FULSE....



Schlumberger

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NEWS ABOUT DATA SYSTEMS DIVISION

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ELECTROSTATIC AWARENESS SEMINAR TO BE GIVEN HERE

Electrostatic awareness...static sensitive devices and materials... ESD... Electrostatic Discharge... static electricity...

Not new terms. Almost everyone has felt the effects of Electrostatic Discharge (ESD). It can happen on a cool dry day when you walk across a room and your leather shoe scuffs against the floor or rug. You reach for a doorknob and draw a spark.

In the electronics business, there are increasingly sensitive devices -- FET's, MOS and CMOS integrated circuits. (FET stands for field effect transistor, MOS for metal oxide semiconductor, and CMOS for complementary metal oxide semiconductor.)

These devices, so important in our equipment, can be seriously affected -- even damaged -- as the result of ESD (Electrostatic Discharge). Government contracts require compliance with Mil Standards or DOD Standards on Electrostatic Discharge Control.

A training seminar will be given at Data Systems Division on September 5 and 6 for all employees whose work requires handling static-sensitive materials. The Static Awareness (Cont'd on Page 2)



Miriam Smith is pictured at an ESD control work station. She wears a wrist strap attached to the static control table mat, as she mounts components on a printed circuit board. The wrist strap's flexible cord allows needed freedom of motion. The table mat is grounded to drain off electrostatic discharge.

NEW PT. MUGU SYSTEM SHIPPED TO CUSTOMER

A new telemetry/computer system destined for installation at the U.S. Navy's Pacific Missile Test Center, Pt. Mugu, California, was completed and shipped this month -- less than eight months from receipt of contract. The system is valued at over \$1 million.

Program Manager Bob Buell and Project Technician Gary Snyder are scheduled to install the system in late August.



Gary Snyder at telemetry front end, and Bob Buell at computer terminal of Pt. Mugu system.

(Cont'd on Page 2)

SAFETY HOURS REACH OVER HALF A MILLION

Congratulations -- over half a million hours without a lost-time accident.

Thanks to YOUR safety awareness, the plant safety record at press time stands at 516,975 hours without a lost-time accident. That means YOU are helping to avoid painful injuries. Keep up the good work!

IT'S ALMOST TIME FOR OUR PICNIC!

SAVE THE DATE -- OCTOBER 13TH

AN EQUAL OPPORTUNITY EMPLOYER M/F/H/V

ELECTROSTATIC AWARENESS SEMINAR TO BE GIVEN HERE

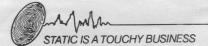
(Cont'd from Page 1)

Training Seminar is aimed at explaining the causes of static, its effects, and proper use of static control material. Employees are being invited to the Seminar through their Supervisors.

Steps to counteract ESD have already been taken, and there will be an ongoing educational campaign, with employees in Manufacturing, Quality Assurance, Engineering, and other areas actively participating.

"As you go through certain area -- Receiving Inspection, Assembly, and Test, for example -- you will notice mats on the work tables, and employees wearing wrist straps," explained Pervis Sanders, of Manufacturing Engineering. "These are some of the ways to minimize charge buildup or drain off charge."

Electrostatic awareness is going to be part of our everyday work environment for a long time to come.



Static can undo your best work.



NEW PT. MUGU SYSTEM SHIPPED TO CUSTOMER

(Cont'd from Page 1)

This new telemetry decommutation and processing system includes a dual 700-series telemetry front end, a 715 Multiplex Preprocessor, and a DEC VAX 11/780 hosting four megabytes of memory. The system utilizes standard software developed for the McClellan program, plus newlydesigned software which can now be added to our list of standard software available to future customers.

"As with all systems, the project involved significant contributions from a large number of employees," Bob Buell said. These included the efforts of Manufacturing personnel in producing the standard Production units, and work performed by the Systems Assembly group. Special design work on this project included enhancement of the TELDAX data acquisition software by Bob Feather, and the addition of some new capability to the Model 715 Preprocesssor, performed by Mike Witchey and Greg Lambert. These capabilities will now be available to future customers.

Other contributors included Tom Smeed, Jack Boehner and Ron Connolly, Dick Vorce, Earl Studenwalt, and Carl Steineckert.

FORE! GOLF OPEN ON SEPTEMBER 29TH

With the regular Summer Golf League activity winding down at the end of August, it's time to sign up for the big Fairchild Weston Golf Open at Jacaranda West Country Club on September 29.

The \$17.50 fee covers greens fees and carts, buffet lunch, trophies and prizes. That's September 29, 8 a.m., shotgun start, Call Rick Mitchell, Ext. 271 or 339.

CONGRATULATIONS!

MICHAEL BLOCZYNSKI (SPS) and his wife Angel Ann welcomed their new baby boy Michael Raymond, Jr., on July 15. Young Michael weighed in at 8 lb. 15 oz. at MacDill AFB hospital.

JIM ROBINSON (SPS) and his wife Julie are the proud parents of a new son, Brian James, who was born on July 24 at the Venice Hospital. Brian weighed 8 lb.

SHARON VENNEMAN (PWB Assembly) and MIKE VENNEMAN (Short Run Shop) are the parents of a baby daughter, Tara Lee. She weighed 6lb. 4 oz. on her arrival July 26.

CHERYL MNICK (PWB Assembly) and her husband Charles announced the birth of son Jason Curtis on July 22, weighing in at 8 lb. 3 oz.

AUTOMATIC TEST SYSTEM PROVIDES MORE TESTING CAPABILITY AND IMPROVED RELIABILITY ON HUNDREDS OF 400-SERIES UNITS

An automatic test system, custom designed in-house by Test Engineering, is assisting our Telemetry Test Technicians to conduct longer, more complete testing of 400-series units -- an effort which is paying off in improved reliability for these units. The versatile system is also testing some 5000-series cards.

This 420 System Automatic Tester was custom designed around some outside purchased equipment. A special interface was designed in-house, and specially-designed software enables Test personnel to use the ATE System in combination with the Manufacturing PDP-11 computer.

This 420 System Automatic Tester is giving us very complete test data. It is operating 24 hours a day, completely automated, without any support.

"Units are now being tested in a system configuration for a minimum of 100 hours," reports Test Technician Ray Thomas. The system configuration is 420A's, 420B's, 425'S, and a 428. The automatic test system is helping us to identify potential problems before the units go out to the customer, and we can avoid early life failures.

"Improved reliability is the main benefit offered by the new ATE System," said Manufacturing Engineering Manager Paul Copen. "Test Technicians are freed up to concentrate on troubleshooting, and we anticipate good customer acceptance, with fewer Field Service repairs."

"Two contracts currently in-house (NASA/Vandenburg – LEIS, and NASA LC-39) require over 600 Model 420's," said Operations Director Ray McPartlin. "Automatic testing and improved reliability are certainly very important in our performance on these contracts, and will no doubt help with other jobs in the future."

Woody Griggs, of Test Engineering, has prime responsibility for this ATE system, with Sam Virts assisting in building the special interface test boxes.

"All the instrumentation is controlled by an IEEE-488 Bus, and the enhanced graphics on the computer terminal aid the Technicians in analyzing test results from the great amount of data taken." commented Woody Griggs. "All the test data is stored on hard disc drives. Data can be sampled at designated intervals and printed out. This provides Test Technicians with a quick-look report on the testing done over long periods of time and makes any potential product problems easy to spot for follow-up."



Sam Virts, Woody Griggs, Ray Thomas, Rick Wilson, and Vince Wuellner with new custom-designed ATE system. Two racks at left contain 400-series system. Rack behind Ray Thomas contains the Automatic Test Equipment. Woody and Ray are touching the computer terminal.

AVIATION RECORDERS WIN SIGNIFICANT NEW ORDERS

An order for Fairchild Cockpit Voice Recorders has been received from Short Brothers in Northern Ireland. The CVR's are to be used for the C23-A Sherpa aircraft which is being supplied to the USAF European Delivery System. The order is part of a continuing effort by Fairchild Aviation Recorders to win more military business for our recorders.

"Fairchild was selected based on the excellent experience we have had with Short Brothers in providing recorders for their successful 330 and 360 aircraft," said Barry Hawkins, International Sales Manager for Aviation Recorders. "The Sherpa is a variation of the 330."

Initially 18 aircraft are involved, but the USAF has an option for an additional 48 aircraft. The USAF European Delivery System (EDSA) is a European operation which provides for logistic support of USAF bases in Europe. The aircraft will be based in Zweibrucken, West Germany.

Other successes achieved by our Fairchild Aviation Recorders group recently include orders from Pakistan Airlines and Finnair for CVR's and DFR's for their new on-order aircraft.

"This is a major breakthrough with two customers who have not purchased our Digital Flight Recorders before," Barry Hawkins said. PIA plans to install our equipment on their 737-300 aircraft, and the Finnair orders are for the new Douglas MD83, a variant of the DC-9-80 aircraft. MD80 orders are also a first for Fairchild. PIA has been using a competitor's CVR and DFR equipment for many years prior to selecting Fairchild for this new program.



A WILDERNESS CAMPING ADVENTURE IN NEW MEXICO -- WITH MIKE RUSSELL AND A GROUP OF BOY SCOUTS

For ideas about a different kind of vacation, talk to Mike Russell, of Aviation Recorders Engineering. Mike was one of four adult advisors who accompanied a bus load of Boy Scouts on a camping trip to the beautiful mountainous wilderness area in New Mexico known as the Philmont Scout Ranch near Cimarron.

The contingent from the Sunnyland Council included over 30 Scouts, ages 14 to 17. Four Scouts were from Troop #95, where Mike has been active in Scouting for seven years. In the group on the New Mexico trip were Allen Lawton, son of Jay Lawton of our Cal Lab, John Schroeder, son of Gene Schroeder of Telemetry R&D, and Mike's son Seth.

"We chartered a bus, and en route to New Mexico we stayed overnight at various U.S. Armed Forces bases, where the group usually slept in their sleeping bags in the gym," Mike said. "The military were excellent hosts, and let us utilize their fine facilities, including the Cafeteria where meals usually cost the Scouts about \$1 each."

Notable sights along the way included a visit to the Taos Indian Pueblo and Carlsbad Caverns. In Santa Fe the Scouts stayed at a National Guard Armory with fewer facilities than at other stops. But one of the Boy Scout Advisors happened to meet a Girl Scout Leader who invited the young men to come to a dance that evening to meet a group of 60 Girl Scouts.

"We were at the Philmont Scout Ranch July 12-22. It consists of 214 square miles of rugged, mountainous terrain, with trails, streams and wild life," Mike relates. "Our crew consisted of nine Scouts and myself as Crew Advisor.

"Staff members and Rangers at Philmont were truly exceptional. They arranged educational and fun activities for the Scouts at most camp sites. We camped in tents, carried packs weighing 40 to 60 pounds, built camp fires, and ate freeze dried food," Mike continued.

Activities varied each day. The Scouts were up at dawn and hiked to the next camp site, where the Staff arranged for burro races, riding horses, or instruction in shooting, gold mining, rock climbing, or climbing a pole with gear used by loggers. Another day's activity was making a railroad tie -taking a log, and squaring it off, using old style hand tools. Later the Scouts used the wood chips to heat water for showers in a wood-fired water heater. Occasionally they had to carry their own water supply.

A medium-sized Cinnamon bear visited the camp on the first day and ran off with the Scouts' bag of unburnable trash. The incident reinforced the Scouts' determination to keep their edibles safe. A bear bag was rigged up at each camp site -- suspended by rope between trees, and hanging



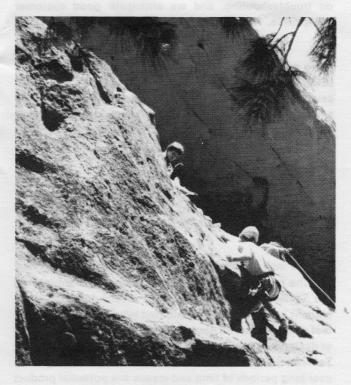
View from Mt. Phillips, altitude 11,700 ft., the highest point reached by Mike Russell's crew.

at least 15 feet off the ground and 15 feet from the nearest tree.

One Scout ran into a fat, four-foot-long rattlesnake. It was killed by a Ranger, cooked, and eaten by the Crew.

"Delicious,," said Mike.

The whole trip cost \$420 per person for the full 20 days -and gave the campers an experience they will always remember.



Rock climbing

CAMPING ADVENTURE

(Cont'd from Page 4)





Mike Russell

Scouts on the trail.



Tents up -- time for activities.

??? DID YOU KNOW ???

DEBBIE GRAHAM, Occupational Health Nurse in Personnel, has been notified that she passed the National Certification Exam as an Occupational Health Specialist. It's a grueling exam for which Debbie studied hard for many months.

RON VAN DER VLIET (SPS) ran the Tropical 50 Mile Road Race held in Miami on Saturday, August 11. Ron took 20th place by running the course in 9:59. The field consisted of 75 runners who began the race at 7 p.m. Ron started on a weight loss and physical fitness program in October, 1981. After trimming down his weight and exercising, he tried running around the block in early 1982. He gradually extended his running time at the beach, and over the next two years entered a number of running events. But a 50 Mile Marathon is a major achievement for any runner! Incidentally, Ron's son Bob Vander Vliet, another fellow employee, is also an accomplished runner.

BETH PUTNAM, of Telemetry Systems Software, has captured some water skiing awards lately. She won two first place awards and one third place in Women's I Exprt Trick competition, and a third in slalom, in Orlando and Sarasota. Beth has been water skiing for nine years. She's a member of the local Ski-A-Rees group and YMCA Aqua Kats, and is a volunteer water skiing instructor at the YMCA on Saturdays. Right now the Show Skier is practicing for the Regionals.

EXPORT BOOKS ORDER FOR NEW 1785 SYSTEM

An order has been received from India for telemetry equipment including our new Model 1785 Universal Telemetry Reduction System with the Tape Formatter option. Value of the order is over \$700,000.

The new 1785 system consists of our XPRT telemetry front end with color graphics CRT display and utilizing a new DEC Micro PDP-11. The equipment has high speed digital tape recording and playback capability.

CVR & DFR TRAINING CONDUCTED IN-HOUSE

In-house training on our Cockpit Voice Recorders and Digital Flight Recorders was conducted during the weeks of August 6 and 13. Represented were the U.S. Air Force (Wright Patterson AFB, Dayton), KLM-Netherlands, Air Midwest, NIC (Australia), Scan Avionics (Demark), Gates Learjet, Airtransport Charter (England). Carl Palkovich did the CVR training, and Ron McDeed and Dave Schmidtman taught the DFR class, with assistance from other in-house experts.

STRIKE UP THE BAND! -- SYMPHONY IS HERE

The much advertised, long awaited Lotus SYMPHONY integrated software package is now installed on the IBM PCXT in the MIS Information Center for viewing and evaluation by employees.

"SYMPHONY is representative of the new generation of personal computer integrated software, encompassing spreadsheet, word processing, data management, graphics, and communications in one package," explains Dale Dennis, Manager of Management Information Services. "This approach eliminates the annoying inconvenience, and sometimes disastrous results, of data transfer and diskette loading for individual software packages. It makes the personal computer more user-friendly for general business applications, and reduces the requirement for users to be data processing knowledgeable."

An extensive, interactive, computer-based tutorial simplifies training for the new user.

Several trade publications containing analytical reviews of SYMPHONY are available for reading in the Information Center.

Interested employees are encouraged to view or use the new software on a sign-up basis by calling X386 for reservation. The Information Center is open from 7 AM to 6 PM daily. Use of the Center during working hours requires approval of your supervisor.

RENOVATIONS AND MOVES ARE UNDERWAY THROUGHOUT PLANT

Renovations and plant improvements are taking place throughout the facility. Here's a summary of current and planned activities, as provided by Frank Bloechl, Facilities Manager.

- A special humidity-and temperature-controlled room was built for Inspection. This room houses test equipment used to test integrated circuits for incoming inspection.
- Architect's drawings are complete and approved for construction of our new lobby. Work is expected to start in September.
- Signal Processing (SPS) is expanding and will take up approximately 6000 square feet of additional space in the S-3 section of the building. Work is currently in progress.
- Our Equipment Recorders and Instrument Recorders Assembly group will be moving to the Production area near the Cafeteria. This is the area which was recently cleared out by our surplus sale for employees. These two product lines will fill the entire area of approximately 13,000 square feet.
- The area vacated by the Recorders Assembly group will be utilized by Systems. The immediate use will be for our current NASA Contracts.

- The area which has been utilized as a Temporary Break Area, near the Machine Shop, is to be used by the Paint Shop as a staging area for the necessary preparation and painting of racks for the NASA contracts.
- The exterior of the Administration section of the building and part of the Production building is being painted. The balance of the building will be painted by year-end.
- Four temporary summer student helpers were hired to clean the air handlers and replace filters throughout the building. This job is complete.
- Half of the L building (center section of the plant) has been remodeled for use by the Photo Lab and Reprographics. Repro completed moving in late August. The other half of the L building will be remodeled for EDC, with completion planned for 1985.
- Finished Goods was moved closer to Shipping, which provides more room for Systems.

Your cooperation and patience while this work is taking place are greatly appreciated.

ANNIVERSARY GREETINGS TO THIS GOOD GROUP

Anniversary greetings go to a group of seven employees who are observing major service anniversaries this month. In the group are three of our colleagues who completed a quarter of a century with our company in August, and two who rounded out a mere 20 years!.



Special congratulations to Wyatt Bishop, Carmen Ireson and Dorothy Watson, who are observing their 25th service anniversaries with our company during August, and to Tom Greinke, at right, who marked his five year service milestone.







Royal Bechtold (left) and Jack Cain (center) completed 20 years of service this month. At right, Larry George, of Field Service, observed his 10th service anniversary on August 19th. Larry is based in Fredericksburg, Virginia. Happy anniversary, gentlemen!

ALMOST TIME FOR OUR PICNIC!
-- OCTOBER 13TH