



**FAIRCHILD WESTON  
SYSTEMS INC.**

FAIRCHILD WESTON  
Schlumberger

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

VOL VII, NO. 7

AUGUST, 1985

## MODEL 80TA RECORDERS ORDERED BY AIR FORCE

An order for 12 Model 80TA Data Recorders has been received Warner Robbins Air Force Base in August. The contract, valued at \$550,000, calls for these 28-track Recorders to be used on C-130 aircraft, based at Keesler Air Force Base, Biloxi, Miss.

These Instrumentation Recorders are used in the C-130's to record multiple radio communication links between aircraft and ground control points, according to Steve Hoff, Data Recorders Sales Manager. One Model 80TA replaces two older recorders, saving the Air Force vital space and about 200 pounds of weight per aircraft.

The Recorders are being used on the first phase of a multi-year update program, and we hope to participate in future phases of the program, Steve Hoff said.

## PICNIC PLANNERS WORKING ON BIG OCTOBER 19 EVENT

Planning is underway for the big Family Picnic for Data Systems Division employees and their families. The annual company event is scheduled for October 19 at Elks Park, with October 20 as the rain date. Employees throughout the facility are pitching in to help with the various committees and the planning. Suggestions are most welcome. Just call any member of the Picnic Committee to volunteer, or to give the Picnic planners the benefit of your ideas.



Members of the Picnic Planning Committee include (seated) Ben Robinson, Bill Kirby, Kathleen Keegan, Elaine Ellis, Peggy Long. Standing are Dexter Nash, Jackie Neipert, Pat Carney, Dale Woodland, Don Caron, Sharron Hicks, John Thornton and Margaret Herbst.

## 401 (k) FEATURE

### OVER 600 EMPLOYEES ENROLL IN IMPROVED SAVINGS PLAN

Over 600 employees have elected to contribute to the improved Data Systems Savings Plan which includes a 401 (k) tax-saving feature. Some 83% of eligible employees are contributing between 1% and 10% of their gross pay into the 401 (k) Plan, which is a revision of our earlier Schlumberger Contributory Investment Growth Plan.

Employee participation is up 15% compared to the number of employees who contributed under the earlier plan. New employees are eligible to participate after one year of service with the company.

"In addition to the improvements already announced, we have been advised that there will be a few additional changes offered to employees," said Personnel Director Rick Greenawalt. These new features will be available to eligible employees between September 1 and October 15, 1985, and will be effective January 1, 1986.

Very briefly, the new changes can be summarized as follows:

- Employees will have a one time right to redirect investment of current account balances into investment Funds A, B, or C. (Formerly employees could never redirect account balance.)
- Up to 60% of employee and employer money can go into Fund C (Schlumberger stock). (Formerly the limit to Fund C was 50% of employer and employee money.)
- Fund D, the pre-retirement liquidity fund, will be eliminated. Instead, all people age 50 and above may move all their accounts into Fund A, if they wish. Once an employee chooses the pre-retirement liquidity option, moving the account into Fund A will now take place at one time rather than over a two-year period.
- The open investment election period will be from September 1 to October 15, THIS YEAR ONLY, instead of in November.

(Cont'd on Page 2)

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

## OVER 600 EMPLOYEES ENROLL IN IMPROVED SAVINGS PLAN

(Cont'd from Page 1)

Material describing these new changes is being distributed to all employees, and there will be an opportunity for question-and-answer sessions with groups of employees during September.

During this one time sign-up period, from September 1 through October 15, 1985, employees can choose to change the % of employee contribution, as well as designate how the employee and employer contributions -- past and future -- are to be invested in Funds A, B, or C.

"We are pleased that this change is giving all eligible employees a chance to reevaluate their savings and investment decisions," Rick Greenawalt said.

The deadline for returning your form to Alma Sanger, Benefits Coordinator, is October 15. If you have been with the company for one year or more, you must return a form -- even if you elect to make no changes or decide you do not wish to contribute.

## GOLF TOURNEY SEPT. 28

Golfers are getting ready for the Fairchild Weston Open Tournament to be held on Saturday, September 28, at 8:30 a.m. (shotgun start) at Palm Aire Country Club on The Lakes side. Fee for league members will be about \$15, and \$20 for non-league golfers.

Chairman Rick Mitchell invites interested golfers to call him, Ext. 339 or 271, to sign up for the tourney.

Golf league playoff on August 6 resulted in Ken Triplett and Bruce Knisel knocking off Bill Zoerner and Ron Connolly to capture the league championship.

## WAIT 'TIL NEXT TIME !

Data Systems Division's Men's Softball team won two of their four playoff games and closed the season in third place in the division with an excellent record of 12 wins and four losses. The men are looking forward to winter season play.

Team members included Craig Bolger, Rick Greenawalt, Tom Greinke, Manager Maurice Gritzman, Tom Hackett, Chris Lester, Rob McLendon, Fred Meyer, Rob Ramey, Robin Speidel, Dan Toler, and Joe Yeager.

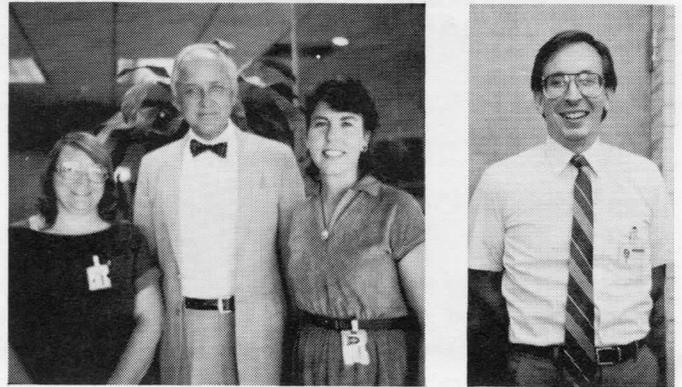
## ATTENTION BOWLERS !

Fairchild Weston's Mixed Bowling League currently bowls on Wednesday nights at South Gate Lanes. The owners have informed League officers that there is a possibility of closing those lanes in two years.

"To assure ourselves of a place to bowl in the future, we are considering starting another league on Sunday nights at Galaxy Lanes," said League Secretary Carol Waters. "Before we can approach Galaxy Lanes, we need to find out how much interest there is and how many teams we will have. If you are interested, please sign up at the bulletin boards, or call me at Ext. 574," Carol said.

## ANNIVERSARY GREETINGS

Four long-time employees observed some major service milestones during August. Heading the list is Bill Kessler, of Data Recorders Programs Marketing, who marked his big 35th service anniversary with our company on August 8. Bill was among our Sangamo Data Recorder colleagues who moved to Sarasota from Springfield, ILL. in 1978.



*Congratulations to Linda Chadwick (10 years of service), Bill Kessler (35 years), and Rosemary Williams (20 years). At right, Ron Johnson completed ten years of service during August.*

## DFR USER LIST GROWS

Fairchild's Digital Flight Data Recorders are being used by an increasing number of customers. Our Aviation Recorders organization has recently received word that the European consortium, Airbus Industries, has selected our Digital Flight Data Recorders as standard for the new A320 aircraft. Lufthansa has also indicated they will specify the Fairchild DFR on their new 737-300, A300-600 and A320 aircraft.

The list of users of Fairchild Digital Flight Recorders includes:

DOMESTIC USERS -- Air One, Allied, American Hospital Supply, America West, Beech Aircraft, Boeing Airplane Company, Command Airways, Dash Air, Delta Airlines, Falcon Jet, Gates Learjet, Hershey Foods, KC Aviation, Mark Air, Mid Pacific, Ozark Airlines, Piedmont Airlines, Pillsbury Co., Ransome Airlines, Republic Airlines, Sunworld International Airlines, USAF OSA Program, and Wright Airlines.

FOREIGN USERS include: Aerospatale, France; Air India, Air Malta, Alyemda Democratic Yemen Airlines, CASA, Spain; Cimber Air, Denmark; DLT, Germany; Dornier Reparaturwerft GMBH, Embraer, Brasil; Finnair, Finland; Fokker B.V., French Military Mission, German Air Force, Lufthansa German Airlines, McApline Aviation, U.K.; Nurtanio, Indonesia; Pakistan Airlines, Royal Air Maroc, and Yunnan Province, China.

## STARTING OVER

Data Systems Division employees reached over 599,600 safe hours without a lost-time accident during August. That good safety record has been interrupted, due to a lost-time accident, and we are now starting over. Please remember to practice safety awareness which can help avoid those painful injuries -- at work, at home, and at play.

## NEW ENGINEERING WORKSTATIONS HELP DIGITAL DESIGN WORK

In Engineering Lab 3, our Telemetry Design Engineers and Technicians are utilizing a new work tool to help streamline the process of designing circuit boards for new digital products.

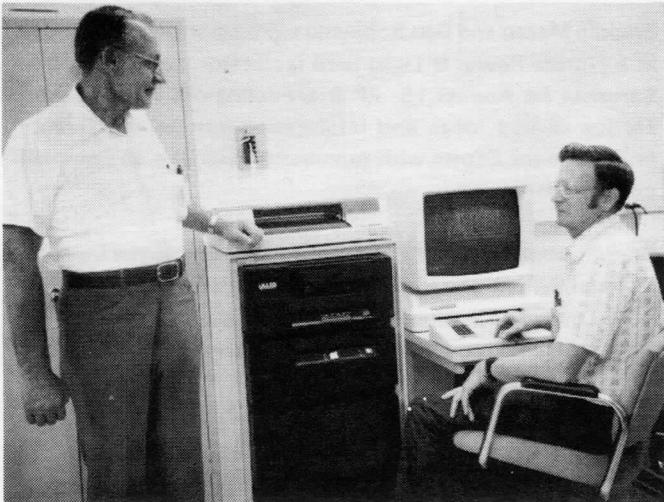
The new tool is called Computer Aided Engineer (CAE) workstations, and three of these CAE workstations were installed in the Telemetry R & D Lab during the first half of 1985. Design Engineers and Technicians are learning to perform computer simulations of circuit board designs using these workstations.

Through simulation, design problems can be identified, analyzed and corrected before the actual circuit is ever built -- a process which can save much time in the design process. The CAE workstations allow design teams to create schematics on the graphic CRT terminals. Once the schematic is "captured" the workstation computer can create a model of the circuit by combining the interconnection information from the schematic with information from computer files describing the properties of each integrated circuit. Using this computer simulation capability, some digital circuit designs can be debugged without ever building a hardware circuit. Breadboards can frequently be eliminated.

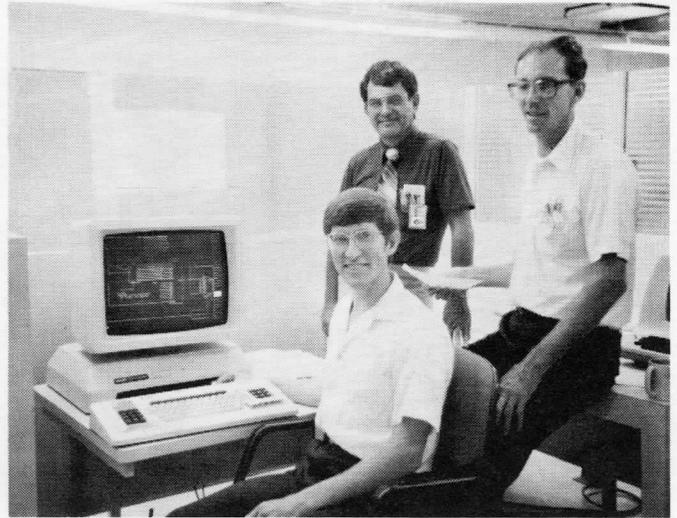
The reasons for using CAE workstations are to increase productivity, and reduce the cost and time required to develop a product and get it into production.

Potential cost and time savings come from several sources:

- Schematics (drawings) entered at the workstations are used and corrected by the designers as the circuit is developed. Schematics generated on the workstation plotter can be released directly by the Engineering Document Center.
- With increased complexity of telemetry products, it is extremely difficult to test a unit under all the possible



Senior Principal Engineer Gene Schroeder at central processing unit (CPU) of VALID Computer Aided Engineering workstation. John Belt is seated at a workstation terminal.



Nick Ostrye, seated, is working on a schematic at CAE workstation. Wayne Lockwood has CAE system responsibility. At right, Milt Litwiller is another user of the new VALID Computer Aided Engineering workstation. Missing from this photo is Chip Voss.

modes and conditions of use which customers may have.

Individual integrated circuit performance differs, and engineering tests of one unit do not assure that all units will function identically. Simulation can account for variations in circuit properties and allow more operating modes to be evaluated. This should reduce the number of engineering changes required during and after manufacturing start-up.

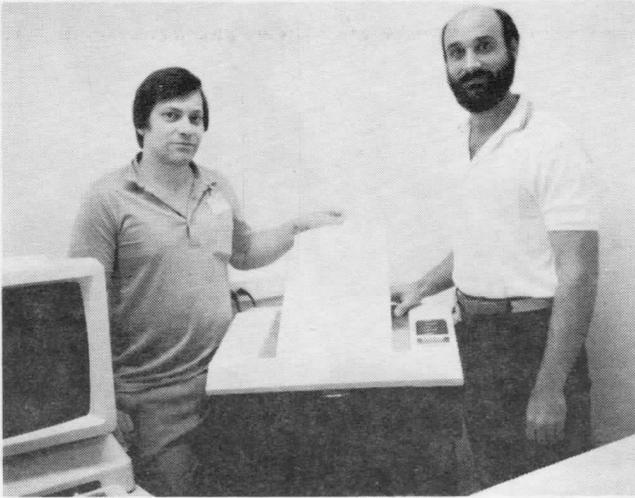
- If the simulation is thorough, the first circuit built can be a prototype printed circuit board. This eliminates the cost of parts, labor, and calendar time usually required to build a wire-wrap breadboard to test the circuit board performance.
- In wire-wrap construction of printed circuit boards, a "net list" showing interconnections -- Pin A to Pin D, etc. - was manually generated. With the CAE workstations, the "net list" can be done by computer once the schematic is finalized. This net list, combined with parts placement information, can be used by the IBM 370 computer to create a tape for the wire-wrap machines, or transferred to the CADD computer for use in printed circuit board design.
- Time saving will occur in the future as a link is built between the engineering workstations and the Automatic Test Equipment in Manufacturing. The computer model and simulation results produced in Engineering can eventually be used by Manufacturing Test Engineers to generate test programs for use on the automatic board test equipment.

The three Engineering workstations -- from VALID Logic Systems -- were installed in Telemetry R & D under the direction of Gary Schumacher. Wayne Lockwood was assigned responsibility for the CAE equipment, and he has brought the system to its current operational level. His

(Cont'd on Page 4)

# NEW ENGINEERING WORKSTATIONS HELP DIGITAL DESIGN WORK

(Cont'd from Page 3)



*Jim Schadl and Jim Hornberger at VALID Plotter which prints out schematics and other graphics.*

tasks included development of software and procedures for transferring data between the CAE system, the CADD computer, Engineering Data Processing Lab, and the IBM 370 computer. Future operations will be improved when the Local Area Network (LAN) is installed.

A significant amount of education and training is involved to learn the capabilities of these new tools and to integrate them into the design and development process. Technicians who have already started to use the Engineering workstations are enthusiastic about the tool and what it can do in our digital design work.

"Insofar as the simulator project has been concerned, the VALID system has offered Engineering a high level of confidence in product design," said Jim Schadl. "The number of wiring and design errors have been reduced to almost nil through the use of VALID's simulation and packaging programs. Along with its other unique capabilities, such as load testing and timing verification, the VALID systems gives us the latitude to 'test' a board before it is constructed. I believe the use of this tool will become a vital link in the future of system development here at Fairchild."

Jim Schadl was instrumental in designing the Simulator module for the 8330 Decommutator on the workstations, and parts of the module were simulated. Advanced design work is currently being performed on the CAE system and simulation is being performed on some of the module designs. Engineering plans extensive simulation in a current new digital design program, and Manufacturing Engineering has started efforts to utilize the output from the CAE system.

Future improvements and new options being introduced by VALID Logic Systems offer the potential for significant future benefits in Engineering design work. One of the most important benefits is the ability to simulate circuits containing

microprocessors or other Very Large Scale Integrated (VLSI) circuits.

The CAE workstations are now administratively part of the CAE and Planning group, headed by Fred Paine, in our Engineering organization.

## MEN'S BASKETBALL TEAM REACHES THE PLAYOFFS

Members of the Fairchild Weston Men's Basketball team made it to the playoffs on their initial season's record of 7 wins and 9 losses. Coach Ralph Portuondo said the members had a lot of fun and were pleased to do as well as they did with a new group of players who had never played together as a basketball team before.

Team members were: Robert Anderson, Dick Dobbyn, Herb Jones, Gerry Lavelle, Rick Mowrey, Ralph Portuondo, Scott Rowe, Wayne Sarnie, Mike Wagner and Scott Zeiner.

"We're hoping to begin practice in October for the winter basketball league play which begins in December," Coach Portuondo said. All men employees and husbands of women employees are invited to participate. Call Ralph Portuondo, Ext 177, for details.

## STOP BY AND CHECK US OUT!

To promote communication, there is now a Circle Bulletin Board across from the Credit Union office. All Circles will post information on projects they are working on so that employees can keep abreast of what's happening in our Circles program. Circle members seek your ideas and suggestions, and urge you to remember the poster theme -- "Better Ideas Together."

## CIRCLES IN THE COMMUNITY

Freddie Masse and Ben Robinson were among the attendees at a Florida Power & Light joint facilitator meeting held in Sarasota on August 15. FP & L Facilitators from all over Florida shared ideas and information concerning Quality Improvement Efforts with representatives of a dozen local companies.

Freddie spoke about the history of FWSI Employee Involvement activities, and Ben called on his personal experiences as a Circle Leader for three years to talk about employee development through the Circle process.

## COMING SOON -- PICNIC! SATURDAY, OCTOBER 19TH



Our next Blood Drive is scheduled for September 17-18. And thanks for caring.

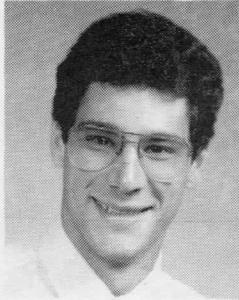
# WELCOME ABOARD TO OUR NEW FELLOW EMPLOYEES

Introducing our new colleagues who joined us during July - Welcome aboard! Here's hoping you enjoy being part of the action at Fairchild Weston. We look forward to working

together with you as we design and produce the high quality products, systems and service needed to meet our customers' requirements.



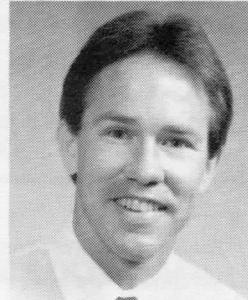
**CINDY COLE**  
Secretary  
Systems Engineering



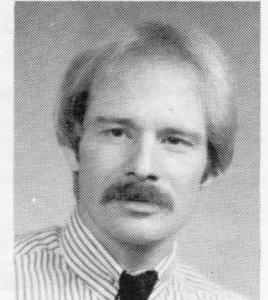
**NEIL Di SPIRITO**  
Tech Writer  
Signal Processing



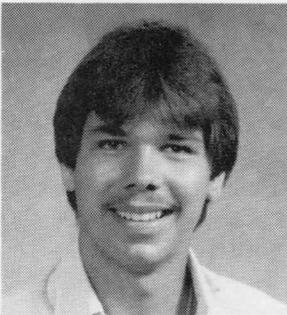
**DICK KISSELL**  
Sr. Programmer/Analyst  
Management Info. Systems



**DALE R. MUNSON**  
Sr. Training Instructor  
Signal Processing



**JOE PANARELLO**  
Principal Engineer  
Data Link Software Eng'g



**MICHAEL ROSENTHAL**  
Mat'l Attendant Helper  
Stock Room



**JULIE SODERQUIST**  
Secretary  
Instr. Recorders Sales

## CREDIT UNION MONEY AVAILABLE FOR LOANS

Ample funds are available to Credit Union members for loans at reasonable rates and terms, according to Fairchild Sarasota Credit Union Treasurer Ed Annaratone.

"The Credit Union's 1985 progress is going very well," Ed said. "However, one major purpose of a Credit Union is to provide loans to members, and our loan activity is below average this month.

"New car loans are available for a maximum of \$10,000, over 48 months, at 13%," Ed said. "Also the Credit Union sometimes has repossessed cars or boats for resale, and we currently have an excellent boat for sale. Details are posted on the Credit Union bulletin board."

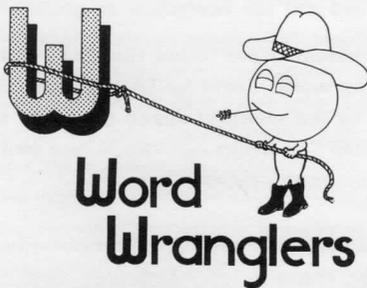
## NEW LOOK IS RESULT OF CIRCLE PROJECT

The new look in Telemetry Assembly is the result of a Circle project conducted by the Ms. Wits Circle. The work stations in this Assembly group were moved in mid-August after the Ms. Wits presented their findings following research on the most efficient work flow into and out of their department.

## "THURSDAY NOON LIVE" GROUP MAKES CIRCLE PRESENTATION

"Thursday Noon Live" Circle, representing the Fab Shop, made another successful management presentation on August 14. Their current project aims to reduce indirect labor in their department.

After considerable investigation, the group has identified a number of factors contributing to indirect labor. One area which was addressed was some Operation sheet times which need changing. The management team agreed to a joint experiment with the Fab Shop to try to determine accurate times for the operations in question.



## A CIRCLE REPORT

- Bill MacNeill

A big thank you from all the Word Wranglers to the many CPT users who answered our survey. Thanks to your efforts we were able to set up a six-week CPT mini-course. The course has been well attended and has provided a forum for a health exchange of ideas. With your help we have successfully completed our first task. Your honesty and enthusiasm was refreshing to us all. I found the experience of working with you rewarding and I'm sure the other Word Wranglers feel the same.

For our next project, we have put our brand on CPT/VAX communications and procedures. We feel it's a project within our range and will keep you posted. We look forward to working with you again.

They told me to keep this short, so I think I'll look for a sunset to ride into. Thanks again.

# MARTY BELKIN ELECTS EARLY RETIREMENT

*Martin Belkin, Manager of Instrumentation Recorders Engineering, has elected early retirement this month after nearly 28 years as a major contributor in Engineering from December, 1957, through August, 1985. His career in Sarasota has involved engineering design work on many telemetry products, and in more recent years in Data Recorders Engineering. Martin advanced in responsibility from Engineer to Section Manager and has long held managerial positions in Product Development and Research and Engineering.*

*PULSE is grateful to Martin for sharing with our readers some highlights of the past and thoughts about the future here at Data Systems.*

*To a valued colleague, a friend and gentleman, we say, "Thank you and we'll miss you."*



## 2.8 DECADES AT FWSI

BY MARTIN BELKIN

The evolution of the electronics industry over the past 28 years has been dramatic and exciting. Those fortunate enough to work at FWSI have had the opportunity to participate directly in the application of new components and concepts to meet our customer requirements for data acquisition, processing, and storage systems.

The most prominent advances relate to the shrinking size and power required to perform signal amplification. The progression from tubes to large scale integrated circuits, which have thousands of transistors per chip, has received much publicity. This has been the prime mover in the computer industry which has provided ever increasing processing power in ever smaller space. Computers now permeate every aspect of our business.

Advances in display technology have been significant and evident to the average consumer who takes them for granted in watches, calculators, games, and an endless procession of gadgets.

Slower but steady progress has been made in the development of improved switches, connectors, capacitors, and other components necessary for our products and systems. The transparent membrane switch in the Model 9 Tape Recorder is an example of a new component finding its way into a new product.

FWSI has kept in step with the times in Sarasota. It has grown from a single building in 1957, to four buildings, and then one building which gobbled up the smaller buildings plus the space in between. The employee count has expanded from a few hundred to more than 850.

Many successful products have been offered to customers from Sarasota under the names of EMR, Weston, Sangamo, and Fairchild. The 200 Series FDM line was highly successful with more than 8000 Model 210 Discriminators sold. The 4000 Series successor to the 200 Series, and the 700 Series digital products, led by the 720 Bit Synchronizer, represent equipment having long and distinguished performance records at customer facilities. We have provided transmitters for Titan rockets, wind shear systems for the nation's airports, digital spectrum analyzers for shake and bake facilities, and a host of other products.

A long list of complex systems have found their way from Sarasota to all parts of the world. From NASA's first worldwide tracking stations for the manned space program, to the recently-shipped FDAPS, a solid reputation has been established by FWSI systems personnel.

FWSI employees can look back with pride to their accomplishments -- but only briefly. There is too much that must be done to expand the business and increase the opportunities for all participants in this venture. The next two decades will experience technological advances that will greatly outstrip those of the past two decades. The intelligence and dedication of all employees will surely lead to continued success of the Data Systems Division.

### CONGRATULATIONS !

SCOTT ROWE (SPS) and his wife Leslie welcomed their new son, Brandon Davis, on August 13. Brandon weighed in at 8 lb.

DEAN BECKER (SPS) and his wife Nancy are the happy parents of a baby girl, Bonnie Marie. She was born on August 19 and weighed 8 lb. 3 oz. at birth.



**FAIRCHILD WESTON  
SYSTEMS INC.**

FAIRCHILD WESTON  
Schlumberger

FAIRCHILD WESTON SYSTEMS INC.  
DATA SYSTEMS DIVISION  
POST OFFICE BOX 3041  
SARASOTA, FL 33578

**HEALTH LINE**

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

## SNAKE BITES

In the USA, only about 20 of the various 150 snakes are venomous (poisonous). The poisonous snakes can be divided into two groups:

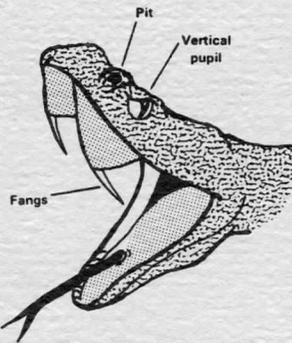
Pit vipers  
Corals

The pit vipers are:

Rattle snakes  
Copperheads  
Cottonmouth moccasins

The pit vipers can be identified:

A vertical slit for the eye  
Two well developed fangs  
A pit between the eye and nostril on each side of the head (This pit is a heat sensing organ, and the snake can sense heat even in the dark)  
One row of plates beneath the tail



Because it is very important to identify the snake if someone is bitten:

Non-poisonous snakes can be identified:

Round eyes  
No fangs  
No pit  
Double row of plates beneath the tail

Many times a snake will bite but not introduce venom into the person. It is extremely important to be able to identify the snake and to recognize the symptoms if the snake has injected venom into the person.

The best symptoms to identify if venom has been injected:

Extremely painful burning sensation  
Rapid swelling  
Discoloration at the area of the bite

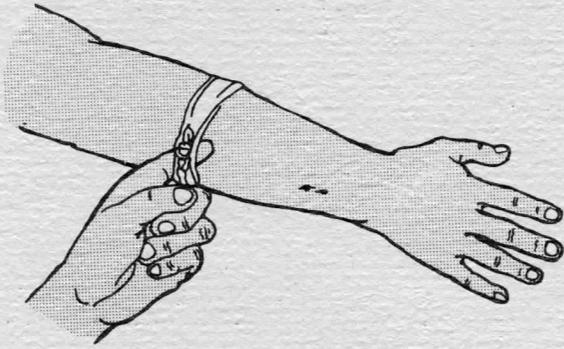
These symptoms occur within 5-10 minutes.

All reactions from snakebite are aggravated by acute fear and anxiety.

## FIRST AID

If there is evidence of any poisoning soon after a bite, do not underestimate the urgency of the situation.

1. Keep calm, and reassure and try to calm the victim. Have the victim lie down and eliminate any unnecessary movement of the victim or the area bitten. Splint or immobilize the extremity.
2. If the bite is on an extremity, apply a constricting band about 3 inches above the bite. (Only if on an extremity). The band should not be tight. You should be able to slip your index finger under it. The purpose of the band is to reduce the spread of the venom. Keep extremity at heart level.
3. Gently wash the wound with soap and water. Apply a sterile or clean dressing over it.
4. Apply a cool cloth over the dressing. Ice may be used if wrapped in cloth, but do not pack the wound in ice.
5. Do not give the victim alcohol. Sips of water may be given if the victim is conscious and is able to swallow without difficulty.
6. Treat for shock. Keep warm and allow the victim to get plenty of air. Raise legs about 6-8 inches higher than his heart. Keep head flat.
7. If the snake has been killed, bring it with you. Transport the victim to the nearest hospital as quickly as possible.
8. If you are unable to reach medical assistance within 4-5 hours, and if it is certain that venom was injected, and you have reached the victim within 30 minutes after being bitten you may need to suction the wound.
  - a. Use the blade in a snakebite kit, or a knife sterilized by flame.
  - b. Make an incision (cut) through the skin over each fang mark; 1/2 inch long, over the long axis of the extremity.
  - c. Do not go deeper than 1/4 of an inch.
  - d. Do not make cross-cut incisions.
  - e. Do not go deeper, because nerves and tendons could be severed.
  - f. If you have no suction cups you can use your mouth. Wash your mouth carefully afterwards.



- g. Apply suction to fang(s) bites. Remember, only one fang may have struck the victim.
- h. Apply sterile or clean dressing after cleansing with soap and water (gently).

Get the victim to a hospital as quickly as possible. If able, have someone call ahead and alert the hospital that you have a snakebite victim and identify the type of snake if possible so that the proper antivenom is ready.

### CORALS

This snake lives primarily in Florida and the desert Southwest. He is identified:

It has no pits, and the head is not triangular. It is a colorful, small snake, with yellow, red, and black bands encircling it's body.

### RED BANDS ARE NEXT TO THE YELLOW BANDS

**IMPORTANT:** Other snakes have similar colors, but none have red and yellow bands next to each other, completely encircling the body.

A rhyme for remembering this important difference:  
 "Red on yellow, will kill a fella,  
 Red on black, venom will lack."

The symptoms to identify if bitten by a coral snake and venom was injected:

- Slight burning pain
- Mild swelling at the site of the bite
- Tiny punctures with scratches
- Complaints of blurring vision, drooping eyelids
- Slurred speech, increased saliva and sweating

### FIRST AID

Basically the same as if bitten by a pit viper. The exceptions would be:

1. Flush off the bitten area with 2-3 quarts of water to remove any venom which may be left on the skin surface.
2. **DO NOT USE INCISION AND SUCTION** as there is little local effect from the bite.
3. Transport immediately to a Hospital. Try to call ahead to alert the hospital that you have a coral snake bite victim.

### DOG BITES

A dog's mouth is contaminated with bacteria. Bites on the face, neck and trunk are especially threatening.

Dog bites should be treated by a physician.

1. Occasionally antibiotics are needed.
2. Tetanus protection should be given if the victim is not up to date on his last booster or has not had primary protection.
3. Sutures may be required. With facial wounds, careful suturing is desired to avoid scarring.
4. If the animal is rabid, treatment must be started immediately.

With all dog bites, it is important to capture the dog and to ascertain that the animal has had rabies vaccination and is not rabid. The dog may be kept in quarentine for a period of time and if he is found to be healthy, he is released. All dogs are required to be vaccinated and wear a collar tag indicating this.

### HOW DO YOU TREAT A DOGBITE ?

1. Keep the victim calm and reassure them.
2. Gently clean the wound with soap and water.
3. Cover with a sterile dressing.
4. Contact your physician.
5. Attempt to find and identify the animal.

If the animal cannot be found, and there is a strong suspicion it may have been rabid, the anti-rabies vaccine series is started. It is never left to chance. Once rabies is contracted, it is almost always fatal.

### SPIDERS

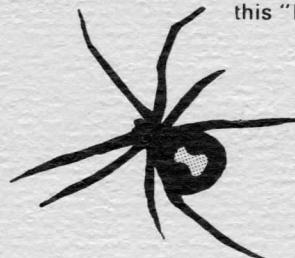
We will talk about two spiders whose bite will cause serious illness.

The black widow spider and the brown recluse spider.

How do we identify these spiders ?

### Black widow:

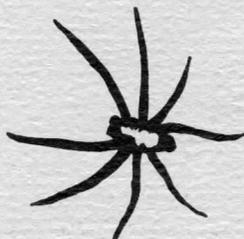
Is shiny black, about 1 inch long (with legs extended) and has a characteristic red and yellow hourglass marking on it's belly. It has no marking on it's back so the spider must be turned over to see this "hourglass of red and yellow".



Black widow  
(underside)

### Brown recluse:

Is smaller than the black widow spider and, about 1/2 inch with legs extended and is a dull brown color. It has a violin shaped mark on it's back. (You can see this by looking down on it. Sometimes called the violin spider).



Brown  
recluse  
(back)

Since so many spiders are venomous, and since other insects also bite, how do we know if we have been bitten by one of these two that can cause illness?

### Black Widow Signs and symptoms of bite:

1. Sharp pinprick-like pain, then dull numbing pain in the extremity.
2. Progresses to pain of muscles as they cramp: stomach gets boardlike and rigid, chest muscles get tight, and there is difficulty in breathing.
3. Sweating, nausea and vomiting can occur.
4. Headaches, dizziness, rash, anxiety, swelling of eyelids.

### Brown Recluse

1. Little pain at first, but worsens over an hour or so.
2. Bite area becomes red and you feel heat in it.
3. A small blister forms, and is surrounded by a pale ring which in turn is surrounded by a red ring. (bull's eye appearance)
4. This becomes larger until the blister ruptures and an ulcer forms.
5. The ulcer becomes larger and may become deeper.
6. The pain becomes more severe, and other symptoms occur such as nausea, vomiting, fatigue.

If you suspect you have been bitten by either spider, what do you do?

### Black widow:

1. Attempt to capture the spider for identification. It's important to know exactly what bit you.
2. The only first aid for the black widow spider is to apply cold to the area of the bite. Other first aid measures are of no value.
3. Support basic life systems i.e. treat mouth to mouth if not breathing.
4. Take patient to the nearest hospital. Call ahead to let them know of a black widow spider bite.

There is a specific antivenom for this illness. Deaths are rare if treated quickly.

### Brown recluse:

1. Wash the bite very gently with soap and water.
2. Cover with a dry sterile dressing.
3. Seek medical assistance, as these ulcers frequently need to be surgically treated.

For minor bites of spiders who do not fall into the seriously venomous range as the black widow and the brown recluse, you may want to:

1. Wash the bite gently with soap and water (be thorough).
2. Apply cool compresses
3. Apply calomine lotion
4. Keep careful observation of the bite and look for signs of possible infection (redness, swelling, drainage, heat, increased pain).
5. In the event that signs of infection seem apparent, contact your physician for treatment.

### SCORPIONS

These inject venom through a stinger in the tail. These animals are found primarily in the southwest desert area, and only one species is dangerous to humans. The Arizona scorpion is not ordinarily found in Florida, and although scorpion bites may be painful, they are not dangerous.

### FIRST AID

1. Wash the wound gently with soap and water.
2. Apply cool compresses.
3. Apply calomine, or any first aid cream.

If you are ever in doubt about what to do for any bite - contact your physician for instructions.