIVERSARY GREETINGS

Happy anniversary to four employees observing major service anniversaries this month. MIKE RUSSELL completed 20 years of service on September 7, and CHET REYNOLDS, of Customer Service in Lancaster, Calif., rounded out 15 years with our company on September 8. FRED LOWERY and RAY NERVINA each completed five years of service this month. Congratulations!



*Chet Reynolds (at right) received his 15-year pin and congratulations from Don Roberts recently at our Lancaster, Calif., Field Office.*



*Mike Russell (left) rounded out 20 years of service this month, and Ray Nervina observed his fifth service anniversary. Missing from this photo is Fred Lowery who also marked five years of service in September.*

## NEW WORKSTATIONS IN TELEMETRY TEST

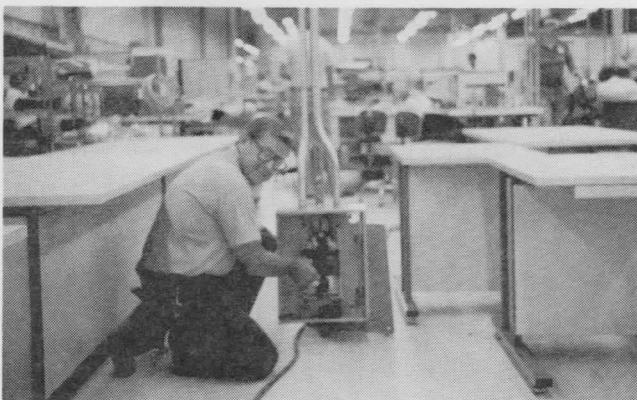
It's taking shape -- a new look in Telemetry Test. This is the first step in a major revamping of the Telemetry Test Department's layout with new workstations. Attractive new tables and racks have been received, and racks have been wired to accommodate the test equipment needed at each new workstation.

Plant Maintenance personnel are installing the electrical conduits and compressed air connections required for the new layout. The renovations will be accomplished in three sections, over a period of several months.

These Telemetry Test renovations are the direct result of a Quality Circle study conducted by the S.P.C.A. (Standard Products Circle in Action) group. The Circle's goal in their project was to create workstations, along with a department layout, that would increase efficiencies and give the Test Department a professional appearance within a period of one year.

The group's well-documented Management Presentation won approval for the project which involves a total estimated investment of over \$88,000. The Circle project studied work flow, efficiency, fatigue factors, and test station layout before coming up with their recommendations for the new design. The group expects many intangible benefits -- improved appearance, pride in the work area, easier reaching, better utilization of space, etc.

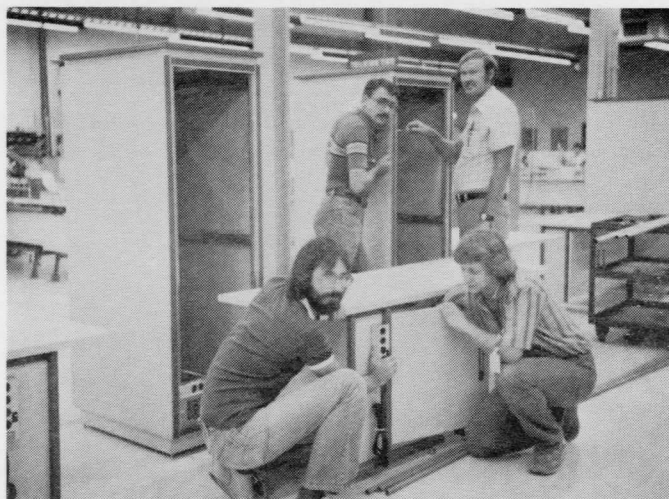
"Our special thanks go to the Systems Assembly group for wiring the racks so that the test equipment could be installed in the racks at the new workstations," said Bill England, Telemetry Test Supervisor.



*Frank Knott, of Plant Maintenance, works on the electric power for Telemetry Test's new workstations.*

## SAFETY AWARENESS PAYS

Data Systems Division's safety record currently stands at 133,500 hours without a lost-time accident. Safety awareness pays -- because it helps us to avoid painful injuries. Please remember to think about safety -- at work, at home, and at play.



*Helping install new test stations -- Doyle Jones and Dean Norfleet in foreground. Phil Luquette and Bill England are at new rack in background.*

## "BIT BY BIT" GROUP IN CIRCLE PROGRAM

Introducing the members of our "Bit By Bit" Circle. This Circle involves employees who deal with Engineering computer software, such as Scientific Programmers, Computer Librarians and Computer Operations personnel.



*"Bit By Bit" Circle members include: Back Row -- Adam Leonard, Kevin Lewis, Marvin Edgeworth, Herb Larrabee and Art Hallett. Front Row -- Kathy Bossert, Jan Ammen, Bob Feather, Michelle Crawford, Mona Carter, Teresa Fannin. Missing from this photo are Carol Byrne, Mike Hutchinson and Judy Lamp.*

**IT'S PICNIC TIME  
OCTOBER 19, 1985**

## THESE EMPLOYEES REALLY HAD SOME GREAT VACATIONS

Data Systems Division employees know how to enjoy great vacations. RICK WILSON and VINCE WUELLNER, two Test Technicians, decided on a Central European "grand tour" of Luxembourg, Germany, Austria, Switzerland, France and Liechtenstein. Quality Assurance Secretary BABA MARRERO and her husband and daughter spent a splendid three weeks touring Spain and Portugal.

Vince and Rick took Icelandair from Orlando to Luxembourg, in August. The men rented a Fiat "Uno" diesel for traveling by car. Their first overnight stop was Trier, Germany, an ancient city with Roman baths and amphitheater, and once the residence of Emperor Constantine. They found good inexpensive accommodations called "Zimmerfrei" which provided room and breakfast for about \$10 per person. For their first meal in Germany, they couldn't resist eating at McDonald's -- with beer!



*Rick Wilson, Baba Marrero and Vince Wuellner compare travel highlights.*

Vince Wuellner's French was helpful as they traveled to Paris to enjoy the cosmopolitan capital city -- the cuisine, the Metro, the Louvre, Pompidou Center, and the Jeu de Paume collection of Impressionist paintings. On August 18 they returned to Luxembourg, via Metz, and prepared to leave for Florida.

Rick Wilson joined our Telemetry Test Department in March, 1984. He came to Florida by way of the Philadelphia area, attended Penn State for two years, received his Associate's degree in Electronics from Manatee Community College, and expects to receive his AA in Business in December. The European trip also helped Rick add to his beer can collection.

Vince is a Navy veteran. He worked in Sonar, was based in Jacksonville, and served on a Frigate (USS Voge), which gave him the opportunity to travel to far-off places -- Kenya, Egypt, Bahrain, and Southern Europe. He is a Tampa Tech graduate and joined our Test Department in July, 1984. Vince is currently taking French at MCC.



*A view of Luxembourg*

Rick Wilson's six years of German helped them as they traveled to Heidelberg, Fussen, Garmisch-Partenkirchen, Oberammergau, Munich, and picturesque Neuschwanstein -- fabled castle of Ludwig II -- whose bedroom decor is said to have kept 14 woodcarvers busy for many years. The travelers went on to Innsbruck, Austria; Liechtenstein; Zurich and Basel, Switzerland; then into France to Dijon. They discovered a "super" supermarket, called a hypermarché, which stocks just about everything imaginable.



*Tour boats on the Seine*



*Heidelberg Castle overlooks city.*

## EMPLOYEES SHARE VACATION HIGHLIGHTS

On to Spain with the Marrero Family. Baba, Jose and Gloria left Miami via Iberia on June 11 and returned July 2. The trip was Gloria's high school graduation present.

With Madrid as a home base, they visited Toledo, the Valley of the Fallen memorial, Segovia with its Roman aqueduct, and Galicia in northwest Spain, where from a promontory they could see the Bay of Biscay meet the Atlantic.

"The Galicia motor coach trip was fun. We met people from Argentina, Brazil, and all over the world," Baba relates. "The flowers and views along the narrow mountain roads were beautiful, and the chilly air very refreshing."

The Marrero family visited friends in Madrid and near Bilbao. They took a day-long trip to Bilbao and then Orduna, in the Basque country, to visit an elderly lady in a nursing home, where the visitors from America were warmly welcomed. On returning to Madrid, they took a short trip to Portugal, visiting Lisbon, the Fatima religious shrine, Estoril, Sintra, and had glimpses of the residences of the rich and famous.

Back in Spain, they went south to visit Andalusia -- Torre Molinos, Seville, flamenco dancing, Granada, the Sierra Nevada mountains, and the romantic Alhambra.



*The Alhambra in Granada*

"One funny incident happened at poolside in Torre Molinos. My husband took a nap, awakened and started reading a British newspaper for world news. When he looked up, he was thunderstruck to discover he was surrounded by topless ladies sunning themselves," Baba said.

"To make the trip even more exciting, there was a bombing of a building in Madrid, which we missed by just a few hours," Baba said. "The Spanish food, wine and scenery



*Cathedral at Santiago de Compostela*

were all lovely, but we were so glad to get home to the USA."

Baba and Jose are both from Cuba, but met in New York. They were married in 1965 and honeymooned in Sarasota, finally moving here in 1978, after many vacation visits. Baba joined our company in October, 1979, and daughter Gloria is currently studying at MCC.

(Cont'd on Page 6)



*Estoril in Portugal*

## GREAT VACATIONS

(Cont'd from Page 5)



*Closeup of Arc de Triomphe*



*Roman aqueduct in Segovia*

## ENGINEERING CLASS USES TVI TEACHING TECHNIQUE

A course in Microprocessor-Based Digital Signal Processing is currently being offered to Data Systems Division employees through the University of South Florida's Engineering Education program.

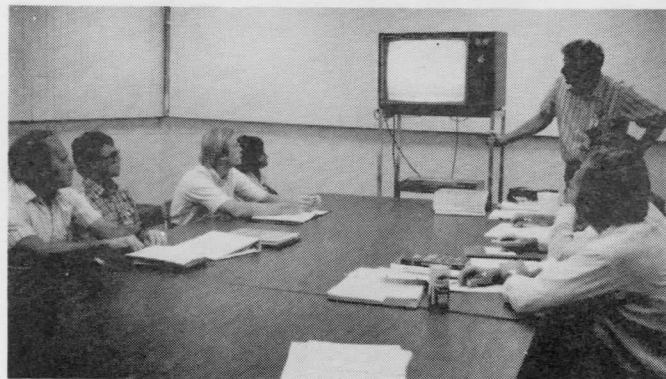
The class utilizes USF's Tutored Videotape Instruction (TVI) method and each class session is led by a knowledgeable Proctor or Tutor. The graduate-level class is open to qualified undergraduates, and there are eleven credit-seeking students registered in the class.

"Because all of the students who registered for this class are employees of FWSI, we have the added advantage of offering the course here at the plant," said Proctor Joe Lehmann. Joe Lehmann is Staff Engineer in our Engineering organization. The course meets at 4:45 p.m. on Mondays, and it consists of 16 three-hour classes, one night a week, for three credits.

Tutored Videotape Instruction classes use candid videotape recordings of live classes on campus, and each class session is led by a tutor or facilitator. The tutor is a volunteer, selected for his or her ability and familiarity with the course material, according to information from USF and FEEDS (Florida Engineering Education Delivery System).

Engineering graduate courses are now offered at the Sarasota USF/New College campus as well as the University of South Florida Tampa campus.

Horace C. Gordon, Jr., director of the Bi-County Center for Engineering at the University of South Florida's Sarasota campus, is also looking forward to the implementation of a new video instruction system. The new system will link the Sarasota campus to the Tampa campus (and other locations) through "live" video instruction and two-way audio links in real time, so that students can ask questions and receive replies.



*Pictured attending a USF Tutored Videotape Instruction engineering class in our plant are: Graham Hildebrand, Mark Hemmerlein, Randy Bernard, Shoba Shetty, Proctor Joe Lehmann, David Payne, Bill Waggener, Jr., Mike Weed and Mike Witchey. Not in the photo are Pavlo Bobrek, Guy Ellis and Jim Massing.*

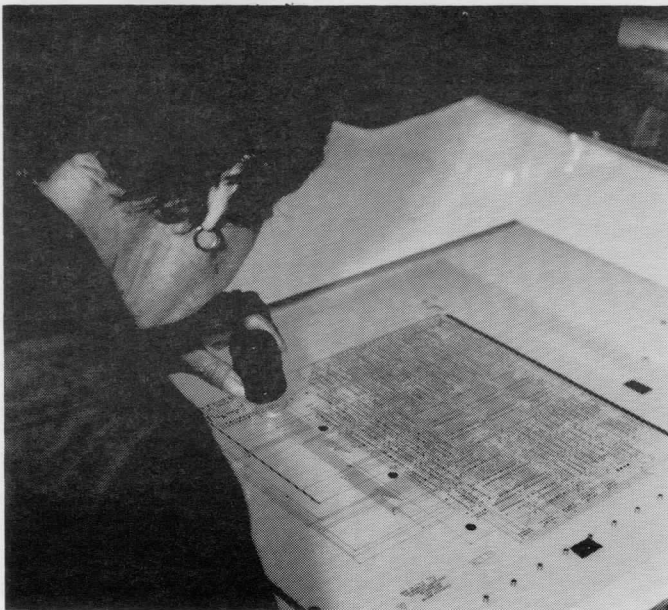
## NEW EXPOSURE UNIT TO HELP MAKE DOUBLE-SIDED PWB'S

A new machine, called a Colight Double-sided Exposure Unit, has been installed in our Printed Wiring Board Photo Lab, and will soon be ready to help streamline the PWB manufacturing process.

The exposure unit will allow operators in the Printed Circuit Photo Lab to expose both sides of the sensitized copper-clad panels at the same time, during the process of making double-sided or multi-layered printed wiring boards.



*Old Colight single-side Scannex in foreground, with new Double-sided Exposure Unit in background. Shown with the units are Nancy Wentz, Mike Moninger, of Fabrication Engineering, Gene Flagg, Supervisor of P.C. Fab and Plating area, and Dorothy Richey.*



*Dorothy Richey is shown checking printed wiring board art work which will be used in the new Colight Double-sided Exposure Unit.*

Precision registration is becoming more critical in the new, denser, more complex designs utilized in making printed wiring boards. In double-sided or multi-layered printed circuits, the PWB art work images must be aligned within .002 to .005 (two thousandths to five thousandths of an inch) tolerance.

The film patterns of printed wiring and the "pads" for precisely-drilled holes look like a maze of lines and dots. This art work pattern must be transferred to and etched into the sheets of copper-clad boards to become printed wiring boards. Printed wiring boards are the electronic circuits which are basic to the production of our sophisticated electronic products and systems.

A new fixture is being designed to hold the film "art work" in place so that the Colight Exposure Unit images can be precisely aligned.



*Nancy Wentz and Dorothy Richey, of our Printed Circuit Dry Film Processing area, are shown with the new Colight Double-sided Exposure Unit.*

## 117 BLOOD DONORS ARE HELPING OTHERS

Employees, Retirees and members of their families will benefit from the generosity of 117 employees who gave blood on September 17 when the Lower West Coast Bloodmobile visited Data Systems Division.

Our Company Blood Bank is available for use by Data Systems Division Retirees, employees and their families whenever the need arises. Just call Occupational Health Nurse Debbie Graham, Ext. 5559, and Debbie will arrange for the appropriate number of units of blood to be transferred to the account of the patient needing the blood.

Special thanks to all those who gave !

## CONGRATULATIONS !

WOODY HAMILTON (Signal Processing) and Wilma Singleton were married September 14 in Charleston, S.C., in a church wedding.

PATRICIA BAKER (Aviation Recorders Assembly) became Mrs. James Martin on Friday, September 13, in a home wedding in Bradenton.

CHIP VOSS (Telemetry Engineering) and his wife Pam are the proud parents of a baby boy, Ryan Philip, born on August 28. Ryan weighed in at 6 lb. 9 oz.

PAT REDMOND (General Accounting) and Libby Hill were married August 10 in a church wedding in Clearwater.

SHARRON HICKS (Training) was in the social news recently in her role as Chairperson of the 11th annual Hillbilly Hoedown benefit, sponsored by Xi Delta Psi Chapter of Beta Sigma Phi. The event was held at the Sarasota Exhibition Hall on September 14. Among the other committee members in the news photo were Dee Rigdon (Mrs. Ty) and Grace Brown (Mrs. Jon). The benefit was for Fame Haven.

RAY McPARTLIN (Operations) sank a hole-in-one at Palm-Aire champions course this month. Ray used a six iron on the 12th hole (par 3, 170 yards). Yes, there are witnesses and notarized sworn statements have been taken!

## NAPFEL, HAWKINS GIVE TWO TECHNICAL PAPERS

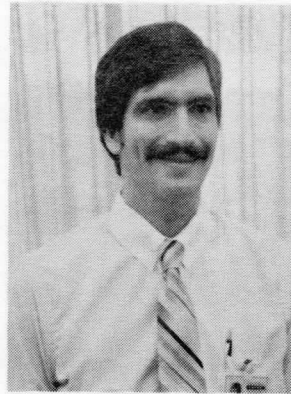
Two members of Fairchild Weston's Aviation Recorders organization presented a pair of technical papers before professional groups in Arizona and Germany during September.

Hans Napfel, Manager of Aviation Recorders Engineering, and Barry Hawkins, Aviation Recorders International Sales Manager, appeared before the International Society of Air Safety Investigators at the group's 16th annual international seminar in Scottsdale, Arizona, on September 4. Their technical paper on the methodology of readout of the Fairchild Digital Flight Recorder presented details on how to analyze and readout the Fairchild DFR. Over 200 air safety investigators were present.

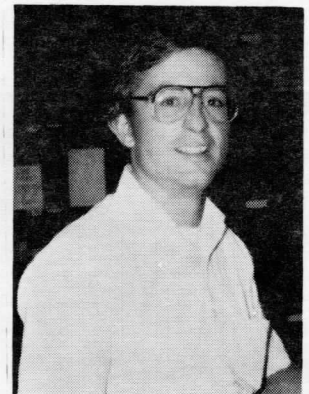
On September 19 Hawkins and Napfel were in Hamburg, Gemany, where they presented a paper on the new Fairchild Cockpit Voice/Data Recorder (CVDR) to a group of Airborne Integrated Data Systems engineers and technical personnel. The meeting was sponsored by DFVLR (Deutsche Forschungs und Versuchsanstalt fur Luft und Raumfahrt), the German equivalent of the U.S. National Transportation Safety Board. DFVLR has responsibility to investigate aircraft accidents and incidents in Germany.

## WELCOME ABOARD TO OUR NEW FELLOW EMPLOYEES

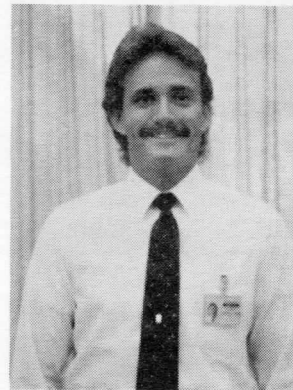
A sincere welcome to the new employees who joined Data Systems Division in August. We look forward to working with you to reach the Division's goals as we design and produce the quality products, systems and service our customers need.



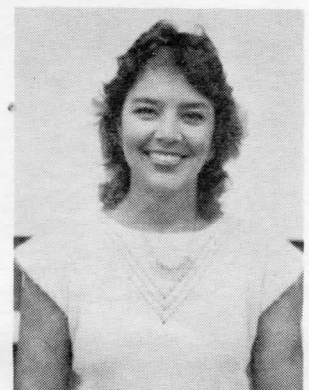
MICHAEL J. MEESIT  
Engineer  
Telemetry Systems Eng'g



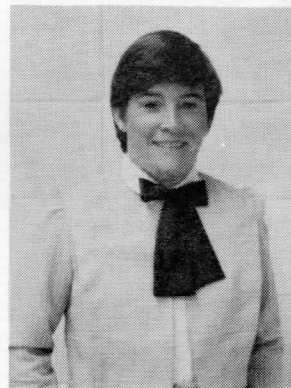
JEFFERY L. MILBURN  
Technician, Customer  
Support, Lancaster, Ca.



JEFF MOLER  
Sr. Production Engineer  
Production Engineering



CINDY PRIETO  
Accounting Clerk  
Accounts Payable



YVONNE R. VANCE  
Assoc. Sci. Programmer  
Signal Processing



STEVE R. VICKERS  
Customer Support Engineer  
Lancaster, CA.





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**M  
I  
S** MANAGEMENT  
INFORMATION  
SERVICES

BY DALE DENNIS, CDP

## INFO CENTER NEWS

Welcome to a new service being provided by the Data Systems Division (DSD) MIS Information Center. Periodically an insert will be provided in PULSE on activities and projects in process in the Info Center of general interest to employees. The material will include topics and activities concerning business applications of computing equipment and office automation at DSD.

The objective is to make DSD employees a better informed group and boost employee performance and productivity through the use of computing tools and technology.

The announcements will be brief and as non-technical as practicable. We encourage contacts (ext. 5386) for further information, training, or hands-on experience.

### PC TO MAINFRAME LINK

A new software package, PANLINK from Pansophic Systems Inc., has been installed on the IBM 4341 mainframe. This software provides extended "virtual diskette" capabilities to users with PC's connected as terminals to the mainframe. PANLINK now provides an efficient, effective way to "back-up" critical data from hard disk systems, such as the FutureNet schematic capture systems, without the time-consuming drudgery of writing to multiple diskettes. Operations are now set up to do the back-ups unattended during off-shift hours.

Additionally, PANLINK provides virtually unlimited expansion of PC capabilities for storage of multiple spreadsheets and application data. Plans are underway to use it as a centralized repository for electronic messaging, storage of common usage data, downloading of selected mainframe data for spreadsheet analysis, and storage of site-licensed software.

### NEW PC PRINTER SOFTWARE

DIGICON, from Digital Concepts (\$49.95) and LETTRIX, from Hammerlab Corp. (\$98.50) have been evaluated for high quality printed output and expanded functionality of the PC printers. Both packages provide multifont capability on several PC printers. DIGICON additionally provides virtually unlimited enlargement of text characters and sideways printing. LETTRIX provides multiple fonts with varying qualities to be printed on a single page. LETTRIX has received very high ratings in the trade literature.

### STUDENT USE

The Info Center is once again available for DSD students taking computer classes at MCC or USF. PC's with LOTUS 1-2-3, CROSSTALK XVI, PFS: Write and other software are available on a sign-up basis for homework from 7:00 AM to 8:00 AM and 4:30 PM to 6:00 PM, or during working hours with special permission from your Supervisor. Please call ext. 5386 for more info or to sign-up. Also a mainframe terminal has been dedicated to Assembler coding during certain hours--call for specifics.

### HELP SYSTEM

Those of you with access to IBM mainframe terminals now have available to you volumes of information by just entering HELP on a cleared screen and pressing the ENTER key. You may browse through the menus at your convenience to learn more about DSD business systems, special tools and software, equipment available in the Info Center, computing magazines, special selected articles, etc. Come join us on HELP.

### WORD PROCESSING CENTER

New graphic and scientific symbol libraries and VEGA type fonts (similar to HELVETICA) are now available in the WP Center for expediting proposal, technical manual, and scientific papers preparation. Classes are being held periodically on new applications of graphics and text preparation. Call ext. 5225 for further info or to sign-up for training.

## NEWS FLASH !

### NEW PFS:WRITE WORD PROCESSING

Version C.O of PFS:Write has been released. The updated version provides 250 character line-width, 100,000 word spell-checker, "quick save" to save document snapshots without exiting to MENU, micro-justification for proportional print on specific printers, and several other features. Single copy upgrades are available at \$35 each, or multiple copy upgrades at five units for \$75. It is necessary to remove the cover from your manual and send it with check for \$35 each (or \$75 for five) to Software Publishing Corp., 1901 Landings Dr., Mountain View, CA 94043. Users with single copies may contact the Info Center (X5386) for consolidation with other users to achieve the five unit upgrade rate.



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## HEALTH LINE

By **DEBBIE GRAHAM R.N., C.O.H.N.**

### BREAKNECK SPEED

Seatbelts unquestionably save lives when worn properly. But like all safety devices, there are potential failings. One reported problem is the "hangman's fracture", discovered recently through an analysis of car accidents involving people wearing seatbelts. This special fracture, which resembles the type sustained when a person is executed by hanging, is caused by improperly adjusted head rests.



During a crash, the torso is held in place but the head is allowed to whip back. If there is no headrest, or it is too low, the neck may be fractured. The solution appears to be mandatory head rests and an effort to educate the driving public on how to adjust them.

(Machine Design, August 22, 1985 Compliments of Will Zoerner)

### THREE O'CLOCK LET DOWN?

It's only 3:00 P.M. but you are sitting at your desk or at your workbench and are feeling like your eyelids are about to close, you are not able to concentrate, and your "get up and go," got up and left! you have work to complete and a deadline to meet and are seemingly too tired to get on with it.

Most of us try to "wake up" with a candy bar, or a cup of coffee, or if we are smokers, light up. Somehow we all believe that we will be stimulated and perky if we do any of those things-----but-----by four o'clock we feel worse than we did at 3:00. How come?

Well, sugary snacks raise the blood sugar levels too fast. As your blood sugar rises you get "Insulin rebound" (which is produced by the body in response to large doses of sugar) and you crash, feeling more tired than before.

Coffee stimulates your system too fast and the same rebound effect occurs.

Smoking a cigarette, along with coffee, causes a worse effect, because nicotine is also a stimulant, and causes a rebound effect. You are tired, because you are in need of a fresh supply of oxygen. What to do?

Try exercise to get rid of that groggy mid afternoon slump. Exercise gives your body cells fresh oxygen and that is what you need to get perky again. Oxygen is energy and after many hours at work we can become energy short.

If you have been sitting, stand up, and take a minute or two and try some simple exercises or take a brisk walk around the area. Move your arms and legs, and refocus your eyes at a far distance. Roll your neck gently, bend at the waist. It doesn't matter exactly what you do, just as long as it gets you breathing faster for a few minutes.

This is what happens to your body when you take a few minutes of hard exercise:

1. Your body is forced to nearly double its intake of oxygen
2. You pump about twice as much blood through your veins
3. You convert blood fats into blood sugar (the healthy way - not from a sugary candy bar which will rebound)

Now you are cooking, because what you've done is call upon your body's supply of reserve fuel (we have loads of that) instead of adding fuel in the form of calories from outside. This makes you feel better, and doesn't add calories to your day. Fresh fruit or "veggie" snacks do a better job of getting us "up" and keeping us there. Cheese peanut butter or a hard boiled egg add nutrition to our diet and also give us that needed late afternoon boost.

## SOME EXERCISES TO DO RIGHT AT YOUR DESK

These exercises reduce stress, reduce fatigue, and help to loosen and relax tight muscles. All these factors are present when we are desk bound, or when we sit for long periods of time. Mental fatigue is as tiring as physical fatigue and short breaks for exercises, can "rev" us up and get us feeling less tired and dull for the rest of our day.

### HEAD & NECK

Turn the head slowly from side to side. Hold each turn for the count of four, and repeat this series 5-10 times. Keep eyes closed and relax your whole body slumping your shoulders

### SHOULDERS

Relax, Roll your shoulders forward, slowly. Use a wide circular motion. Then, roll your shoulders backwards, using a wide circular motion. Repeat this series 5-10 times.

### UPPER BACK

Relax, close your eyes. Fold both arms at shoulder height, across chest. Push elbows back, hold in this position for 3 seconds, repeat this motion 5-10 times.

### DEEP BREATHING

The best stress reducer and relaxer there is. Breathe in slowly through your nose. Count to 6 as you inhale. Hold your breath for 6 seconds and slowly exhale through your mouth for a count of 6. Repeat this 5-6 times. Remember--- slowly. Close your eyes and think of something pleasant.

### LOWER BACK

While seated, slowly lean over and bend your body down between your knees. Hold this position for a few seconds, then slowly sit up. Repeat this after a 10 second break (count to 10) and repeat this series 3 times. Relax for the 10 second rest.

### LEGS

Grab the shin of your leg and pull your leg up slowly to your chest. Go as close to the chest as is comfortable. Hold your leg in this position for a count of about 5 seconds. Repeat the same procedure with your other leg. Repeat this series for 5-6 times.

## TO ALL OF OUR BLOOD DONORS--- THIS PAST DRIVE WAS OUR MOST SUCCESSFUL

Our community blood bank was at a very low ebb, prior to their visit to FAIRCHILD WESTON SYSTEMS, INC. Your generosity helped fill the need, Sandy Reister, donor recruiter, called the following day, and expressed gratitude to all of you. We can be proud of our response to this vital community need. We have proven that the employees of our company care enough to share the gift of life. Let's make our next drive twice as successful. Remember that every day, someone, somewhere, needs the Gift of Life.

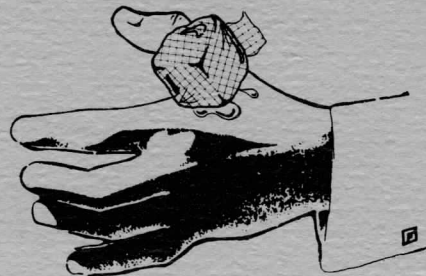
### "CONTACT-LENS HAND"

Many of us at work wear contact lenses. We frequently see persons suffer reactions to the lenses or to the products that clean and disinfect the lenses.

Now it is discovered that "rashes" on the hands are occurring when the lenses are held for cleaning. The culprit is the chemical, thimersol. This is a preservative found in many lens-cleaning preparations. Although this ingredient is known to cause itchiness and redness of the eyes severe enough to discontinue the use of the product, it was not previously implicated in skin problems. Thimersol is also found in eye, ear and nose preparations, and also dental-care products. Many "unexplained rashes" now may have an explanation; a possible allergy or sensitivity to thimersol.

(Harvard Medical School Health Letter, June 1985)

### GOT A TOOTHACHE / TRY ICE ON YOUR HAND!



You read it right! A study done at McGill University, in Canada by Dr. Ronald Melzack, has found a simple way to temporarily ease the pain of toothache.

Wrap a piece of ice in gauze and apply it to the Hoku acupuncture point. This is located in the web between the thumb and the index finger. Hold the ice on this area for seven minutes or until the area is numb. Always place the ice on the same side of the body (hand) as the pain is from the toothache. It's a great way to obtain temporary relief until you can see your dentist.

(From Body Bulletin, Sample issue) 1983