

# Microwire

## SPECIAL RECOGNITION INCREASE PROGRAM IMPLEMENTED

On November 23, 1971, Dr. C. Lester Hogan, president and chief executive officer, announced to employees that Fairchild would establish a special service recognition increase for those hourly and salaried non-exempt employees who were caught in both the Fairchild wage freeze and the Phase I wage freeze. On January 3, 1972, this special service recognition increase became effective. The following questions and answers will give you an insight to this special program.

**When and how will the service recognition increase payments be made?**

The first payment will appear in the payroll checks issued February 11, 1972. Payment will be made for all straight time worked up to a maximum of forty (40) hours per week, beginning January 3, 1972, based on the following schedule.

Date of Hire	Increase to be Granted	
	Hourly	Non-Exempt
1970 July-Sept	.02¢/Hr.	\$ .80/Week
1970 Jan-June	.03	1.20
1969 July-Dec	.04	1.60
1969 Jan-June	.05	2.00
1968 July-Dec	.06	2.40
1968 Jan-June	.07	2.80
1967 July-Dec	.08	3.20
1967 Jan-June	.09	3.60
1966 July-Dec	.10	4.00
1966 Jan-June	.11	4.40
1965 July-Dec	.12	4.80
1965 Jan-June	.13	5.20
1964 All Year & Prior	.13	5.20

**Is it considered part of the base pay or shown up as a separate item?**

In order to comply with the 5.5% maximum amount by which we are permitted to increase wages and benefits under Phase II regulations, this service recognition payment must be shown as a supplement to regular pay.

**If you are top on the pay scale and the increase puts you over, what will happen and how will it affect the pay scale?**

The service recognition increase will not be included in your base rate. It will be shown as a separate amount. The service recognition increase will not affect the date of any subsequent merit reviews.

**Will the check received on February 11, 1972, include retroactive pay from January 3, 1972?**

Yes, each subsequent paycheck will contain the amount of the service recognition increase for that pay period.

**Will it increase with service put in the company?**

No, the service recognition increase is paid based on your length of service as of January 3, 1972.

**If an employee is not eligible now, when will he be?**

Only those hourly and salaried non-exempt employees (including employees working less than forty (40) hours per week) with a "date of service" prior to October 1, 1970, who are, and continue to be, on an active payroll status after January 3, 1972, are eligible.

**How long does an employee remain eligible for the service recognition increase?**

An hourly or salaried non-exempt employee will remain eligible for the service recognition increase while on the active payroll or until promoted to exempt.

**What happens if an hourly or salaried non-exempt employee is promoted to an exempt position?**

Should the employee be promoted to an exempt position, this special increase will be included as part of the employee's base salary at that time.

**How does leave of absence, sick leave, etc., affect the increase?**

Employees hired prior to October 1, 1970, and currently on lay-off status, military leave, or other approved leave of absence will be qualified upon their return to active pay status provided their adjusted "date of service" is prior to October 1, 1970.

**Does this include vacations?**

The service recognition increase will not apply to overtime payments, shift premi-

um or fringe benefit programs, including vacations.

**Is this going to be a yearly increase?**

No, this is a one-time service recognition increase for those employees who were caught in both the Fairchild and President's Wage Freeze.

**Can the service recognition increase be withdrawn?**

It is subject to modification at any time in order to comply with the requirements of applicable laws or regulations.

## a taste of Christmas

It was three days before Christmas and all through the cafeterias everyone was preparing for the company-sponsored Christmas lunch. When all of a sudden appeared Dr. Hogan and his thirty helpers wearing their Merry Christmas aprons and hats, dishing up the Christmas meal.



*You better watch out, you better not cry, you better be good cause Tom Longo's hanging around!*



## NEVER a day missed

Rain, sleet, snow, mud or floods cannot keep 159 Fairchild employees away from their jobs. These dedicated employees did not miss one working day during 1971 and some for an even longer period.

Because of this fantastic feat, Fairchild wanted to give them recognition by presenting each employee with an "attendance bonus" in the form of a check.

A special recognition goes to our Plant Protection Department. They had an overall average of 7.5% of all the employees receiving checks. The recipients were Officers Benge, Bizzozero, Edwards, Feldman, Lighthiser, Luce, Martin, Peevyhouse, Perales, Reeves, Stuck, and Young.



One year ago in December Betty Little, San Rafael, was presented with her sick leave paycheck for not missing a day in nine years. On December 17, 1971, an historical event took place at San Rafael; Betty Little celebrated her ten-year anniversary with Fairchild and received her tenth sick leave pay check. Unbelievable!!

### *Mountain View and R&D Recipients of Sick Leave Pay*

V. Beck, J. Windham, W. Hamilton, M. Ward, M. Park, H. Iverson, P. Johnson, C. DeBruyn, M. Llamas, F. Ramos, J. Martin, K. Humpfle, C. Haines, G. Tennant, W. Hamrol, V. Cady, A. Larsen, G. Johnson, B. Bravo, R. Jones, S. Robertson.

L. Wheeler, J. Morris, L. Ochoa, M. Sopko, M. Haynes, M. Herrera, V. Fugate, A. Mota, T. Handa, A. Sullivan, W. Thomas, P. Cater, B. Cramer, B. Serovpeyan, T. Sasaki, V. Goskey, L. Tidwell, M. Mattson, J. Gibson, J. Glivar, I. Soto, R. Vogt, T. Uamagi, G. Drake, W. Prickett, M. Guzman, J. Aboussleman, B. Gregory.

L. Carvalho, G. Duff, E. Crabtree, R. Rodriguez, H. Huerta, L. Arias, N. Hodge, D. Copeland, V. Jagard, B. Knox, R.



Ruano, B. Coleman, E. Bozo, L. Sommers, M. Mutia, L. Loba, E. Ryan, W. Jew.

D. Turner, A. Summerfield, D. Silva, H. Brunelli, T. Erickson, P. Cava, S. Gregg, H. Halmi, M. Rosa, R. Collins, R. Kley, R. Trayhey, G. DePuglia, A. Lima, M. Ost, M. Szilagyi, I. Trevino, K. Winters, G. Gregory, A. James, S. Johnson, R. Falconi, M. Tyrfingsson, D. Roberts, R. Wing.

T. Reinhardt, F. Camat, J. McCarthy, J. Romero, A. Brard, I. Javier, J. Higgins, N. Geer, A. Gradwohl, D. Lewis, H. Poyne, V. Clark, J. Woodard.

D. Benninger, H. Block, M. Miller, R. Hubbard, B. Paredes, D. Oehlschlager, S. Benetti, A. Schweighardt, J. Zawistoski, M. Durzao, M. Talamantez, D. Houser, O. Cabeza, S. Oda, J. Young.

F. Feldman, G. Benge, J. Reeves, R. Sca-

lier, W. Perales, H. Porter, J. Bottero, C. Delacruz, H. Bizzozero, D. Lighthiser, D. Freitas, A. Giron, B. Silva, E. Martin, S. Soria, B. Abellera, R. Augustin, J. Reynoso, A. Stuck, A. Abina, G. Namba, V. Hernandez.

D. Herndon, G. Carley, D. Green, G. Simons, V. Williams, R. Van Leeuwen, H. Clemons, W. Peevyhouse, M. Maldonado, F. Edwards, G. Galera, M. Sabangan, V. Fangonilo, E. Catolico, M. Vick, J. De Young, S. Wiley, L. Cramer, W. Silva, A. Lopez, H. Beam—R&D, A. Riemer, B. Brown, C. Nishimura, C. Morgan, C. Jack.

V. Gustavson, B. Brier, J. Jones, C. Ichikawa—R&D, P. Cangialosi—R&D, V. Hughes, P. Hopkins, R. Toledo, G. Matz, C. Lindstrom, M. Graham—R&D, M. Wilkins, C. Helm—R&D, E. Fichtner, W. Romer.



# FAIRCHILD/SHIPROCK honored for hiring the handicapped

Shiprock, located on a Navajo reservation in New Mexico, received the Employer of the Year award (in the large business category) of the President's Committee on Employment of the Handicapped on December 2nd.

Fairchild was honored at a National Association of Manufacturers' Congress of American Industry luncheon at the Waldorf Astoria Hotel in New York City.

Shiprock carries on an aggressive recruitment program within the Navajo Indian reservation and offers training to over-

come educational and other socio-economic handicaps.

For employees with severe physical handicaps, Fairchild has installed hand rails, ramps, wide doorways, and other accommodations that facilitate mobility and job performance.

Disabled Shiprock employees fill a variety of positions, including electronics assembler, engineer, mechanic, machinist, quality control inspector, foreman and supervisor. Their physical handicaps include amputations, congenital deformities, epilepsy and others.



Leo Contois, manager of industrial relations, accepted the award from Harold Russell, chairman of the President's Committee. The plaque reads: "The President of the United States cites with pleasure Fairchild Semiconductor for distinguished service in encouraging and promoting the employment of the handicapped.

(Signed) Richard Nixon."

*you say it's happened  
to YOU before?*

You find a parking space right near the building in the morning—and remember you parked there as you approach the end of the lot that night.

You carefully Snopake one tiny, accidental comma from a page full of equations—and the bottle spills across the page.

You mail an urgent memo to someone in another building—and it comes back to you because you forgot to readdress the envelope.

You collate 100 copies of a 50-page report—and find there's no page 22.

You run down the hall all out of breath because you're late for work—and bump smack into your boss.

You shut the alarm clock off at 6:30 am and leisurely get out of bed to get ready for work—and find out on the morning news that there was a one-hour power failure during the night.

You notice your car sitting slightly lopsided in the parking lot, and as you approach it—you see that you do have a flat tire.

You dash out of the building at night and hastily buy a paper from the vending machine—and it's yesterday's edition.

You are asked to type a last-minute letter at quitting time—and your typewriter ribbon runs out.

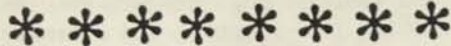
You finally get 20 people to agree on a day and time for a meeting called by your boss—and he gets the 24-hour virus the night before the meeting.

## ATTENTION EMPLOYEES

During January 24th, 25th, and 26th, speed breakers will be placed throughout the Mountain View complex. This temporary inconvenience is for the protection of employees walking to and from the parking lots and other buildings.



# SERVICE AWARDS



## TEN YEAR

Marjorie Carson	Lois Corey
Irene Soto	Ethel Poag
Kathryn Montgomery	
John Glivar	Florence Smith
Juanita Anderson	Rose Devito
Margaret Osmar	Grace Drake
Taneyo Yamaji	Jack Tanimoto
Vera Hodgins	Ivan Nielson
Hildegard Solti	Dorothy Parsons

## FIVE YEAR

Ethel Bozo	Lorraine Mazza
Kay Sallas	Hellen Brunelle
Maxwell Maydew	Janis Farmer
Pedro Gutierrez	Patricia Bartholomew
Wilming-Jew	Patricia Cava
Ronald Bruder	Linda Steele
Dale Turner	William Watson
Janet Demaree	Juanita Moehrle
Jerry Hubbard	Robert Poorman
John Smit	Stanley Brehm
Rosemary Dodd	Beverly Lang
Carl Mattson	Sylvia Vigil
Dolores Silva	Aurora Gonzales
Decatur Stewart	Shirley Gregg

## SUPPLEMENTAL

Michael Mattson	Jim Butler
Betty Coganoglu	

# FOR SALE

### FOR SALE

1961 Cadillac - 4-door white sedan, all standard equipment with power seats, brakes, steering, and windows - electronic headlight control, air conditioning, new tires - with 80,000 miles. Asking \$450. Phyllis DeWeese. 245-1616

Corporate leased vehicles occasionally are available for employees to buy at the expiration of the lease. For information regarding how to purchase these cars from our lease company, please call Teri Mead on EXT. 2174.

1971 Porsche 911E Coupe - 8,000 miles, in excellent condition - buy or take over lease. Call EXT. 3034 or 732-6433 after noon.

### FOR RENT

2 bedroom home with separate garage and workshop, located in Mt. View. Will be available Feb. 1st. Asking \$170 a month. Phyllis DeWeese

245-1616

# Monday night BOWLING RESULTS

## FIRST HALF STANDINGS

- Pin Poppers (Won 47/Lost 21)  
*Team Members:* Frank Becerra, Ann Lima, Judy McGlashan, Bill Newton, John Phillips
- Rainy Days & Monday (Won 46/Lost 22)  
*Team Members:* Bill Towler, Elena Legarburu, Iz MacKay, Bob Anderson, Brent Knudson, Wilma Knudson
- Tad's ARCO (Won 42/Lost 26)  
*Team Members:* Jerry Prichard, Tammie Prichard, Rich Rowell, Margaret Hollister, Ed Hollister

### High Series

- 1st Don Ochse 655 / Ann Lima 565  
2nd Don Stacks 623 / Diane McDaniel 536  
3rd Vic Mitrison 606 / Dixie Caito and Iz MacKay 513

### High Game

- 1st Tom Bispo 253 / Iz MacKay 237  
2nd Vic Mitrison 249 / Ann Lima 215  
3rd Clay Marr 245 / Dixie Caito 212

### High Handicap Series

Rich Rowell 690 / Juanita Kennedy 645

### High Handicap Game

Bob Loucks 276 / Deloris Hively 259



# MOVING UP



Jess Duran—Supervisor, Inventory Control  
Jim Molinari—Manager, MOS Test Area  
Joe Zelayeta—General Supervisor, MOS Wafer Fab  
Chuck Patterson—Supervisor, Swing, MOS Test Area

## 1972 Holiday Schedule

Friday, March 31st	Good Friday
Monday, May 29th	Memorial Day
Tuesday, July 4th	Independence Day
Monday, September 4th	Labor Day
Thursday, November 23rd	Thanksgiving
Friday, November 24th	Floating
Friday, December 22nd	Christmas Eve
Monday, December 25th	Christmas Day

# REC COUNCIL

Things are happening in your recreation department! If you admire "man's best friend," plan to see the Dog Show at San Francisco's Cow Palace on Saturday, January 29th. Tickets normally \$3.00 are \$2.50 with coupon.

Again, the Rec Council has tickets to Santa's Village. It's a fun weekend treat for your children.

If you don't mind a nip of wind, take a bay cruise on the Harbor Queen. It leaves every hour from Fisherman's Wharf. The cruise includes 18 points of interest—you haven't seen San Francisco until you've sailed through the San Francisco Bay.

The Rec Council has cards to Dahnken's Santa Clara Showroom. Dahnken has been supplying the Western and Southwestern United States with "the finest jewelry and giftware items since 1933."

For information on any of the above discounts, please contact Ann Poole, EXT. 4286..

# Think SNOW!

Yes, at last we are planning a ski trip to Squaw Valley—on February 25th, 26th and 27th. The price will be \$35.00 per person, which includes:

- Round trip transportation aboard a Greyhound bus
- All lodging (only a 5-minute walk from slopes)
- 2 Breakfasts
- 1 Dinner
- \$1.50 discount on lift tickets
- \$1.00 discount on each ski lesson
- Free shuttle to North Shore casinos
- Free beginners ski lesson
- Free ice skate rental with admission price

Now that we have you "thinking snow," plan to join the fun the weekend of February 26th with your Fairchild friends. Reservations must be made *before* February 11th! For further information and reservations, contact Ann Poole on EXT. 4286.

MICROWIRE I - January, 1972

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# Microwire

## Job Opportunity System Announced

A new internal placement program, named *Job Opportunity System*, has been announced. The Job Opportunity System will eventually provide all Fairchild employees with company-wide promotion opportunities. However, the initial phase of the program will be limited to hourly employees in Grades I to IV in the Mountain View complex. The system will be expanded to include all hourly, salaried non-exempt and exempt employees by mid-year.

The first job will be posted in Mountain View in February, 1972. Eligible hourly employees (Grades I to IV) will be allowed to bid by filing an application for the job posted. Employees will be selected for the openings using a combination of factors including performance, attendance, skill and seniority.

All employees will be given a booklet by their supervisor which explains the Job Opportunity System.

### WHO RUNS THE PROGRAM?

The program is managed by Dale Johnson, Internal Placement Administrator, and Rita Hawkins, who handles the day-to-day administrative functions.



Dale has been with Fairchild four years. Prior to transferring to Mountain View in June of last year, he was the Industrial Relations Manager for the San Rafael plant. He has approximately 10 years of personnel experience with such companies as Honeywell, Inc., IBM and Philco Ford.

Rita joined Fairchild in May, 1969, and has provided clerical and administrative assistance to the Industrial Relations Managers here in Mountain View. She has worked in various clerical and supervisory positions in personnel for such companies as California Packing, Kern County Land Co., and Liberty National Bank.

### WHAT FUNCTIONS DO THEY PERFORM?

When an authorized Personnel Requisition is received, a Job Opportunity System number is assigned to it and an appropriate Job Description is posted on the Job Opportunity System Bulletin Boards.

After the 48 hour posting period has expired, the Job Applications are collected and screened against the requirements of the job. The Internal Placement Office will notify the immediate supervisor of all applicants. The qualified applicants will be contacted by the Internal Placement Office to arrange for interviews with the selecting supervisor. The applicants who are not qualified (a reason will be given) will be notified by the Internal Placement Office.

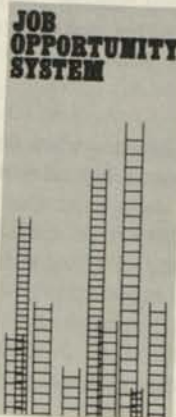
The Internal Placement Administrator will assist the interviewing supervisor in evaluating the qualified applicants to determine who gets the promotion. (NOTE: Applicants who are qualified, but not selected, will be kept in an active file for 90 days in the event the *same* job classification becomes open.)

The selected employee will receive a formal offer and will have 24 hours to accept or reject it.

### WHEN A JOB IS POSTED - HOW TO APPLY

- ▲ Each interested employee must complete an application and deposit it in Job Application Box located near the Job Opportunity Bulletin Board.
- ▲ The Internal Placement Administrator will pick up all applications and refer qualified employees to the Requisitioning supervisor. Those not qualified will be notified.
- ▲ Interviews will be arranged for the qualified employees and the selection will be made. A written offer is then made to the most qualified applicant. The other qualified applicants will be kept in an active file for consideration in the event the *same* job classification becomes open within 90 days.
- ▲ The selected employee will be informed of his new department, supervisor, rate of pay, report date, etc., by the Internal Placement Office.
- ▲ All inquiries or questions should be directed to the Internal Placement Office on Ext. 2341, between the hours of 8:00 a.m. to 11:30 a.m. and 1:00 p.m. to 5:00 p.m.

Look for orange colored bulletin boards located in the various buildings.





# Aquarius Boss

January 21st – February 19th

By Linda Goodman – SUN SIGNS

First of all, check again. Are you sure his birthday is late January or early February? Are you absolutely positive your boss is an Aquarian? Uranus-ruled executives are as rare as albino pandas. If you have one for a boss, you can't very well sell him to a zoo, but consider him a collector's item, anyway. Someday, he may be extremely valuable.

Seriously, the typical Aquarian would just about prefer starvation to the usual nine-to-five office routine. Most Aquarians dislike making decisions, they are uncomfortable giving orders, and they have no particular desire to direct others. This doesn't mean Aquarians are not competent bosses. Uranus is full of surprises, and the totally unqualified Aquarian boss who turns out to be absolutely indispensable is one of them.

When an occasional Aquarian wanders into an executive position, burdened by all the above negative qualifications, he simply pulls a couple of new tricks out of his bag. He may be absent-minded and forgetful, eccentric and unpredictable, by turns shy and then bold, but he also has a mind like a bear trap hidden behind those strange, vague eyes and that detached, distant attitude. Add to that a highly tuned, perceptive intuitiveness which makes you think he has a crystal ball tucked in a pocket. Throw in his uncanny ability to analyze, dissect and weigh the facts with insight as keen as a razor blade – and for good measure – his sure instinct in making a warm friend of everyone from the office boy to the firm's biggest customer. Back it up with the broad, liberal Uranus philosophy which sees miles into tomorrow, and catches the big picture in all its scope while others are floundering over details – and you see what I mean by surprises.

He can be maddening when he plans complicated programs behind your back and springs them on you at the last minute. And I'm sure you've chafed under his frustrating habit of giving you a completely new and unexpected job to do, blithely neglecting to explain the reason behind the change. But confess now, under it all he really is rather a lovable old dear, isn't he?

# On the Line

With Bob Hood, Manager  
Automotive Products



Checking the exhaust output of one of the Automotive Products test cars. From left to right, Bob Hood, Don Pezzolo, and Dave Krupp are shown.

## What is the function of your department?

The Automotive Products Department's function is to make Fairchild the major semiconductor supplier to the industry. We have developed designs for about 80% of the functions shown on the chart below in cooperation with the major automobile manufacturers.

The market for semiconductor controls in automobiles has grown rapidly over the past few years. The car industry has advanced from the use of relatively straightforward applications—such as the alternator rectifier diode or the voltage regulator—toward more complex functions including electronically controlled transmission shifting or electronic anti-skid.

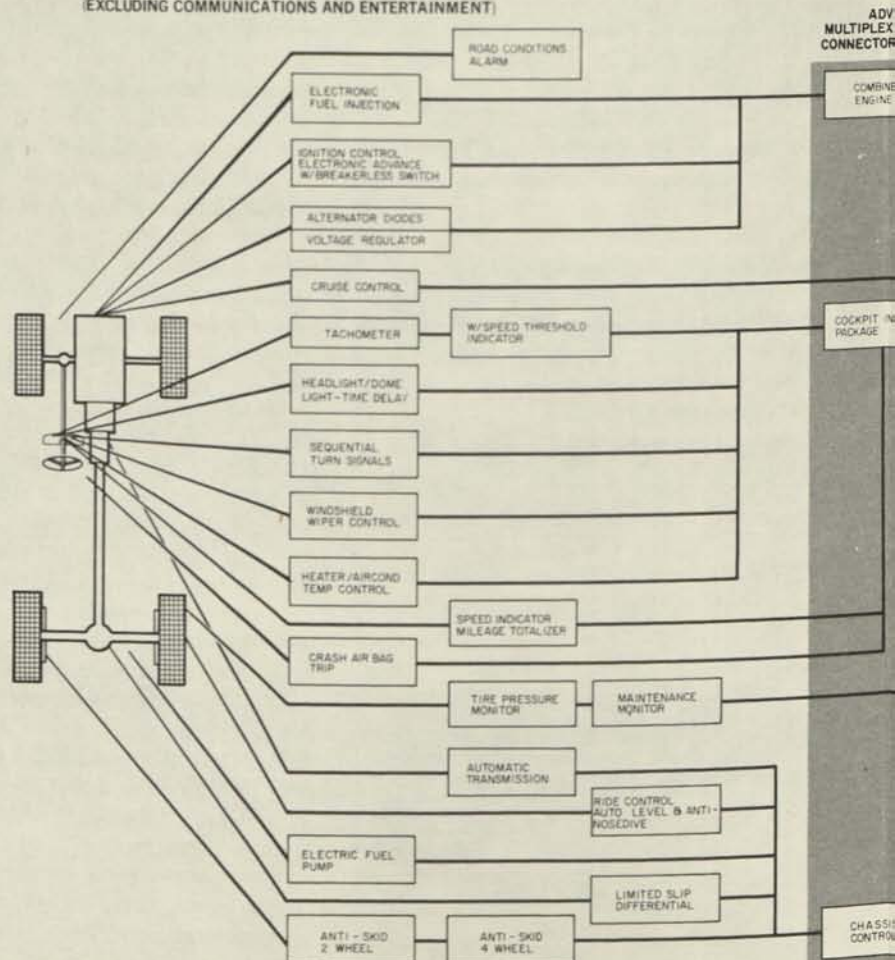
Some of the applications, which are either in production or now under study, are shown on the chart. We have identified over fifty different control functions within the car which can profitably use discrete devices, custom IC's, or hybrids in their construction.

Perhaps you would be interested in a crystal ball review of the impact of semiconductor controls on the modern automobile. If you look at the chart, you will see three basic phases in the growth of the silicon controlled automobile.

1. On the left of the chart there are a number of blocks which define the separate control functions—most of which can be recognized as standard functions presently being done by electro-

## PROJECTS FOR AUTOMOTIVE CONTROL APPLICATIONS

(EXCLUDING COMMUNICATIONS AND ENTERTAINMENT)





mechanical type controls spread around the car. Almost all of the controls are non-interrelated. They do relatively simple individual functions—we call this the “discrete phase” of control growth. I would say that the industry is in this state at the present time.

This is the learning phase in which the industry gains confidence in our ability to produce their type of control.

2. Soon afterward the obvious economies to be gained, through simpler packaging and reduced wire harness/connector complexity, will drive the industry toward the middle “combinational control” phase. Here, all of the boxes, spread about the car, will begin to grow together, and we will have vehicles that are more reliable and easier to service. Also, the automobile industry will find itself in the position of getting more functional for less money. I believe that in this stage, many of the semiconductor controls will cost less than the electromechanical, hydraulic, and other units that they replace. They will perform their jobs in a more accurate and reliable manner.

3. Finally, the ever increasing cost of the vehicle wiring harness, together with its warranty costs / safety / reliability problems (how many cars have you seen on the highway with their tail-lights out) will force the manufacturers to adopt a multiplexing control system. At this stage, the car will have a very simple three to five wire control arrangement which will use a central processor to deal with the entire car control function as an overall system.

The effect on the kind of transportation the car buyer gets is going to be pretty profound. For instance, we have designed an ignition system which will start and run your car with relatively little problem—even if you parked overnight in Bimiji, Minnesota, at a temperature of  $-40^{\circ}$  on a low battery. The normal 12 volt battery voltage falls to only 4 volts while cranking. The system works fine if you use two batteries to start the car. To the other extreme, it is not affected by very high temperatures, or by very high speeds. More important, your cost of running the car will be lowered because there are no breaker points to replace (the system stays in adjustment for the life of the car). Your car's spark plug life should be extended to about 20,000 miles without change in the engine's performance. Of course, during this period, the smog output of the car is held at its lowest possible value.

We can also expect more flexibility on the car's operating features. For example, it would be handy to have an indicator on the dashboard saying—in effect—that at your present speed, you have enough fuel to go X number of miles before stopping at a gas station. This could be very helpful on long trips.

Another function would be a constant monitor of systems in the car, which would tell you when a grease job or a front end alignment was needed—or could alert you of dangerously low brake fluid, or of low coolant in the engine. This type of equipment could take most of the worry out of driving for a non-mechanical motorist.

We are a group very strongly oriented toward the future, but we are also involved in a number of important short term projects which will have a favorable effect on the company's business. We are working on a number of projects which will reach volume production in the near future.

### What are you doing to improve safety control and pollution reduction?

For safety control applications, we have looked into anti-skid, true vehicle velocity sensing, radar collision avoidance, and the monitoring of safety related systems within the car such as lamp-out indication. For the longer term, we have looked into intervehicular communications, fore-and-aft collision avoidance and blind spot detection. Much of the work that has been done is the result of a number of cooperative efforts with other parts of the corporation. For instance, many of the sensors we will be using with these systems have been developed by our MOD division. When the systems go into production, we expect that they will be serviced, both in the garage and on the automobile production line, by test equipment designed at Systems Technology.

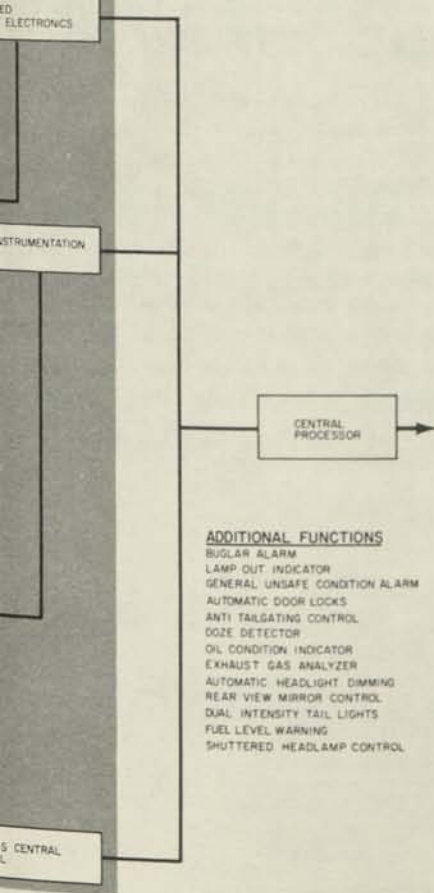
In the area of pollution reduction, we have made very significant gains in the areas of fuel management (mainly in the form of electronic fuel injection), and improved ignition systems. We look forward to the time when the fuel management and the ignition control functions will grow together into a “combined engine electronics” function which will further reduce pollution levels. There has already been a 90% improvement in the exhaust emissions of today's cars. We expect an additional 6% to 9% reduction in emissions over the next three years. (This has been legislated under the terms of the Clean Air Act.) The result will be smog levels, in most of the country, that will fall below the 1940 level by the end of this decade. I'm sure that Fairchild will have a large hand in making this improvement in our environment possible.

### What innovative things are happening in your department?

In addition to the things I have mentioned, we are investigating a method to ensure that the driver of a car fastens his seat belt before starting the motor. The Department of Transportation has estimated that this system alone could prevent about 5,000 highway fatalities each year. We are also looking into many of the functions shown on the chart's lower left.

About ten million cars are built each year in the United States. We are convinced that Fairchild will be an important contributor to their construction in the near future.

MENT OF  
AND SPECIAL  
R TECHNOLOGY





# Funny You Should Ask!

WHAT SONG TITLE BEST DESCRIBES YOUR PHILOSOPHY OF LIFE AND WHY?



**Scotty Hamilton**  
Mail Clerk  
"I'm Always Chasing Rainbows." "I always feel things will be better in the future. I'm very optimistic."

**Shirley Garrigues**  
Mask Designer

"Rain Drops Keep Falling On My Head." "I've got my own cloud over my head and it keeps sprinkling little surprises all over me."



**Gary Tharp**  
Discrete Production Control

"Love Makes the World Go Round." "Since you are only going to love once (probably), you might as well make it as nice as possible. Love is the nicest thing I know—besides it's more interesting, more fun, makes more sense, and is definitely more satisfying than war."

**Edie Beam**  
Mask Making

"To Each His Own." "I believe people should do their own thing. People should live and let live."



**Pat Ezekiel**  
Discrete Wafer Fab

"Why Was I Born." "I should have been created because I am such a fantastic person!"

**Tom Branch**  
Product Marketing & Design Engineering Manager

"The Games People Play." "One of my favorite pastimes is 'people watching,' and in particular, watching the games they play. I think that often in the semiconductor business, we get too involved in the technology of our industry and lose sight of the fact that people make these things happen. My philosophy is that by understanding why people 'play games' one can develop ways to motivate them. A person who gains the ability to motivate people will bring success to himself and his company."



## FAIRCHILD RECEIVES BURROUGHS CONTRACT

Just before New Years, Wilf Corrigan, vice president and group general manager / Components Group, and Tom Longo, vice president and general manager of Digital Products Division, consummated several new and significant contracts with the Burroughs Corporation in Detroit. These agreements, plus the addition of several more contracts due soon, will allow Fairchild to enter 1972 with an involvement and participation in Burroughs business across all Fairchild product lines. This situation will represent not only a renewal, but an improvement of the favorable position we held at Burroughs prior to 1971. Fairchild product groups are to be congratulated at all levels for the team effort and long hours expended in making this possible for Fairchild-DIC, Discrete, LIC/IMS and MOS. Independent surveys indicate that Burroughs is a strong Number 4 in the computer systems manufacturing business and is 1 of only 2 companies which are primarily dedicated to the computer market. Burroughs is expected to continue to increase its share of the Electronic Data Processing (EDP) market and we at Fairchild are pleased to have an opportunity to participate in this growth.

## Rec. Council

See "Fiddler On the Roof" on Sunday, March 19th, at the Century 21 Theatre in San Jose. There will be a slight discount per person for the movie. Make your reservations by Tuesday, March 14th, with Ann Poole on EXT. 4286.

Whether you are a "super" skier or just beginning, you will want to take advantage of the trip to Squaw Valley on February 25th, 26th, and 27th. Reservations must be made by Friday, February 11th. Please contact Ann Poole on EXT. 4286.

Discount cards are now available for furniture at the House of Carlson in San Francisco. In order to purchase furniture on a discount basis, you must have a card. They are available in the Personnel Building on National Avenue.

MICROWIRE II - January, 1972

EDITOR: Vicki Heinsheimer  
REPORTERS: Geri Hadley, John Walsh, Marge Killian, Cliff Reich, Millie Dawson, Clint Haines, Margaret Elliott, Pat Alfred, Lorette Hayes, Bev Delos Santos, Judy Curiel and Marlene Souza

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## MOVING UP

Roger Arnold - Product Control Manager/Mask Making

## SALESMAN of the MONTH

Bob Hand, Orlando Sales Office, was presented the November Salesman of the Month award for his concentrated efforts during 1971 on a major account in Florida, where Fairchild had been doing virtually no business. Bob received the first substantial order after three years.

Perry Constantine was awarded the December Salesman of the Month. He is located at the Schiller Park, Illinois, office. Perry went "above and beyond the call of a salesman" to secure a large dollar booking from a consumer customer.

## 3650 Days with Fairchild

Flo Smith, secretary to Joe Bailey, regional sales manager and Art Massicott, southeast area sales manager, received her 10-year pin in December at the Fort Washington, Pennsylvania, sales office.

Flo is the first field sales secretary to be presented with this honor. Fairchild is proud to have such a dedicated person out in the field.

## ATTENTION EMPLOYEES

In the last Microwire, it was mentioned in the Special Recognition Increase article that overtime payments, shift premium, or fringe benefit programs, including vacations would not apply to the Special Recognition Increase. This is incorrect! Eligible employees will get paid as time worked including vacations, holidays, and sick time.

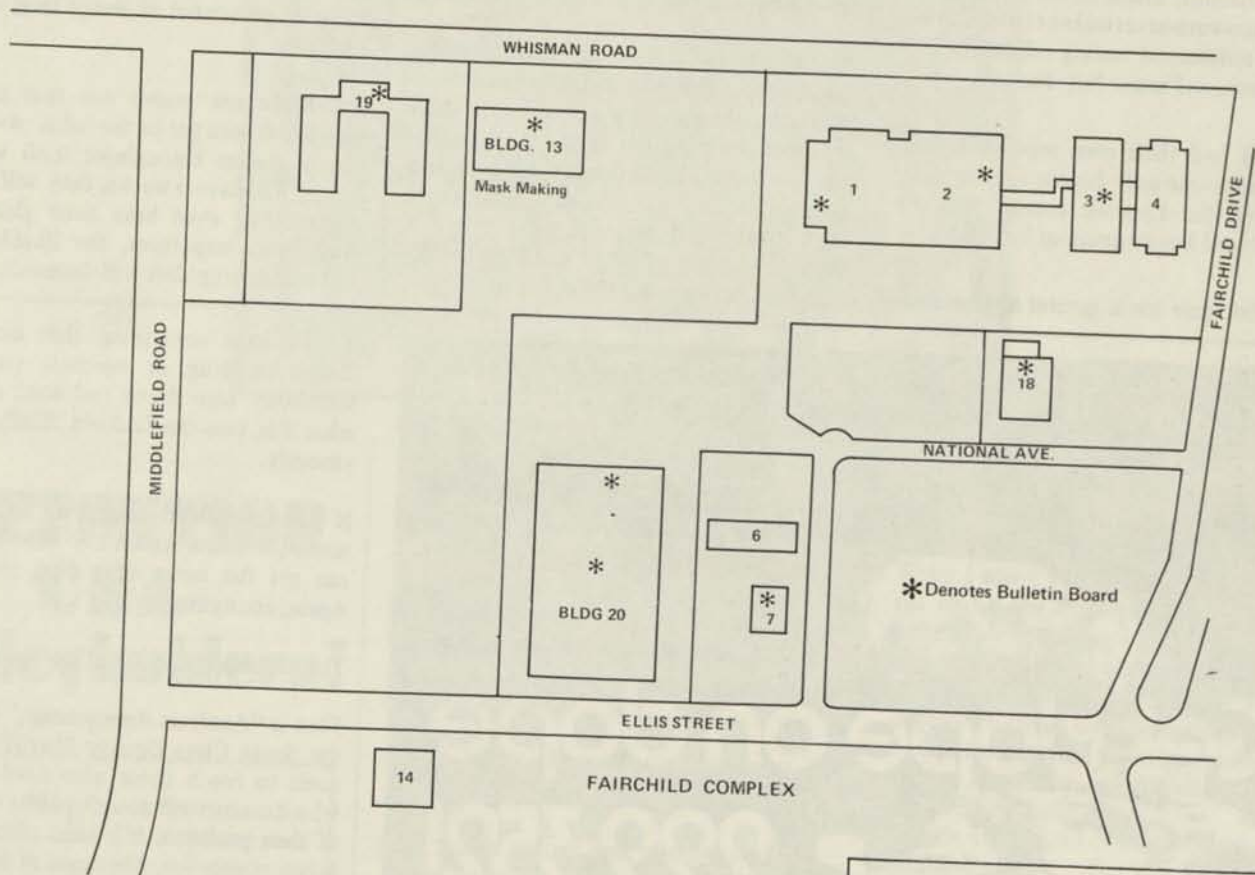


# Microwire

## “Ability is of little account without opportunity”

Fairchild believes in company-wide promotion opportunities for all employees.

Located in all Mountain View buildings are the orange-colored Job Opportunity bulletin boards. Jobs are posted for a 48-hour period. Applications are next to the boards for interested employees. Just fill it out and drop the completed form in the slot behind the applications. Check your bulletin boards daily for new jobs.



### *Pardon My Blooper!*

In the last Microwire, the Internal Placement Administrator's name was misspelled. The correct spelling is Dale J-A-C-K-S-O-N. My apologies!



## Fairchild Sponsors Crystal Growing Tour



Thirty-four engineers, studying Microelectronic Design Technology at De Anza College, toured Fairchild's Crystal Growing area in Building 4 on Monday, January 31.

These engineers, representing major electronic firms on the Peninsula, are studying the design of thick and thin film hybrid circuits, bipolar and dielectrically isolated bipolar circuits, metal oxide semiconductors, microwave-microelectronic, mask-making automated testing reliability considerations, and make-buy analysis.

Fairchild had their own representative—Bea Sparks—the only female non-engineer to attend the 12-week course. Bea was also selected Leadwoman of her class.

"The tour gave me a greater appreciation

of the technology, equipment, and training of personnel for silicon crystal growing," said Lockheed engineer D.P. Ruby.

"This tour gave me the opportunity to see the actual crystal growing process required to furnish silicon wafers for industries. It is much easier for me to view the process in person than study about it in a classroom or textbook," commented Herschel Smith of Dalmo-Victor Corporation.

According to classroom instructor Ed Thompson, "the tour certainly enlightened my class because they could relate their textbook information to the actual process. I want to thank George Bangora and Bob Kruse for their fine analysis of Crystal Growing and personal interest in our class. But most of all, I want to thank Fairchild for opening the doors to us."

## AVERT TRAGEDIES

"There is nothing more distressing or frustrating for a doctor than to see a serious accident that could have been prevented if the simple safety procedures had been followed."

Dr. O. Bruce Dickerson, corporate medical director, stresses this point while explaining the company's stepped-up campaign urging the use of safety glasses—at all times—in designated plant areas. He cites instances throughout industry where plant accidents have occurred endangering or impairing the eyesight of employees. Yet minutes after many of these incidents, safety glasses were found either on the employee or readily available nearby.

The lesson is self-evident. Supervisors and managers have both a moral and legal responsibility to make every effort to see that safety glasses are worn by workers or visitors to their specified plant areas. This includes personnel at every level—no exceptions.

Dr. Dickerson points out that the employees should get in the habit of wearing safety glasses throughout their working hours. Within two weeks, they will seldom notice they even have their glasses on. And most important, the likelihood of regrettable tragedies will diminish.

If you have something that may be a dangerous drug or narcotic (or know somebody who does) and want to know what it is, you can find out. Easily. Anonymously.

If you have been caught up in the drug scene (or know somebody who has), you can get the name of a drug counsellor. Again, anonymously.

The number is 299-3521 on weekdays.

That is "Analysis Anonymous," set up by the Santa Clara County Sheriff's Department to reach those who need help but who do not want to risk public disclosure of their problem. If a caller wants to contact a counsellor, the name of one will be supplied. If the caller has something that may or may not be a drug and needs identification of the substance, he will be supplied the name of a "drop off" spot. When the substance is left, the person leaving it will be given an identifying number to use when calling in for the result of a chemical analysis.

SHERIFF'S DEPT. SANTA CLARA CO. CONTRIBUTED BY SAN JOSE ADVERTISING CLUB

Get dope on dope

299-3521

Analysis Anonymous



# Fairchild announces improved 9344

Digital Products Division has introduced an improved version of its 2 × 4-bit TTL multiplier. It performs multiplication in one step, rather than a series of operations, required in previous techniques.

The 9344 was originally produced more than two years ago in an LSI technology development program for the military.

The new version, still designated as the 9344, has been redesigned for general purpose, low cost applications and gives cost reductions over other multiplication approaches using existing integrated circuits.

The 9344 is even faster than the old circuits. Several 9344's can multiply large numbers in less than millionths of a

second!

The 9344 is suited for use in minicomputers, and systems using fast Fourier transform approaches in radar and sonar signal processing systems, as well as other systems where fast, "real-time" multiplication is necessary. The 9344 is completely compatible with other TTL devices.



## ATTENTION CNA Policyholders!

If you need more information regarding the CNA Car Insurance program—or have problems with your payroll deductions with CNA, please call (415) 982-3420 in San Francisco. If you have a claim, check your CNA manual for your local claims department phone number.

## Funny You Should Mention...

*By Deloris Hively*

- A. The worst thing about retirement is having to drink coffee on your own time.
- B. A family man is one who has replaced the currency in his wallet with snap shots.
- C. Get regular exercise—jog to your garage!
- D. The thing about popular music is that it isn't popular for very long.
- E. How come the people of the generation that talks the most about cleaning up the environment won't start with their own rooms?
- F. A distraught mother of a 4½ year old boy: "Same thing every day—I work from son up to son down!"
- G. When I was 8 years old, my father told me about the birds and the bees. The next day a bee stung me—and for seven months I thought I was pregnant.
- H. A 19 year old lad received a letter of inquiry from his local Selective Service board. He supplied the requested information, and then concluded his letter with: "Eventually yours."
- I. A wife came into a bank to cash her husband's paycheck. "It needs an endorsement," the teller explained. The woman looked thoughtful for a moment, then wrote on the back of the check: "Joe is a wonderful husband."
- J. Growing old is a state of mind brought on by gray hair, false teeth, wrinkles, large belly, short breath, and an all over feeling .of being constantly and totally pooped.



# Moving Up

## MOS DIVISION

Jerry Kiachian — Manager/MOS R & QA  
Doug McBurnie — Controller/MOS

## MARKETING

John Deaville — District Sales Manager/  
Schiller Park  
Will Riner — Regional Sales Manager/  
Syracuse  
Les Welborn — Regional Sales Manager/  
Dallas  
Steve Lindsey — Regional Sales Manager/  
Bladensburg

## ANALOG DIVISION

Andy Procassini — Manager/ANALOG  
Marketing  
Janice Nuttall — Executive Secretary to  
John Husher

## DISCRETE PRODUCTS DIVISION

Marie Christians-Diaz — Product Controller  
Carol Hosoda — Diode Plant Controller

## DIGITAL PRODUCTS DIVISION

Tony Steimle — Product Manager/Radia-  
tion & Poseidon  
Bill Shepherd — Manager/Process Engi-  
neering & Advanced Development  
Joe Bailey — Manager/Reliability & Qual-  
ity Assurance

## INDUSTRIAL RELATIONS

Roger Barney — Employee Relations Man-  
ager/Administrative & Plant Services/cor-  
porate  
Caryl Gates — Executive Secretary/Indus-  
trial Relations Manager, Systems Tech.

## ADMINISTRATIVE & PLANT SERVICES

Barbara O'Brien — Supervisor/Communi-  
cations  
George Compton — Manager/Support  
R & QA

# Welcome Mat

Tom Rouse — Employee Relations Man-  
ager/Digital Products Division & MOD  
Veronica Kane — Corporate Manager/Em-  
ployee Communications

## FIRST SCHOTTKY TTL PRODUCTS

The Digital Products Division has entered the Schottky TTL market with the introduction of eight second-source SSI devices—the first Schottky TTL products to be announced by Fairchild.

Transistor saturation, a limiting factor in the speed of TTL circuits, is prevented by the use of transistor clamping diodes. This is achieved by the use of the Schottky process. It also doubles the speed of a standard TTL gate.

The 9S series devices are designed for use in any digital system to achieve ultrahigh speeds, and are expected to find primary use in existing TTL systems that require upgrading of speed, for example, the mini-computers.

Fairchild plans to add additional second-source gates and flip-flops to the Schottky TTL line soon, followed by announcement of a line of 93S series proprietary Schottky MSI designs.

## Service Awards

### COMPONENTS GROUP — FEBRUARY

#### TEN YEAR

Hilda M. Perry	Elizabeth J. Peterson
Betty J. Ochse	Ann Norris
Ruby C. Rivera	Lilly Stein
Lillian J. Tonis	Mildred N. Behrman

#### FIVE YEAR

Helen Halmi	Joseph Steele
Allen Sprowl	Maria Rosa
Arthur Summerfield	Joseph Krause
Pauline McReynolds	Dominga Flores
Richard Derickson	Geraldine Gordon
Gary Tharp	Joyce Mayou
Mary Davis	Rosie Yamaji
George Harding	Donald Antonietti
Martha Burnette	Sandra Trowbridge
Rexene Atcheson	Rolf Kley
Roylee Manzano	Marietta Dorsey
Doug Peltzer	Mary Branco
Julie Mikaelian	Donald Lennox
Leroy Jebian	Jeanne Spratt
Melvin Hoffower	Connie Lemberger
Beryl Ramirez	— Omitted from January

#### R & D

FIVE YEAR JANUARY	FIVE YEAR FEBRUARY
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Bob Erkson	Dan Mock
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## REC COUNCIL



Attention tennis buffs — spring is just around the corner and the Fairchild Tennis Club is completely prepared. On Saturday, April 1, 1972, tennis lessons will be available for employees and their families at Awalt High School in Mountain View. For the "pros," two tennis ladders will be set up—one for the ladies and one for the gents. Practices will be scheduled for Tuesdays (5–8 pm), Wednesdays (5–8 pm), and Saturdays (8 am – 12 pm) at Awalt High School. If you are interested in learning to swing a racket or competing against others, contact John Leith on EXT. 2487.

Fore! That's the cry of a "true golfer" in the rarest of form. Fairchild Golf League will open its door on May 4th at Fairway Glen in San Jose. For those "sandbaggers" who played last year, your handicaps will carry over from your last game. New golfers interested must turn in five score cards to establish their handicaps. Score cards are to be mailed to Will Mack, M/S 20-1023, or call EXT. 3821.

## ODDS n ENDS

### FOR SALE:

1957 T-Bird with radio and heater, power steering and in great shape. Asking \$1800.  
Twin Beds in fair condition. Asking \$50.00 or best offer.  
2 Bikes (boys). One is a Sting Ray. Call after 4:00 p.m. Dee King 245-3157

Sailboat — 21' Bahama Islander with 9-6 H.P. outboard (new) knotsmeter, depth finder, head, galley, etc., and in excellent condition. Asking \$5200. Al Desrochers 969-2343

Cute "shaggy" poodle-mix pups, 7 weeks old, dark brown miniatures. Asking \$10 each.  
Joan Borges 739-9171

Corporate leased vehicles occasionally are available for employees to buy at the expiration of the lease. For information regarding how to purchase these cars from our lease company, please call Teri Mead on EXT. 2174 or Joe Mahar on EXT. 3646.

### MICROWIRE I — February 1972

EDITOR: Vicki Heinsheimer  
REPORTERS: Geri Hadley, Marge Killian, Millie Dawson, Clint Haines, Margaret Elliott, Pat Alfred, Lorette Hayes, Bev Delos Santos, Judy Curiel, Marlene Souza and Edie Beem

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# Microwire

## SUCCESS STORIES

"It works" was the consensus of the first five employees who have moved up as a result of the recently installed Job Opportunity System. Announced in early February, the first promotions to occur under the System were made during the week of February 14.

"Sometimes you felt that if you did a really good job," states Eileen Burns, "you would be kept in that job forever. The Job Opportunity System gives you a chance to move on. Most supervisors," she continues, "want to see their people get ahead, but, on the other hand, they don't want to let a good employee go to another department."

As a result of the new Job Opportunity System, Eileen moves from metal etch assembler to engineer technician in early March. She heard of the job opening from her supervisor and the bulletin board in Building #1. Also moving from assembler to engineer technician is Arlene Sampson, who, as a result of the new system, looks upon her work with Fairchild as a career. That's a change of attitude. Before she received this promotion she had a job at Fairchild. "I really didn't believe the system could work," Arlene candidly reveals. "I didn't even bother to read the literature on Job Opportunity, my supervisor explained it to me."



**A SEND-OFF:** Arlene Sampson (left) and Eileen Burns are given a send-off to their new assignments by former supervisors John Herrera (left) and Joe Fulginiti.

Helen Payne, who became a quality assurance inspector on February 28, like the other women who have been promoted through the system, read of a job opening, filed an application, was interviewed by her prospective supervisor, Dick Mundy, and within two days was preparing to move from Assembler A (her job for 3½ years) to a new and more rewarding assignment.



**IT WORKS:** Helen Payne tells former supervisor Dan Johnson (left) and new supervisor Dick Mundy of her amazement at the rapidity with which JOS works. She applied for a promotion on Thursday and received it the following Monday.

"You rarely knew what jobs were available," Judy Bouldin admits, "until the Job Opportunity System started. Sometimes you'd hear of openings through word-of-mouth, but that's not a very sure way to plan a career." Judy's new job through the Job Opportunity System is an Aligner in Bipolar Memories.



**A PAT ON THE BACK:** Judy Bouldin is congratulated by her supervisor, Hank Miranda and industrial relations manager George Coppinger for being the first hourly to be promoted through the Job Opportunity System.

"Applying for a promotion takes a great deal of self-confidence," Sally Escamilla believes. Sally moved up to an inspector in late February after applying for a job opening publicized through the Job Opportunity System. She reveals that it took a bit of soul-searching before she filed an application in the System. "It's difficult to leave something that is known for the unknown. But, if you want to progress, you have to develop confidence in yourself. Not very many of the girls," she continued, "have applied for Job Opportunity jobs even though they are qualified. I think that after a few of us try the system and are successful in our new jobs, the system will see a great deal more action."



**FARE-THEE-WELL:** That's the wish Bob Smith extends to Sally Escamilla on the day she leaves his section to report to a new job obtained through the Job Opportunity System.

The initial phase of this new program is aimed at hourly employees, Grades I to IV, in the Mountain View complex. It will eventually be expanded to include all employees by the middle of the year. Announcement of new developments in the program will be carried in MICROWIRE and on the Job Opportunity bulletin boards located throughout the Mountain View complex.

Keep an eye on Job Opportunity, it could help you write your own success story.



# People



PEOPLE: **BOB ERKSON**

Who raises rabbits and ducks during his spare time? A certain young man at our R&D facility does—**Bob Erkson**.

A true Californian, Bob enjoys the outdoors life—whether it's chasing rabbits and ducks or water skiing—Bob is always involved. He and his family are constantly going up to the California mountains to water ski and fish.

Bob joined the R&D team in January, 1967, as a shipping clerk. After a year, he enlisted in the United States Navy on a Military Leave of Absence (retaining all seniority). During his three-year stint with Uncle Sam, Bob traveled to Japan, Philippines, Hawaii, Panama Canal, Virgin Islands, Puerto Rico and Acapulco, whew! Bob returned to his old stomping grounds at R&D after seeing the world.

As R&D's storekeeper, his responsibilities include stores, shipping and receiving, the mailroom and chem mix area. Recently, Bob received his five year pin from supervisor **Dick Parker** at a special luncheon.

Bob is married to a former Fairchilder. They have two children and reside in Santa Clara.

Besides raising rabbits and ducks, Bob is an active member on the Rec Council and R&D's Fire Brigade Emergency Squad.

Raising rabbits and ducks—what in the world ever happened to dogs and cats?

## THE PISCES BOSS

February 20th — March 20th

By *Linda Goodman* — *SUN SIGNS*

There are a limited number of streams for Pisces bosses, and we'll concentrate on those. In most corporate and industrial areas, the Neptunian chief is as rare as a bathing suit at the North Pole. The great majority of Neptune's children prefer to swim alone—unconfined—as writers, salesmen, creative artists, actors, or soldiers-of-fortune.

With his sensitive nature, Pisces was born to serve mankind, not to accumulate power or build huge empires. Too much responsibility. However, thanks to his quick, clever mind and his sometimes uncanny grasp of figures, the fish can have a lot of fun juggling the points of fluctuating shares, though it will be more like a game to him than actual work.

If your boss was born in March, he may be the type to behave like a crosspatch when he's irritated by something. He has a gift of words, and when he's being brusque, it's a caustic brusqueness that can scald a little, but he'll seldom be aggressively domineering or truly mean and petty. One minute he may shock you with his unconventional ideas, then he'll do a rather slippery turnabout and appear to be a conformist. On different occasions he takes either view, to find out what your ideas are. He can be, in other words, a mite tricky. When he finds your ideas and your conversation interesting, your Pisces boss will listen with flattering concentration, silently and sincerely, maybe even offer you a glass of sherry to create

a relaxed atmosphere. If he finds what you say boring, his mind will wander.

He may be well-traveled, and if he isn't, he'll soon make up for lost time. Like the Sagittarian and Geminian boss, the Pisces executive will keep a packed suitcase behind the couch in his office. If not, he should.

The Piscean executive is somewhat partial to the creative thinkers in his firm. If you tend more toward caution than imaginative strategy, you may not get as many glasses of sherry or as many comradely smiles, but you probably won't get fired. He may enjoy the others more, but he needs you.

You've probably already learned that he's installed a Capricorn or Taurus as a middleman to deal with employees who seek raises. He knows better than to let you appeal to him personally. The Neptune nature is so constituted that he finds it almost impossible to say no to a fellow human being who has a sincere need, or even just a sincere desire. He learns early to insulate himself as best he can.

Remember, he lives in two different worlds. Such a division of nature can cause a confused personality, but it can just as easily cause brilliance. He's a mystic at heart, a secret believer in the unseen and the supernatural, though he may be a little bashful about it. He won't practice voodoo at his desk or meditate in the lotus position at the water cooler, because he fears ridicule if people discover the undercurrent of his psychic vibrations. But they find out anyway, for all his clever playing of the role of tough realist.



# Servicing Our Customers

... was the theme for over 300 exempt employees at Mountain View, San Rafael, and South Portland facilities during the week of February 14th. Wilf Corrigan, vice president and group general manager;

John Duffy, manager of marketing operations; and Hank Mahler, manager of logistics; discussed the philosophy: "If we do what we say we are going to do consistently, we will build up credibility and we will share—to a much greater degree—in the customer's business. If we continue to miss the commitments, we will lose the business that we already have. This is not an invalid premise. It has been proven—both from a positive and negative standpoint—time and time again."

During the presentation, John Duffy men-

tioned how there is a wrong way and a right way to serve a customer. The right way means assessing the customer's and Fairchild's needs in the proper balance. The customer views Fairchild as a single entity and not as a loosely knit collection of separate companies. It was also stressed to the audience about working not just for their own division but for the total Semiconductor Components Group.

"If we are to be successful in this market place there is only one way for us and that is the right way."

## DEVELOPING DEVELOPERS



The first meeting was held on Tuesday, February 15, for twelve general foremen. They were invited to make recommendations to further strengthen the program. Wilf Corrigan, vice president and group general manager of the Components Group, and Leo Contois, manager of industrial relations, attended as invited guests.

In October, a joint Task Force of production and industrial relations managers began the research for a new and unique Fairchild Supervisory Training Program. These men came up with one of the finest training programs ever presented to Fairchild supervisors.

The Task Force invited representatives from the first level supervisors to participate in the program's development by filling out a detailed questionnaire made up of questions relative to their responsibilities—dealing with every facet of their functions. The supervisors pointed out to the Task Force what they wanted to know and what they must know. In addition, a rigorous analysis of the supervisor's job, in terms of problems, opportunities, and needs, was undertaken over several months.

The Fairchild Supervisory Training Program is designed to provide Fairchild's

supervisors with the knowledge, skill and understanding necessary to plan, organize, control and lead to the end that the highest possible production standards are met and maintained and they are better able to meet the changes and challenges of the future.

After 38 hours of classroom instruction, outside reading, homework, and tests, the performance of Fairchild's first-line supervisors in the program will be evaluated on their attendance, participation, contribution, and test scores. Successful course completion qualifies the supervisor to receive a Certificate of Successful Program Completion and a lapel pin (shown here)



indicating certification. (The three interconnecting rings represent schedule, standard yield and standard labor. The outer ring which holds the three interconnecting rings in place represents people.)

There are 23 classroom meetings covering 15 course topics, and a total of 17 regularly scheduled sessions. In addition to regular instruction by Jack Higbee, Wayne Carlson and other Task Force members, guest speakers will be scheduled. Some of the topics covered are "An overview of the practical application of the Supervisor's job in the management process," "The Supervisor and Support Resources," "Schedules," "Standard Labor—Standard Yield," "Problem-Solving and Decision-Making," and "Communication." This program is in modular form and can be taken out of context without affecting the subject matter. It can be modified for local use or used as written.

Task Force's mission is to establish an ongoing system for the selection, preparation, assignment and continued development of the first-level of supervision with a view toward improving their leadership abilities, productivity and general knowledge.



## You Can Help

There are so many needs in a community which government cannot meet.

A child who is having difficulty in reading needs a volunteer tutor.

A pre-school teacher in a day care center requires a few hours a week from an unpaid assistant.

A local health agency has a backlog of clerical projects that can't be accomplished without a pair of helping hands.

A social center in a disadvantaged area requires a bit of professional counseling in setting up and controlling its budget.

Children under treatment for physical and mental problems need "friends"—concerned adults who can be with them during their therapy and perhaps extend the friendship beyond the confines of the clinic.

These are some of the requirements for volunteers that exist in Mountain View, Palo Alto and Los Altos at this moment. The jobs to be done require a bit of time and talent; the rewards are knowing that you are contributing to the improvement of life in our communities.

Matching up volunteers who are willing to lend a helping hand to the specific needs in the community is the job of the Volunteer Bureau/Voluntary Action Center of Northern Santa Clara County. The Bureau acts as a personnel placement service for all local non-profit cultural, educational, health welfare, recreational and civic agencies.

In April, Robert Schumacher, Corporate Director of Compensation, becomes President of the Board of Directors of VB/VAC. Bob has served as treasurer of the organization for the past two years. With his election as Board President, he has increased his efforts to tap the vast resources of potential volunteer talent in industrial communities in each city in which VB/VAC serves. "In today's world, as never before," he states, "the services of trained, talented and dependable people are required to meet the needs of the non-profit agencies which enhance life in Northern Santa Clara County.

If you haven't already guessed, that's a plea for Fairchild employees to call the VB/VAC at 326-9381 for a description of the jobs that need to be done and an estimate of the time they take. Bob says that if you don't, maybe no one else will.

## Odds & Ends

### FOR SALE

1969 Plymouth Road Runner, 383 cu. in., excellent condition, 4-speed, green, 2-door, warranty still good. Call after 5 p.m. 736-7408

1964 Oldsmobile Vista-Cruiser Station Wagon, 4-speed, power steering, radio, heater, air conditioning, good tires, clean condition. Make offer. Phyllis Sherwood, EXT. 2470, or call after 5:30 p.m. 252-3736

Knitting Machine, 72 needle bed, only been used twice, like new, \$200 or best offer nearest to it. Call EXT. 2174, or after 5 p.m. 245-7926

Golden Retriever/German Shepherd mix, 2 yrs. old, male with all shots, free. Must find a nice home. Bill Lloyd. 296-2829

1963 Jaguar E-type Roadster. Recent complete engine and clutch overhaul. New Packard plug-wires, C-D ignition, new oil pump, new rebuilt generator, threaded brass core plugs. All new brake calipers about 10,000 miles ago. American-made copper-core radiator (doesn't overheat). Konis on front, mild de-camber at rear. 3:77 gears. Nearly new Dunlop radials on rear. Tonneau cover. New floor carpets never installed. Needs some body work. \$1,050. O.N.O.

1970 American Motors Gremlin. R&H, automatic, power steering. Has AMX power disc brakes on front. Factory handling package on front. Gabriel adjustable shocks on rear with auxiliary coils. Tinted glass. Tilt-down rear seat. Four 6" steel wheels with Michelin X on front, Semperit radials with Bruce racing caps on rear. Includes five 4½" steel wheels for spares, chains, etc. \$1,650.

1947 Chevy ½-ton Panel Truck. Roof rack. Body in fair shape—all restorable. Early 50's GMC ½-ton truck rear end. 15" wheels. Engine burns oil but is dependable. Includes rebuilt transmission—uninstalled. Lots of new rubber door seals, window channels, welting, etc. Needs work, but is a good old hauler! \$125.

Trailer—Ex-commercial box-type, needs work. \$35.00.

Engine—327 C.I.D. Chev, F.I. heads, 350 horse hydraulic cam. "C" series A.F.B. Low mileage, has been in storage. \$275.

Transmission—dual-range hydromatic with starter, all converted to fit small-block Chevy. \$150 or engine and transmission for \$400. Would be sensational in Gremlin!

Early Rochester fuel injection for small-block Chevy. Disassembled, but complete. \$150.

Dan Barnhart

962-2521

## REG COUNCIL



Fairchild is starting Intramural Spring Basketball on March 20th. Deadline for sign ups will be March 9th. If you are interested, please contact Cliff Reich on EXT. 2568.

Discount tickets are still available for "Fiddler on the Roof." It will be on Sunday, March 19th, at Century 21 Theatre in San Jose. Reservations must be made no later than Tuesday, March 14th.

Beautiful downtown Palm Springs is offering a 10% discount to Fairchild employees on their Aerial Tramway. The tramway will take you above the city for a spectacular view. If you play golf, this is one way to choose your course!

Knotts Berry Farm and Ghost Town, located near Disneyland, have special discount prices for Fairchild. You will receive tickets valued at \$5.95 for only \$3.25.

Pacific Rental Car has announced a "special" 10% discount to Fairchild. They are offering free pick up and return service.

For more information on the above items, please contact Ann Poole on EXT. 4286 or in the Personnel Building.

## MOVING UP

### Discrete Products Division

B. Bravo — Production Scheduler  
Lois Tuttle — Secretary

### Administrative & Plant Services

Cravin Williams — Chemical Mixer

### Digital Products Division

Sheila Stephens — Assembly Work Leader  
Bipolar Memories Testing/Swing  
Betty Santos — Assembly Work Leader

MICROWIRE II — February 1972

EDITOR: Vicki Heinsheimer  
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# Microwire

## CAN YOU IMAGINE ?



If you can, you can probably cash in on the Fairchild Suggestion Program. The imaginations of seven employees in Mountain View earned recent U.S. Savings Bond awards under the Program. In each case, the employee examined a portion of his or her job, determined those processes that consumed unnecessary time or expense, and presented an idea for a change that would save time, money, or both.

**Thelma Wilson** suggested a procedure to eliminate one of the baking processes in the fabrication of wafers. In the evaluator's report, her idea was judged to be "effective, efficient and streamlines a process which requires resist coating on both sides of a wafer." Thelma's idea claimed a \$100 value U.S. Savings Bond.

**Floyd Adams** earned a \$25 value U.S. Savings Bond for his suggestion to use a steel tray to contain photo resist chemicals in a dispensing operation. The tray keeps the photo resist chemical from splashing onto the dispenser machine parts and eliminates much of the clean-up procedure previously required to keep the machine operating.

**Pat Freeman** suggested that all mail addressed to East Coast Fairchild locations be collected in the mail room, sorted according to East Coast destination and then bulk mailed by air. Previously, each letter and memo destined for the East Coast plants and offices was addressed and mailed individually. Pat's suggestion, which earned a \$25 value U.S. Savings Bond, saves secretarial time and postage charges.

**Wanda Lingo** saved wear and tear on Textool zip dip hand sockets by suggesting a stop be made for the top of socket to pre-

vent bending of extended points. Her award: a \$25 value U.S. Savings Bond.

**Enzie Crabtree** earned a \$100 value U.S. Savings Bond for her suggestion to prebake 6400 and 6500 series quads. Formerly, the quads were cropped, formed, tested, marked, baked and tested again. The baking can change the electrical characteristics of the quads, so that pre-baking early in their fabrication allows them to be rejected at the first test point rather than investing additional assembly time in a part which would fail as a result of exposure to high temperatures.

**Larry Monroe** collected for two ideas he submitted to the Program. A suggestion to replace more reliable spinner motors for the units then used with the Volks spinner earned a \$25 value bond; and a design for a fixture to channel wafers which would invert and reject them automatically earned a \$100 value bond for Larry. The new fixture greatly reduces the handling of wafers in the photo resist coating operation.

**Ed Denman** received a \$25 value U.S. Savings Bond for locating a source for replaceable neon indicator lamp bulbs. Formerly, the entire socket and bulb were replaced when the bulb failed. His suggestion cuts costs of indicator bulb replacements by more than 85 percent.

Use your imagination to claim either a U.S. Savings Bond or merchandise award in the Suggestion Program. Forms, with detailed instructions on submitting an idea to the Program, can be found in the cafeteria and the personnel office. If you can't locate a form, call **Ann Poole**, EXT. 4286; she will be happy to send you one through the intra-company mail.

## NEWS FLASH

Representatives of the League of Women Voters will visit Fairchild on March 21 and 22 to register voters. If you have moved since your last registration, reached the age of 18, or did not vote in the last presidential election, you must register or re-register in order to vote in the November election. Registration will be conducted in the cafeterias on both days for the convenience of employees.

## FAIRCHILD'S OFF TO THE MOON AGAIN

Apollo Mission 16 is scheduled for liftoff on Sunday, April 16th, with the Fairchild Moon Mapping Camera aboard to take metric and stellar photography of the moon for the second time.

A group of Fairchild Space and Defense engineers and technicians went to Cape Kennedy to install our camera in the "bird" on January 17, 1972.

Integration of the laser altimeter and mapping camera were completed. Our flight unit #5 is now undergoing preliminary checkout of the camera system and continued testing for compatibility with the entire Apollo Mission experiments system.

Fairchild Space & Defense Systems, a division of the Federal Systems Group, is located in Syosset, New York.

Inserted in this MICROWIRE is a Readership Survey for you to fill out. The staff of MICROWIRE would appreciate your candid answers to our questions. Boxes are available in each cafeteria for the completed survey. Please place them in the boxes as soon as possible so the results may be published in the next MICROWIRE.



# Funny You Should Ask

WHAT MOTIVATES PEOPLE TO DO A GOOD JOB?

**Hester St. Clair** / Production Assistant, LIC



Wafer Fab/Engineering Line — "In my opinion, it would be people who are interested in their jobs. This interest motivates them to work harder and become more knowledgeable. It's not just a paycheck or eight hours a day for these people."

**Lillian Peterson** / Senior Lab Tech, R&D



"It's getting a job you are happy with. It gives you self-satisfaction and recognition one receives with good performance. A word of praise from your boss is always stimulating. I would say people motivate people."

**Betty Sears** / Grower, Crystal Growing



"You need good equipment and surroundings. I think a sense of accomplishment comes from your personal attitude and support from your foreman and good morale from the girls you work with."

**Gini Thomas** / Secretary, Indirect Purchasing — "Reasons for motivation vary with the individual. However, I believe the following cover most situations —



a feeling of self satisfaction (accomplishment & a job well done), a desire to perform for a superior for whom you feel it is a privilege to work, a desire to advance in your company and attain certain goals, such as position and financial remuneration."

**Peter Verhofstadt** / Manager of Digital Microcircuits Engineering — "The key is how much people feel that their work contributes to the success or failure of their company. This is the prime motivator other than money."



## Lips & Lipstick

By Helen Hutson, R.N.

A common area of the body not often thought about as a medical problem is the lips. The skin of the lips has more exposure to external factors such as: air, sun, dryness, and constant moisture from being licked and are in motion at all times so the skin tends to crack and when cracked, heals slowly.

There are lip night creams containing oils which melt on contact with warm skin, like a conditioning or "moisturizing" cream. Their purpose is to relieve dryness and roughness.

Of course, you know a dry lip condition may be something more serious. Any condition that interferes with normal maturation of epidermal cells or gives the clinical picture of peeling should be seen by a physician. Just because it's peeling doesn't mean it's dry. It may represent eczema or other conditions.

Some common questions:

**Is there any possibility of harm resulting from the use of white lipstick?**

(Dr. Joseph B. Jerome, Secretary, Committee on Cutaneous Health and Cosmetics, American Medical Association) White lipstick is nothing more than ordinary lipstick with the dyes or colored pigments replaced by a white pigment, usually titanium dioxide.

**My lips always seem to be dry and cracked. I have been told I may be allergic to lipstick. Is this true?**

If your lips become inflamed and irritated, you may be sensitive (allergic) to one of the ingredients in the lipstick you use.

**Beryl Catt** / Contract Coordinator, R&D's Security Officer — "An



employee needs a challenge and responsibility. He must feel that his superiors trust his abilities and will allow him the opportunity to learn and advance in his job."

**Curtis Heimberg** / Research Technician, R&D — "Involvement, responsibility, and encouragement spur a person to do a good job.



Knowing why he does his job and how it fits into the total picture is necessary to give a feeling of importance."

But inflammation of the lips may result from other factors. Most lipsticks contain a number of substances which may cause allergic reaction in some users. For instance, a perfumed lipstick can cause a reaction in someone with a perfume allergy and she should use an unscented lipstick. Other women may find that simply changing brands will help. If these suggestions aren't helpful, call a dermatologist.

**I am frequently bothered with fever blisters on my lips. What causes them and what can I do to prevent them?**

Fever blisters, also called cold sores, are virus infections known as herpes simplex. Colds, menstruation, illness accompanied by fever, and exposure to sun and wind apparently lower resistance to the virus and fever blisters result. As a rule, they heal themselves in a couple of weeks or less—with or without treatment. Local discomfort may be relieved by a number of preparations, although it is not certain whether they help in shortening the duration of healing. Caution should be observed in the use of some popular remedies since some of them may cause irritation.

**Do vitamins really help a dry lip condition?**

(Dr. Paul Lazar, Associate Professor of Dermatology, Northwestern University Medical School) Vitamin A does have some value, depending on the greasiness of the base and the amount of the vitamin in the product, but I suspect it would not be enough to do much good. As for taking vitamins internally, it would not help and could be harmful. Vitamins are chemicals and the body does not throw them off. Too much vitamin A taken internally will actually cause scaling and cracking of lips.

Keeping lips protected from the wind and cold will prevent them from cracking.

## People On the Move

Public Speaking classes are now being formed for Fairchild employees. If you are interested in improving your speaking abilities, please contact **Monique Cushman** on EXT. 3465. Classes will be held either at Fairchild or Los Altos High School, depending upon the number of people enrolled.

## LOST & FOUND

If you have lost or found an article at Fairchild, please contact the Guard House on EXT. 5145.



# what do you think?

*Is MICROWIRE doing its job? You be the judge.*

*MICROWIRE attempts to keep employees informed of Fairchild plans, programs, progress and company and employee achievements. How well is it doing its job?*

*Please take a few minutes to complete this form to help plan the future for MICROWIRE. Your frank comments will help make MICROWIRE the informative, readable newspaper Fairchild wants it to be.*

**1. Do you read MICROWIRE?**

Yes, regularly     Sometimes     Never

If "never," why?

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**2. Do you find MICROWIRE informative?**

Yes     Sometimes     Rarely

Interesting?

Yes     Sometimes     Rarely

**3. Do you think MICROWIRE gives you a sufficient account of company activities?**

Yes     Sometimes     No

**4. Does MICROWIRE devote too much space to any single topic? If you feel it does, what subject gets too much coverage?**

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**5. Do you feel MICROWIRE ignores any subject or any group of people? If you do, what areas should receive more coverage?**

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6. If you were planning future issues of MICROWIRE would you devote most space to articles on:

- employees
- products and how they are used
- company achievements
- company history
- individual departments
- plans for the future
- answers to employees' questions
- employee opinions
- field sales news
- service awards
- employee recreation
- benefits
- want ads
- zodiac signs and other similar features
- general news such as financial information, organizational changes, new products, etc.
- articles by members of management presenting their views on company, industry and community problems
- other (please explain) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Do you feel MICROWIRE is easy to read?

- Yes  No

8. Do you take MICROWIRE home?

- Yes  No

9. Do other members of your family read MICROWIRE?

- Yes  No

From what source do you receive most information about the company?

- my supervisor
- MICROWIRE
- daily papers
- bulletin boards
- other employees
- other sources

If "other sources" is checked, please explain

Which of the sources listed above do you feel is most helpful in keeping you in touch with company matters?

Considering all sources of information, do you feel you are kept well enough informed on company matters?

- Yes  No

\*\*\*\*\*

Do not sign this questionnaire, but do give us a little information about yourself.

How long have you been with Fairchild? \_\_\_\_\_

Is your job in management ( ), administrative or sales ( ), engineering ( ), clerical ( ), or manufacturing ( )?

Are you male ( ), or female ( )? Your age, please \_\_\_\_\_

Please deposit this questionnaire in the inter-company mail for delivery to the Communications Office, mail stop 20-2284, Mountain View, or drop in the marked boxes in your cafeteria.



# Fairchild's "Public" Library



Though there is strong resemblance between the Fairchild Library located in the R&D facility in Palo Alto and your corner public library, the similarities end with the shelves and shelves of books. Unlike public libraries, most of the requests for books and other documents are not delivered in person but arrive in the Fairchild library by phone or mail. Kathryn Dermant, Fairchild Librarian for the past two years, is on the move constantly answering requests for information. The requests come from busy engineers, scientists, managers and secretaries who need material to help them in their jobs. The twice-daily mail delivery carries an abundance of written requests for books, periodicals and copies of documents usually covering state-of-the-art material in fields related to Fairchild's technical interests. The constantly ringing phone brings additional pleas for needed reference material.

The Library, under Bruce Deal, Manager of Semiconductor Technology at R&D, is open to all employees from 8:30 a.m. to 5:00 p.m., Monday through Friday. Few of the more than 8,000 titles represented in the Fairchild book collection are on the shelves of the Library at any one time. Most hard-cover books are on "permanent loan" to employees who use them for reference in their work. Each month additional titles are added to the collection. Kathryn and a Library committee made up of Bruce Deal, Chairman; Albert Yu; Lloyd Walsh and Mike Barry, scientific personnel at R&D, review all books published by technical houses during the month and select those that are useful to Fairchild employees to add to the Library collection. At the same time, the Library Committee examines new technical maga-

zines or journals that have appeared during the month and determine whether they would be useful in work conducted at Fairchild.

Kathryn, who has worked as a librarian in public and university libraries for more than 15 years before joining Fairchild, explains that the services of an industrial library differ greatly from those operated for students or the public. "Fairchild employees do not have the time for casual browsing or lengthy in-library research, so we have to develop ways in which to keep employees, particularly those involved in engineering or the sciences, up-to-date on newly-published information which relates to their fields of interest." This is accomplished through monthly reports of new books, periodicals and technical communications which have been published during the preceding month. Employees on the Library mailing lists, which include supervisors and managers in virtually every scientific, marketing and administrative department within Fairchild, receive copies of these reports. They, by mail or phone, request copies of the listed material applicable to their fields of interest.

Kathryn indicated that it is the Library policy to respond to requests for books or copies of other literature within 24 hours. Because she operates the library alone, she is unable to conduct literature search projects but can respond to any request for a specific book or document. The policy is a limit of three requests per phone call; written requests not limited in number. Through a library loan arrangement, Kathryn has access to the resources of major libraries throughout the United States in supplying employees' information needs. If a specific title is not contained in the Fairchild collection, she will

contact these outside agencies for the needed book or document on a loan basis.

In addition to fulfilling the company's needs for technical information, the Library also loans reference works such as dictionaries and secretary's manuals. All books on permanent loan to employees from the Fairchild collection are charged to the individual and are to be relinquished at the time the employee leaves the company. When moving from one job to another within Fairchild, employees should take their borrowed reference books with them as they will be asked to account for them.

A new addition to the library is a complete subject-coded file of U.S. Patents granted to Fairchild and copies of patents which cover subjects related to the company's fields of interest.

The Library usually sees increased activity during the lunch period when employees gather to take advantage of collection of donated reading. This material is donated by employees, including Dr. Hogan's office, which routes all major magazines and other literature received to the Library.

The Library reflects the pinched budgets felt in other parts of the company with its staff of one. In more affluent times, Kathryn has had two assistants to aid her in supplying Fairchild's literature needs. Though services have been curtailed as the result of the reduction in the library force, Kathryn still encourages all employees who need a book or document to help them in their work to call her at R&D, EXT. 2384. By keeping up her non-stop pace, she manages to maintain the Library's reputation of 24-hour response to ALL requests.

## Year End Statement of Income for Fairchild Camera & Instrument Corporation

The table below shows the comparative operating results for 1972 and 1971.

	<i>Year Ended January 2, 1972</i>	<i>Year Ended January 3, 1971</i>
Net Income	\$200,717,000	\$228,472,000
Expenses	207,406,000	246,032,000
Loss Before Taxes	(6,689,000)	(17,560,000)
Provision for Income Taxes	<u>1,152,000</u>	<u>1,749,000</u>
Net Loss	<u>\$ (7,841,000)</u>	<u>\$ (19,309,000)</u>
Per Share of Common Stock: Net Loss	\$ (1.79)	\$ (4.40)



# FAIRCHILD CONTINUES SCHOLARSHIP PROGRAM



For the past year, Fairchild sponsored scholarships for three American Indians at Stanford University in Palo Alto. The scholarships will carry them through four years of college.

For the 1971-72 academic year, Fairchild will award the tuition scholarships to three Navajo students—Steven Begay, freshman from Tuba City, Arizona; Willard Harris, sophomore from Shiprock, New Mexico; and Jasper Joe, freshman from Shiprock. Fairchild now sponsors six Indian students at Stanford.

During a luncheon on Wednesday, March 8th, at Stanford University, Fred Hoar, corporate vice president of communications; Dean Peskin, director of manpower planning and development; John Salazar, director of labor relations; Tom Rouse, employee relations manager; and Bob Lo Presto, professional employment; presented the Fairchild check to Dwain Fullerton, director of corporate relations for Stanford; Ken Kaufman, financial aids; and Gwen Shunatona, assistant dean of students responsible for American Indian students.

## MOVING UP

### DISCRETE PRODUCTS DIVISION

Dian Derin / executive secretary to Dave Heck  
 Hiawatha Jones / Work Leader  
 Shirley Owens / Process & Device Specialist  
 Carmen Trujillo / Process & Device Specialist  
 Dieter Fischer / Product Specialist  
 Betty Howard / Production Planner

### ANALOG PRODUCTS DIVISION

Mary Henderson / Work Leader  
 Karen Smith / Work Leader  
 Pearl Garrett / Production & Maintenance Clerk

### DIGITAL PRODUCTS DIVISION

Marie Lusk / Assembly B/Bipolar Memory

### ADMINISTRATIVE & PLANT SERVICES

Ted Leno / Manager, Purchasing Contract Administration  
 Bert Click / Manager, Plating & Packaging

## SERVICE AWARDS

### TEN-YEAR

Inez Riley  
 Erna Pena  
 Marguerita Killian  
 June Strobel  
 Marlene Herman  
 Gordon Duff  
 David Heck  
 Sabina Garcia  
 Guadalupe Martinez  
 Betty Gregory  
 Marie Hekman  
 Mary Ann Warr  
 John Whitcomb  
 Eleanor Brown  
 John MacMurray

### FIVE-YEAR

Britt Bredstad  
 Randolph Olson  
 Helen Lesley  
 Helen Silva  
 Condy Gonzales  
 Beverly Campbell  
 Gloria Depuglia  
 Diana Jones  
 Edward Denman  
 Daisy Reese  
 Denise Reilly  
 Shizho Sueoka  
 Nico Kaldis  
 Andrew Wihtol  
 Shirley Jamerson  
 Florence Wallace  
 Robert Trayhey  
 Carine Cato  
 Betty Malone  
 Luzia Lewis  
 Joseph McCoy  
 Alice Wagner  
 Jean Terry  
 Geneva Smith

# REC COUNCIL



Your Recreation Council is offering discounts at the following places:

**Local Area:** Frontier Village; Santa Cruz Beach and Boardwalk; Santa's Village; San Francisco Bay Cruise.

**Los Angeles and San Diego Area:** Sea World; Movieland Wax Museum; Knotts Berry Farm; Disneyland; Palm Springs Aerial Tramway; San Diego Zoo.

**Local Businesses:** Capitol Tire; Keith's Tire and Brake Service; Gerard Tire; Palo Alto Tire and Brake Service; House of Karlson; Dahnken; Pacific Car Rental; Carriage Trade Dinner Club.

For your convenience, the Rec Council has employees with discount cards in the following buildings.

Name	Bldg.	EXT	Mail Stop
Lydia Lopez	2	3425	2-333
Bev Delos Santos	3	5356	3-652
Jenny Bochman	13	3602	13-001
Mary Jane O'Brien	14	3664	14-1070
Rudy Robles	18	5579	18-221
Margaret Elliott	19	5642	19-110
Judy Curiel	20	2838	20-1788
Shirley Adamik	20	3741	20-2805
Joan Borges	R&D	17-	30-123
		2301	
Jan Dahlin	Sys Tech	15-	40-27
		5521	
Bonnie Lewis	MOD	16-	70-21
		269	

## ODDS n ENDS

### FOR SALE

Golden Retriever/German Shepherd mix, 8 mos. old, female with all shots. Free. Must find a nice home. John Salazar 349-3865

Sell or trade recreation lot, 2 hours north of San Francisco. Quarter acre with trees and recreation facilities including two lakes. For further information call after 5 p.m. 738-2461

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# Microwire

Published for the Employees of Fairchild Semiconductor Components Group

## Where, What, When?

We heard you.

The single most repeated request in the recent MICROWIRE readership survey was for a column devoted to answering employees' questions.

Beginning with the next issue of MICROWIRE, your request is granted. We are openly soliciting questions from employees on any subject that has anything to do with Fairchild policies, activities, benefits or services. Practically anything that's on your mind regarding your relationship with Fairchild can be aired in the new column. Questions received in the next week and a half will appear with the answers in MICROWIRE II for April.

Any responsible question that would be of general interest to other employees, will find an answer through this column. You need not sign your questions; however, if the question is not judged to have broad enough interest to claim a spot in MICROWIRE, unless we have your name, you won't receive a reply. We'll attempt to answer *all* questions either in print or in a personal memo or letter. So, if you want to be guaranteed an answer include your name with your question.

Members of the employee communications staff will be the only individuals at Fairchild who will know the identity of the employee submitting a question. Answers will be researched without divulging the name of the questioner. A few words of advice, however, before you begin listing your questions and complaints: Maybe your supervisor could answer the question more quickly and completely than MICROWIRE; and, please, questions asking about attitudes or behavior of other employees (Why is my boss such a grouch? Why is Susie so lazy?) obviously can't be answered in MICROWIRE. Questions of a personal nature that might offend another employee should be referred to the employee, your supervisor or the employee relations manager who serves your area.

(Continued on page 4)

## PRIDE Patches Awarded to R<sup>2</sup>IC Group



If you happened to walk down the halls in Buildings 1 and 2 on Thursday, March 30th, you might have noticed "Pride" Patches sewn on seventeen black smocks. The red and white patches were presented to Radiation Resistant Integrated Circuits, the smallest group within the Digital Products Division.

"My girls have done an outstanding job over the past few months and I just wanted them to know how much we appreciate their efforts," R<sup>2</sup>IC product manager Tony Steimle said.

What could be more rewarding than praise for a "job well done" and a red and white "pride" patch.

### WAFER FAB

Mary Napolitano	Sheila Bernhard
Marce Andrade	Margarita Daguio
Shelby Martensen	Constancia Daguio
Donnie Robinson	Ofelia Aguinaldo

### D.I. MATERIALS

Angie Garcia	Geneva Addison
Donna Cooper	Joan Bottero
Dolores Morgan	Alma Gusman
Katie Martinez	Sarah Johnson
Soon McKay	

### DIE FAB

### R<sup>2</sup>IC Receives Patches

Sam Uyeda, Process Engineer  
Bob Waits, Staff Engineer  
Bruce Truesdell, Foreman  
Lydia Lopez, Secretary

## WHAT YOU SAID

You told us what you thought. We listened, and you'll see changes in upcoming issues of MICROWIRE. Though the response to the recent readership survey on MICROWIRE was not as great as we had hoped, those who took the time to complete the survey form gave us valuable comments which will help in planning the future of the publication.

Here's what you said: You want more stories about fellow employees. You'd like to see answers to your questions about Fairchild practices, policies and benefits answered in print. You like reports on what the company plans for the future and features on individual departments within the Semiconductor Components Group.

On the other hand, you do not like the series on zodiac signs and other stories that do not relate directly to Fairchild and its employees, and you believe the medical columns are too long.

We heard your compliments and complaints and will plan future issues of MICROWIRE to provide the kinds of company and employee coverage you've asked for.

Generally, employees who responded to the survey felt they were not well enough informed on company subjects, but as one sage put it, "How do you know if you know all you're supposed to know?"

The survey respondents cited other employees as the greatest source of company information; next in line was "other sources" and MICROWIRE came in third. We'll see if we can't move MICROWIRE up to first place in the months ahead.

Thank you for your time and your concern. Watch for changes in MICROWIRE in response to your suggestions. But, in the future, there is no need to wait for a formal survey to tell us what you think about your publication. Address any comments or story ideas to the MICROWIRE, mail stop 20-2284, Mountain View.



## Fairchild Participates in Blood Drive

A mobile unit from the Peninsula Memorial Blood Bank once again arrived at Fairchild in Mountain View. The clinic was held on Tuesday, April 11, and Wednesday, April 12, for donations to Fairchild Blood Bank.

Blood donated to the bank is available free to all employees and their immediate families (spouse and children). The savings per unit is approximately \$37.50. To qualify for the free blood, you must have a note from your physician with the diagnosis, amount of units used, dates and name of hospital. With this information, call Helen Hutson, R.N., on EXT. 3711. The Blood Bank Committee, made up of 17 members, worked very closely with Helen Hutson, R.N., committee chairman, by putting up posters, distributing fliers and application blanks to employees.



1972 Blood Bank Committee members (standing, left to right) are: Rudy Robles, Helen Hutson, R.N., Alberta Acosta, Angie Garcia, Margaret Sanders, and Myrna Hyatt; (sitting, left to right): Georgia Washington, Jean Peterson, Lois Stidham, Deloris Hively, Lee Glass, and Lee Carvalho; (not pictured): Connie Bell, Jan Dahlin, Mary Jane O'Brien, Ray Alhona, and Anita Grissom.

## NEW GROUP INSURANCE COVERAGE

A revised edition of the Fairchild Group Insurance Plan booklet and new group insurance identification cards are available. This new booklet incorporates all up-to-date changes.

If you have an old booklet, please discard it and pick up a new one at the group insurance office in the personnel building. In some facilities, reading racks provide a supply of booklets.

The following explanations will enlighten you on the new coverages.

*Page 5:* Reviews life insurance coverages available to Fairchild employees. Basic life insurance coverage is provided to employees by Fairchild at no employee cost. Supplemental life insurance is also available to you. The new booklet reflects the accurate, reduced weekly premium costs of 7¢ per \$1,000 (30¢ per month) of supplemental life insurance.

*Page 7:* Reviews benefits available under the comprehensive medical/dental program. It should be stressed that the philosophy behind a comprehensive medical/dental program is to provide extensive protection in the event of medical or dental expenses due to an illness or accident. The plan covers expenses which include reasonable and customary charges for necessary treatments. The different types of hospitalization and medical expenses are covered on this page.

*Page 8:* An explanation of dental coverage begins on this page. A new paragraph regarding pre-statement of dental expenses has been added. Pre-statement is a concept of having the benefits payable under your plan stated *PRIOR* to work being performed. It is intended to eliminate doubts and apprehensions about what portion of the expenses will be covered by your group insurance carrier. Forms are in the insurance office. Specific instructions are provided with the new dental claim packet.

Another highlight of the group insurance program is long term disability coverage underwritten by the American Home Assurance Company. Long term disability coverage provides you with an income should you become totally disabled and unable to work. The benefit payment on the supplemental long term disability is 60% of your monthly base salary. This amount is reduced by any Social Security benefits available to you. You must apply for long term disability benefits. It begins after six months of continuous total disability and can continue until your 65th birthday.

*Page 21* covers everyday occurrences that may be forgotten in the daily routine. This basic information advises how to enroll for insurance, who is eligible, and who qualifies as a dependent.

In the near future, there will be a special release of information to all employees regarding the new medical/dental claim forms. Watch bulletin boards and employee newsletter for the announcement.

## Job Opportunity System Expands Program

Effective Monday, April 10th, the Job Opportunity System expanded to include all hourly employees at the Mountain View complex.

Hourly employees are encouraged to bid for posted openings by filing an application. Employees will be selected for the openings using a combination of factors including performance, attendance, skill and seniority.

After a 48-hour posting period, job applications are collected and screened against the requirements of the job. Qualified applicants will be notified by the Internal Placement Office to arrange for interviews with the selecting supervisor. The applicants who are not qualified (a reason will be given) will be contacted by the Internal Placement Office.

The selected employee will receive a formal offer and have 24 hours to accept or reject it.

Check Job Opportunity bulletin boards daily for new jobs and instructions on how to apply.

During March, the following employees were promoted through the Job Opportunity System.

### DISCRETE

Erlinda Galinato—Assembler B  
Edith Lloyd—Assembler B  
Fran Torres—Process & Device Specialist  
Shirley Neal—Process & Device Specialist  
Alice Crenshaw—Process & Device Specialist

### LIC

Dell Abbott—Assembly Work Leader

### BIPOLAR MEMORY

Fannie Parker—Assembly Work Leader  
Janie Smith—Assembler B

### DIC

Jean Lovejoy—Training Technician  
Bonnie Buckelew—Inventory Control Clerk

### FACILITIES

Carol Balegna—Landscape Attendant  
(Carol is the first female at Fairchild to become a landscape attendant.)



# Skills Training System Initiated at Fairchild

When an hourly employee without technical skills joins Fairchild or transfers into a new area, he or she qualifies for on-the-line training. The skills training system is available to all areas in Fairchild upon request. The skills training system is designed to improve employees' skills in new areas and to develop skills for new employees who are unfamiliar with the technical aspects of their job. Under the qualified instruction of Dolf Payer, Georgia Washington, Paulette Miller and Hank Watts, many assembly and fab areas, using the system, have seen a definite improvement in productivity.

"It certainly has helped DIC," explains Ed Nunes, training manager for DIC. "What makes the system unique is training in the actual area where the person will work. They become accustomed to the equipment and materials used. I would like to see more fab areas receive this type of training. It does pay off!"

Fairchild's participation in STS program presented a slight problem during its peak. Many areas were utilizing the system and

there were not enough training specialists available. The solution was training additional instructors. This enabled experienced girls selected by their supervisors to perform the training duties. Representing various areas in Mountain View as training instructors are: Carolyn Thomas, LIC; Marge Guzman, Bipolar Memory; Kathy Burkett and Bernie Brandon, Discretes. In DIC, Ed Nunes is training manager with Lorraine Mazza and Jean Lovejoy assisting as training technicians. Josie Peralta, a pioneer with Training, administers the system in Integrated Microsystems.

On-the-line training has proven it can cut down a large amount of training and maintain productivity. It gives the girls an opportunity to work with their new supervisors and become a part of the operation.

"The results have been tremendous in Bipolar Memories, Isoplanar, DIC, LIC, Discretes, MOD, South Portland, Singapore, and Hong Kong," says Georgia Washington. "Eventually, we hope all fab and assembly areas at Fairchild will participate in the Skills Training System."



*Ed Nunes and Lorraine Mazza, DIC, describe equipment and wafer handling to a new employee.*



*DIC swing shift training technician Jean Lovejoy instructs a transferred employee on mask loading.*

## Reaching Out

Eight years ago, Fairchild, along with many other companies, committed itself to supporting aggressive programs aimed at making the most of our nation's human resources. These programs took many shapes, but they were all built on the objectives of extending employment and advancement opportunities to the members of our society who had previously been denied full career potential because of social prejudice.

Like few other things in the fast-moving electronics industry, Fairchild's basic philosophy of providing equal employment opportunities to all members of our communities remains unchanged. The programs designed to put this philosophy into action have broadened and strengthened, however. Today, guided by plans developed by Fairchild managers, the company reaches out into the community with special efforts to attract members of minority groups who have not previously had full

employment opportunities available to them. In addition, the company has developed programs to advance females and members of minority groups into jobs in which they have not been found previously in representative numbers.

Reaffirmation of the company policy on equal employment opportunity and revitalization of the programs that support the policy are a constant concern of Fairchild management. In a memo to corporate Vice Presidents and Directors in March, Dr. C. Lester Hogan, president and chief executive officer, stated, "I am sure you recognize, as I do, the need for corporate and individual commitment to resolving the inequities that exist in employment in our country. In order to formally state our position in regard to equal employment opportunity, each domestic operating division has developed an affirmative action plan with specific goals to attract, train and promote members of our society, who, because of unenlightened social practices, have not had full opportunity for career growth in industry in the past.

"In spite of the pressure created by our company's economic problems in 1971, we have made some progress in meeting our affirmative action goals. But, our job is not finished."

Providing true equal employment opportunities will take conscious action on the part of company management, other employees and industry at large until our nation can be assured that it is fully utilizing the skills and talents of its citizens regardless of their race, color, creed, national origin, age or sex.

RENT	\$2.10
FOOD	\$1.00
RENT AND LIGHT	\$35
MEDICAL PAYMENTS	\$25
LIFE INSURANCE	\$20
CAR PAYMENTS	\$60
LOANS	\$50
Savings	

Gets harder and harder to save a buck these days. Have it saved for you the automatic way before you even get your hands on it . . . join the Payroll Savings Plan for U.S. Savings Bonds.



(Continued from page 1)

But, we are willing to track down the answers to almost anything else you have to ask. Simply write the question out on a sheet of paper. Printed forms to make your questioning easier will soon appear in all Mountain View, MOD and R&D cafeterias. But, don't wait until the forms appear to get your questions off your chest. A note on a piece of scratch paper is fine. Address it to MICROWIRE, Why?, What? or When?, mail stop 20-2284, Mountain View.

We will attempt to answer all questions in the next issue of MICROWIRE. Occasionally deadlines will force us to hold some questions for more than two weeks, but, in no case, will more than three weeks go by without an answer.

## P.I.G.A. Golf

By Rick Schaffzin

Fairchild needs six more golfers to complete the team we have entered in the Peninsula Industrial Golf Association League. Monday night team competition begins the first week in May and continues through August. Four members of the ten-man team compete each week against teams from other firms on the Peninsula. The league is run on a handicap basis and the line-up is rotated to give every member an equal opportunity to play.

In addition to Monday night team play, monthly week-end tournaments are run at various courses in the area. Trophies and other prizes are awarded on both gross and net individual scores. The first monthly tournament will be held on Sunday, April 16th, at Palo Alto Golf Course.

If you are interested in joining the team, contact Rick Schaffzin, MOD, on EXT. 346, as soon as possible. Three "attested" score cards will be necessary to establish a handicap.

## ODDS 'n' ENDS

FOR SALE

1962 Rambler American, automatic transmission, good tires, very economical to drive. Asking \$300. Call 851-1177.

1968 Ford Mustang, excellent condition, must sell due to health. Asking \$1,250. Mary Briscoe, 326-6200 EXT. 2338.

1968 Pontiac Firebird Convertible, automatic, V8, P.S. Asking best offer. Jim Damavandi, 967-6489.

Appaloosa Horse, 4½ year old mare, \$350 for horse and saddle, good rider, papers for registration. Adele Razillard, 657-5566.

## REC COUNCIL



Gene Kelly's "Clown Around," a funny musical for the entire family, will be at the Oakland Coliseum from April 27th through April 30th, and the Cow Palace from May 2nd through May 7th. Joining Mr. Kelly will be Ruth Buzzi from "Laugh-In" fame and a cast of 70. Discount tickets will be available through your Rec Council representative.

"Cabaret," film version of the hit Broadway musical, is showing at Century 25 in San Jose. A discount of 75¢ is offered to Fairchild employees for Sunday, April 30th, at the 7:15 p.m. performance. Please fill out the coupon below and send with your check and a stamped self-addressed envelope to the following address. All checks must be at the Century Theatre by April 23rd.

"Life is a cabaret, old chum.  
Come to the Cabaret . . ."

### GROUP SALES MAIL ORDER

Make checks or money order payable to CENTURY THEATRES and mail to Group Sales, 3164 Olsen Drive, San Jose, California 95117.

Please send me \_\_\_\_\_ tickets at \$2.00 (13-15 years); \$2.25 (16 and older)

Date: Sunday, April 30th  
Performance Time: 7:15 p.m.

My check for \_\_\_\_\_ is enclosed.

Name \_\_\_\_\_

Phone \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

## SERVICE AWARDS

### TEN YEAR

Peter Onstad  
Joyce Scott  
James Corzine  
Hazel Bolton  
Melba Shaeffer  
Enzie Crabtree  
Lily Madayag  
Fortunata Talagtag  
Edith Scott  
Maria Archibeque

### FIVE YEAR

Xaver Gurlich  
Edna Wilkinson  
Cordelia Lovato  
Julia Cabanero  
Mary Golden  
Edward Nunes  
Barbara Moraga  
Muriel Young  
Ida Capponi  
Adele Razillard  
Andrew Adamian  
Dorothy Rodriguez  
Delena Tanner  
Karl Mauritz  
Rebecca Mogueillansky  
Charles Hurley  
Bertha Bass  
Betsy Anderson

### CORPORATE

#### TEN YEAR

Lois Garrett

#### FIVE YEAR

Barbara Butler

## Moving Up

### MOS PRODUCTS DIVISION

Jean Spratt—Production Supervisor/  
Assembly

Debbie Ray—Assistant Lab Technician

### DISCRETE PRODUCTS DIVISION

Carmen Trujillo—Process & Device  
Specialist

S. Huerta—Assembler B

Bill Deuchler—Product Marketer

Dwight Meadows—Product Marketer

M. Haynes—Assembly Work Leader

D. Pollino—Assembly Work Leader

### MARKETING

Dan Bongatti—Intermediate Clerk/  
Customer Administration

### DIGITAL PRODUCTS DIVISION

John Cartwright—Production Supervisor A

Loreli Kirchner—Assembler B

### ADMINISTRATIVE & PLANT SERVICES

Kathy Bohanon—Lab Technician

James Lykins—Plating Engineer A

Edward Carroll—Chem Mixer

Beverlie Stratton—Executive Secretary  
to Group Controller

MICROWIRE 1 - April 1972

EDITOR: Vicki Heinsheimer  
REPORTERS: Geri Hadley, Marge Killian, Milie Dawson, Clint Haines, Margaret Elliott, Pat Alfred, Lorette Hayes, Bev Delos Santos, Judy Curiel, Marlene Souza and Edie Beem

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# INTERNATIONAL INSIGHTS

(A REVIEW OF WHAT'S HAPPENING ON THE INTERNATIONAL SCENE)

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## FAIRMEX/MEXICO CITY

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This month we are featuring our Mexico City operation. It is located on the south side of the largest and one of the highest capitals in Latin America. Our facility employs over 170 people in 8000 feet of plant space.

In August, 1967, Fairmex was acquired by Fairchild Semiconductor and is headed up by Dick Martin, general manager. Fairchild Mexicana assembles and tests plastic, metal can and power transistors, diodes, DIC's and LIC's to serve the Mexican market, and increasing markets in South America.

Fairmex operations include a complete marketing/sales organizations, as well as applications engineering, finance, personnel, product engineering and manufacturing/test groups. Further, Fairchild (U.S.) and Fairmex products are sold in Latin America by a resident sales manager in Sao Paulo, Brazil.

The market for Fairmex products in Mexico is expanding rapidly. Despite conditions elsewhere in the world, the Mexican economy seems to be rolling and growing. The gross national product has been expanding at an annual rate of 7% for the past decade. This is evidence of a healthy economy.

The Latin American markets are also promising, with Brazil the best export prospect at the moment. Brazil's market for semiconductors is about 1-1/2

times the size of Mexico's and there are favorable trade agreements between the two countries.

Mexico's main industry is tourism. There are excellent places to go and see--from colorful and modern Mexico City with its rich legacy of Aztec and Toltec history--to the resorts of Acapulco, Puerto Vallarta and Cozumel Island, where sea sports and beautiful beaches make tropical dreams come true. The Pre-Hispanic pyramids and archeological ruins of legendary Mayapan in the Yucatan Peninsula where vestiges of Maya culture still exist draw thousands of visitors annually.

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.....meet MARIO CORONEL

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MARIO CORONEL, assembly supervisor, Fairchild Mexicana, had prior experience with Fairchild before joining Fairmex in Mexico City. Mario, 28, joined Electromex in Tijuana during 1969. He was supervisor of LIC-DIP, Certub (remember those?) lines and Hybrid Assembly. In August of 1970, he became general foreman for those lines. Mario is married and has two children. He holds a degree in Electronics from ESIME in Mexico City.



## Semiconductor Outlook

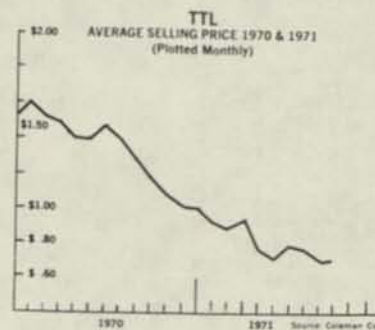
Wulf Corrigan, vice president and group general manager of the Semiconductor Components Group was a featured speaker at a seminar sponsored recently in New York City by Coleman and Company, a Wall Street brokerage house. Sharing speaker's duties with Corrigan were Floyd Kvamme of National Semiconductor, Dick Haenichen, Vice President of Motorola and Robert Noyce, President of Intel.

The purpose of the seminar was to share information on semiconductor industry trends with financial analysts of the Wall Street firm who study the electronics industry in order to advise their clients on the investment in stock in companies within the industry. Each speaker was given the opportunity to state his views on the direction the semiconductor business is taking. Corrigan revealed his belief that the entire industry faces much more formal methods of conducting business and will never again see the freewheeling days of the 1960s. He continued that the semiconductor industry must be increasingly sensitive to understanding and developing customer markets for products rather than simply reacting to obvious customer need. He added that instead of gut-reacting to the fluctuations in the marketplace, we must learn to assess how these customers will do in their marketplaces and what type of follow-on business we can anticipate. He added that difficult times have taught companies that they can live without some segments of their business and have pointed out the benefits to be gained in concentrating on primary strength. In the past, semiconductor companies grabbed whatever portion of the marketplace they could without considering the consequences or considering whether a product

line or marketplace was compatible with their strengths. Corrigan pointed out that this more conservative attitude toward semiconductor marketing does not mean that Fairchild is deserting new areas which demonstrate potential, but, he stated, orders will not be taken just for the sake of broadening the customer base.

In summing up, he stated that the suicidal price war among semiconductor manufacturers which occurred in 1970 and 1971 is not likely to be prolonged because companies have much firmer control on their costs. Overall, he revealed that he expects prices to firm although he sees the traditional industry trend of price deterioration continuing in a gradual, rather than a radical, curve.

(Chart on billing for the semiconductor industry which was developed for the seminar is shown below.)



### QUARTERLY DISCRETE BILLINGS

Quarter	1971			1972		
	1970	Est.	Proj.	Est.	Proj.	Proj.
1st	\$196	\$151	\$154			
2d	187	154	162			
3d	160	151	153			
4th	142	160	166			
	\$686	\$615	\$635			

### QUARTERLY IC BILLINGS

Quarter	1971			1972		
	1970	Est.	Proj.	Est.	Proj.	Proj.
1st	\$119	\$102	\$116			
2d	116	107	126			
3d	102	112	124			
4th	96	121	135			
	\$433	\$443	\$501			

### QUARTERLY TTL BILLINGS

Quarter	1971			1972		
	1970	Est.	Proj.	Est.	Proj.	Proj.
1st	\$ 37	\$ 26	\$ 36			
2d	34	28	37			
3d	26	33	38			
4th	23	38	39			
	\$119	\$126	\$150			

### QUARTERLY DTL BILLINGS

Quarter	1971			1972		
	1970	Est.	Proj.	Est.	Proj.	Proj.
1st	\$ 30	\$ 20	14			
2d	28	17	16			
3d	22	15	15			
4th	20	14	17			
	\$101	\$ 66	\$ 62			

### TTL 1971 BOOKINGS vs. BILLINGS

Quarter	1971	
	Bookings	Billings
1st	\$ 32	\$ 26
2d	38	28
3d	35	33
4th	47	38
	\$152	\$126

Source: Coleman & Co.  
Est.  
Est.



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## From The President's Desk

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Dr. C. Lester Hogan, president and chief executive officer, has announced the Fairchild Supervisory Training Program for employees.

The Training Program is designed to provide FCI supervisors with the knowledge, skill and understanding necessary to plan, organize, control and lead to the end that the highest possible production standards are met and maintained and they are better able to meet the changes and challenges of the future.

The Program which has been developed in a self-administering modular form is easily adaptable to any supervisory situation within Fairchild. Dean Peskin, Corporate Training and Manpower Development Director and author of the course, should be contacted for information on use of the program in Fairchild facilities abroad.

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### Service Gift Taxation?

Effective January 1, 1972, recipients of five-year service awards will be imposed with custom tax by government rules. The service awards are made of gold and ruby and are subjected to customs duty by the laws of Korea. A solution to supply the award pins in a reasonable way are now under study. Incidentally, congratulations to all recipients of the five year service awards.

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### Fairchild Semikor, Korea

In accordance with the agreement of the Union and Management Council for 1971, the company is forming a credit union which is one of the welfare programs for employees.

It was stated (from reliable sources) that Fairchild will loan the Credit Union 700,000 Won (interest free) for two years until it can stabilize and operate on its own.

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## PEOPLE AND PLACES

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### Osaka Electronics Show

During October, 1971, a major Electronics Show was presented in Osaka. Fairchild participated with other U.S. semiconductor manufacturers such as R.C.A., Texas Instruments, Motorola, General Instruments, etc.

Because of the heavy coverage of F.S.C.'s newly announced Isoplanar technology in the trade magazines, newspapers, and other media, it was reported that Fairchild's booth was the center of attention with the industry's engineers. During the seven days, a capacity crowd gathered around Fairchild's booth daily with barrages of inquiries on the Isoplanar process. This kept our sales engineers very busy!

### FAIRMEX - Mexico City

Dick Martin's wife, Annette, made her debut with the Mexico City National Opera opening, Sunday, February 27. She sang the leading role in Puccini's "Manon Lescaut". A repeat performance followed on February 29.



It is quite an honor for an American to sing in the National Opera. In the past, roles are almost always given to Mexican Nationals.

Dick and Annette will sing leading roles in Franz Lehars, "Merry Widow" to be performed in Mexico City on March 12-18. While in Hong Kong, they sang the "Widow" with the Hong Kong Singers. (In the small world department: in the cast of "Widow" in Mexico City is a couple who saw Dick and Annette's performance in Hong Kong.)

#### Fairchild Japan Outing



Recently, Fairchild's Japanese Sales Office personnel enjoyed a company outing at a resort spa known as Nasu located outside of metropolitan Tokyo.

A bowling tournament was held as one of the scheduled programs. Harry Suzuki became a "Tiger" and bowled like a pro. He captured both the high game and high series, but the rules of the tournament stipulated only one prize per person. Nevertheless, he was crowned the champion and received first prize. Congratulations!! What was the prize, Harry?

#### Chinese New Year in Hong Kong

A belated "Kung Hey Fat Choy" to all you Hongkongites!

The Chinese New Year falls on the first day in the Lunar Calendar (this year, February 15) and ancient traditions and customs are upheld even in a modern city like Hong Kong. The new year warrants the year's most gigantic celebration for the Chinese. Festivities include the Dragon Dance and Lion Dance to the rhythm of gongs and drums which represent harmony and happiness.

There are numerous customs still practiced during New Years. One practice is to pay a visit to superiors, relatives, friends and employers--this signifies respect and offers New Year greetings. The host in return will offer tea and seasonal cakes. This is believed to bring more earning power to men and help children to become taller. Traditionally, a bonus of one month's salary is paid by employers just prior to New Years for the purpose of clearing up debts. Then, what is left over is used for food and new clothes and other necessities. Another custom is to place flowers for decoration during this time. This year a peach tree (in full bloom) was purchased and placed in the main lobby. This brings good luck throughout the year.

By arranging the work schedule, Hong Kong Fairchilders had a 5-day holiday to celebrate a very "Happy New Year".

INTERNATIONAL INSIGHTS March 1972  
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S. J. Lee (Korea)  
Roberto Reyes (Mexico)  
S. K. Sze (Hong Kong)  
M. Kimura (Tokyo)



# Microwire

Published for the Employees of Fairchild Semiconductor Components Group

## Why, What, When?

*"Dr. Hogan, shortly after he came to Fairchild, indicated that he found our technical leadership unsurpassed in the industry. Could you please comment on our current industry standing?"*

In the 1971 annual report to stockholders which was published a few weeks ago, Dr. Hogan described some of the current projects which are underway to continue technical leadership in the company's fields of interest. He cited significant progress made in ion implantation, an advanced semiconductor fabrication technique which has many times the precision and reproducibility of present diffusion technology; the utilization of gallium phosphide as the active compound in light-emitting diodes; and progress in the development of charge coupled devices, which are expected to become dominant in the field of photosensing as integrated circuits are today in electronic circuitry.

The results of development efforts which went on the market during 1971 include a variety of standard and custom products including silicon gate metal-oxide-semiconductor circuits, new linear integrated circuits, and an expanded line of transistor-transistor-logic devices. "Recently," he said, "we announced high speed emitter-coupled-logic circuits offering both power supply and temperature compensation, an industry first. Fairchild's Isoplanar process, a technique which nearly doubles the packing density of bipolar devices, went into production in mid-year with the first product, a fully-decoded 256-bit random-access memory." In 1972, Isoplanar is being applied to higher levels of circuit integration.

Dr. Hogan also outlined advances which occurred in 1972 in other Groups within the company including the selection of the Fairchild Lunar Mapping Camera for use in photographing the moon's surface from lunar orbit. It was Sherman Fairchild's design of an aerial camera that stimulated the formation of the company

in 1920, and succeeding generations of that product have continued to be selected for the most demanding aerial photographic projects.

*"Is Fairchild considering giving additional hours of vacation to eleven years and over employees, like that received by the employee who has six through ten years of service? If so, when?"*

At the present time all of our benefit programs are being reviewed. In one sense, our benefits and policies are always being re-examined. Right now, however, the review is more intense. Your suggestion has been passed on to the proper people so that it will get consideration. It is planned that recommendations for changes will be submitted to management for their approval within the next 60 to 90 days.

*"I joined Fairchild's Pension Plan for non-exempt employees when it was first started. After fourteen years of service, if I am terminated or if I resign, will I be eligible for a pension at age 55?"*

You are probably, at least partially, vested in the benefits of the salaried pension plan. Vesting starts at age 40 or the date on which you complete ten years of credited service in the plan. At that time you are 50% vested and vesting increases 5% for each full year of credited service after your vesting date up to a maximum of 75%. You attain 100% vesting if you are a participant at age 55. Your vested benefits may be used to provide a pension at normal retirement age of 65. In order to qualify for early retirement, you must attain age 55 as a participant in the plan. You may then leave the company and apply for early retirement. This will require the consent of the company unless you have reached at least age 60 as a participant in the plan.

*If you are looking for an answer to your questions on company policies, benefits or activities, submit them to Employee Communications, m/s 20-2284.*

## Mask Making Totals 187 Years at Fairchild



Mask Making, under the management of John Crosby, is located on Whisman Road behind Building 20. Inside this relatively small facility are 17 employees with a total of 187 years with Fairchild. January through December, 1972, these employees will have celebrated 10, 11, 13 and 14 service anniversaries.

Can your department beat that?

**10 Years**—Rosie Devito, Kay Doss, Melba Shaffer, June Strobel, Ruby Rivera, Ruby Smith, Charles Van Ness, Edie Beem, Lilly Madayag, Viola Alderette and John Winding.

**11 Years**—May Reich.

**13 Years**—Edna Baker, Mary Forrest, Fran McDonough and Ron Ivancich.

**14 Years**—Jean Parry.

## Saving ?

May has been designated as U.S. Savings Bonds Drive Month for Fairchild employees. Payroll Savings cards will be mailed to your home.

"Have your money saved for you the automatic way . . . Join the Payroll Savings Plan for U.S. Savings Bonds."



## Stamp Out Drugs

The sale and use of drugs has extended to junior high and grammar schools. If we are to turn the tide on this horrible monster affecting our children, we must develop and implement programs—NOW.

Starting May 2 through May 30, a drug education class will be presented free by the Mountain View Police Department at Mountain View High School on Castro Street. Classes are held once a week for a four-week period on Tuesday nights from 7:30–9:00 p.m.

Upon completion of this course, each attendee will receive a Certificate of Achievement (diploma) which entitles him or her to use a slide series on drug abuse for showing. The course will cover all drugs used by youth and their effects. Discussions will cover symptoms, actual arrests and trial of drug cases, punishment, talks by ex-addicts and where to go for help.

Sponsoring the drug abuse program is the Rotary Club of Mountain View spearheaded by **Blaine Putnam**. This energetic and intensive program needs the cooperation of every person living in Mountain View to help "Stamp Out Drugs Together." Citizens of Los Altos, Sunnyvale, and other areas are invited to participate.

## FC Introduces 1103 Version

1103 is the product that broke the barrier from the usage of core into the semiconductor computer memory. The difficulties of this product, as it appears to date, are twofold: it is difficult to produce, and difficult to use.

Fairchild has overcome the difficulties inherent in this by producing a device via a process window wider than the competitor's and also a device that solved the user's problems.

A new 1024-bit MOS dynamic random access memory, introduced by MOS Products Division, serves as a pin-for-pin replacement for the 1103 MOS, while eliminating the critical system timing requirements associated with the 1103. When used in new systems, faster speeds can be achieved.

The key difference in Fairchild's version is that the basic cell of the 3534/1103 consists of four transistors, rather than three as competitive devices use. The most important advantage of the four-transistor cell, from the design point of view, is that it requires a minimum of internal support circuitry, thus resulting in a favorable area ratio of memory to peripheral circuitry.

## Pride Patches

The Republican Party isn't the only group using an "Elephant" as their symbol. MOS Products Division devised a new "pride" patch using the elephant as their insignia. The elephant signifies their long memory while the banner, held by the elephant, represents pride in production.



Modeling the new "pride" patch is Linda Wack, MOS Assembly. Linda designed the emblem during one of her class breaks at college.

## New Product Line Subject for Movie



Eighteen months ago a new line was introduced at Fairchild called the Martin Marietta Transistor Control Production Line located at Mountain View and San Rafael. This production line is a new concept in semiconductor and transistor production. Fairchild is the only company in the semiconductor industry to have such an elite product line.

Recently, a twelve minute "progress report" film was made by **Martin Marietta** for their customer. The movie describes how a control production line assembles a transistor into a missile for our Safeguard

program. Ten Fairchild girls were the "stars" for three-day filming.

On Friday, April 14th, Fairchild presented the actresses with a version of the Academy Awards. Several honored guests were on hand for the ceremony: **Greg Reyes**, general manager of Discrete Products Division; **Ralph Miller**, manager of power transistor; **Ed Bennett**, manager of R & QA; **Bob Bylin**, production manager of control production line; and **Bruce Williams**, production supervisor. Representatives from Martin Marietta were also guests.

Each girl received a Certificate of Achievement signed by **Wilf Corrigan**, vice president and group general manager of Components Group and **Sid Stark**, vice president and general manager of Martin Marietta. Highlighting the ceremony was the presentation of Fairchild's Academy Awards—not with an Oscar but with their own miniature "loving cups." Envelope please . . . and the winners are:

**Mona Haynes**—Best Actress in a Leading Role

**Edith Bein**—Most Congenial

**Helena Lima**—Best Foreign Actress in an American Film

**Connie Martinez**—Best Back of the Head View

**Rachel Figueiredo**—Actress with Best Curls Since Shirley Temple

**Mary Sifuentes**—Best Actress in a Long Suffering Role

**Fran Dilbeck**—Best Blonde Since Jean Harlow

**Sara Chavez**—Best Newcomer

**Vicki Ochoa**—Most Consistent Performance

**Terri Beckmann**—Sharpest Eyes Since Superwoman



## EXPLORING WAFER DIE WITH THREAD & NEEDLE



Emiko Takata, high speed wafer sort, Discrete Products Division, spends eight hours a day, five days a week, studying wafer die under a microscope. After three years, she is very familiar with the various patterns used in high speed wafer.

Recently, Emiko came to work with unusual designs embroidered on her slacks. Looking closely, the designs are wafer die patterns. Emiko wanted to do something unique—what could be more of a novelty than using wafer die patterns.

## Dual Comparator Subsystem Extends Range of Industrial Applications

A high-current dual comparator subsystem was introduced on March 27th, by Analog Products Division. This subsystem can drive a wider range of relay or other control loads than any other integrated circuit comparator on the market.

The two comparators in the new uA750 are completely independent except for common biasing and overload protection circuitry. Each comparator has its own strobing feature, built-in hysteresis for positive switching, and in-phase output current sinking and high current sourcing capability, which allow the user to increase hysteresis for operation in exceptionally high-noise environments.

The uA750 is designed for use in a wide variety of applications including environment and process control systems such as temperature controllers, lamp, relay and solenoid drivers or window detectors (go, no-go systems).

## International Sales Conference a Success

Approximately 235 domestic and international sales support and management personnel attended the Second Annual International Sales Conference. Theme of the conference, held in Palm Springs, California during the week of April 16th, was Art Heller's slogan, "Made in Fairchild."

The primary objective was to strengthen communications between the five divisions and between field sales and the divisions. Other objectives were to provide the international field sales staff with the 1972 strategies and goals of the Components divisions; to discuss implementation of those strategies; and to provide them with a better understanding of

Fairchild's customer needs through systems workshops. "We are now in a position to say that we have attained our objectives," according to Jim Johnson, national sales administrator and coordinator for the conference.

**MADE IN  
FAIRCHILD**

"I went away with a good feeling," said George Korpontinos, regional sales manager/Los Altos. "The conference was a positive step towards a successful 1972-73 in sales."

"This conference gave me a clear picture of what our strategies and goals are, and areas where we are expanding," comments Wiesbaden sales engineer Sven Behrendt.

"I felt confident after hearing each general manager's presentation," said Jerry Winters, Syracuse sales office. "These guys are a winning combination which will make Fairchild a winning company."

The awards banquet on Friday, April 21st was attended by Walter Burke, chairman of the Board, Dr. C. Lester Hogan, president and chief executive officer, and the members of the Board of Directors. Mr. Burke presented the annual Sherman Fairchild awards to Bob Russo, Alberto Franzo, and Ray Bortener.



2. The recipient for Sales Professionalism (International) was Alberto Franzo, Milan, Italy.



3. Ray Bortener, product marketing engineer, Discretes, was presented with the Sherman Fairchild Award for outstanding performance in a support group.



1. Bob Russo, Stamford, Connecticut, received the Sherman Fairchild Award for Sales Professionalism (Domestic) from Walter Burke.



# Moving Up

## DISCRETE PRODUCTS DIVISION

Janice Milka—Inventory Control Clerk (Job Opportunity System)  
Aurora Gonzalez—Assembly Work Leader /TO Class (Job Opportunity System)  
Clark Hayes—Mechanic C/Equipment Services (Job Opportunity System)  
Grace Marines—Process & Device Specialist/Hi Rel (Job Opportunity System)  
Harlan Lawler—Senior Process Development Engineer  
E. Burns—Process & Device Specialist

## MOS PRODUCTS DIVISION

Sue Fredrick—Assembler B/Bipolar Memories (Job Opportunity System)  
Remedio Sablan—Assembler B/MOS Assembly (Job Opportunity System)  
Linda Wack—Process & Device Specialist/Product Engineering (Job Opportunity System)

## DIGITAL PRODUCTS DIVISION

Dorothy Bottley—Assembler B/Systems & Test Digital Microcircuits Engineering (Job Opportunity System)

Helen Estrada—Process & Device Specialist (Job Opportunity System)  
Joe Higgins—Mechanic Specialist/Mechanical Maintenance (Job Opportunity System)  
Francis Zapata—Assembly Work Leader/Wafer Fab (Job Opportunity System)  
Joanne Epstein—Assembler B  
Caren Bulman—Assembler B

## ANALOG PRODUCTS DIVISION

Grace Young—Process & Device Specialist (Job Opportunity System)  
Carrine Jack—Process & Device Specialist (Job Opportunity System)  
Barbara Littlejohn—Assembler B/Wafer Fab (Job Opportunity System)

## ADMINISTRATIVE & PLANT SERVICES

Joneta Mendonca—Assembler B/Silicon Materials  
Barbara Maher—Assembler B/Silicon Materials

## CORPORATE

Vern Flink—Manager/West Coast Disbursement



Several women representing Fairchild participated in the Foothill Women's Bowling Association Annual City Tournament. The team bowling events were held at Cherry Bowl in Sunnyvale on March 5. The singles and doubles events were held at Fiesta Bowl in Palo Alto.

Highlighting the singles event was Fairchild's own Barbara Butler. She took third place honors for the "B" division. In Singles "C" division, three employees placed in the top 20. Timmie Porrez captured third place, Betty Ochse and Madlyn Bare took 18th and 19th places.



1970 G.E. Color TV, 12" screen with stand, asking \$150.00. Double bed and headboard, \$30.00. Unfinished chest of drawers (6) \$20.00. Call 739-9082 or 734-3769.

1970 Dune Buggy—built from '68 VW with Manx type body in dark blue metalflake. Spitfire bucket seats, rear seat, and roll bar. Asking \$1300. Steve Keys, EXT. 4265.

Suzuki 80 (66") and Honda 50 (65" trial gears) with helmet, rack and other items. Asking \$275. Call 797-7031.

Double bed with mattress, no headboard, asking \$80.00. Call 567-1477 after 5 p.m.

Home at Clear Lake Keys, 2 bedroom, living room, all electric kitchen, dressing room/bath combination; well furnished; carpets, drapes. Covered patio, private deck, landscaped, low maintenance. Located in new area. Full price: \$18,000. Call 322-0187.

## MICROWIRE II - April 1972

EDITOR: Vicki Heinsheimer  
REPORTERS: Geri Hadley, Marge Killian, Millie Dawson, Clint Haines, Margaret Elliott, Pat Alfred, Lorette Hayes, Bev Delos Santos, Judy Curiel, Marlene Souza and Edie Beem

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## REC COUNCIL



Fairchild Family Day at Roaring Camp will be held on Saturday, June 10th. Tickets are available through your Rec Council representative. For more information, please contact a member of the Rec Council.

Special admission tickets to Marine World for Saturday, May 6th and Sunday, May 14th. This is *not* a special family day for Fairchild employees—the general public will also be admitted. Rec Council has 75 tickets for each day at a special discount rate of \$2.00. If you are interested, please contact your Rec Council representative.

Baseball fans—your wish is our command! The Rec Council is working to set up trips to the Giants games this summer. More information on baseball trips will be available through the MICROWIRE.

One  
cancer  
you can  
give  
yourself.



Horrible  
isn't it?

AMERICAN CANCER SOCIETY



# Microwire

## NEW CRYSTAL GROWING AREA



At the end of February, Tom Donovan, Joe Solinski, Roy Walden and a maintenance staff were constructing the new crystal growing area for a three month target date.



In three months, the crystal growing production area was completed with five new Siltec growers.

On Monday, May 1st, the ribbon was cut at the opening ceremony announcing the opening of the new crystal growing area in building 3. A tour was given to guests and refreshments were served.

This new facility, which employs 22 girls, will be capable of supplying the 1972 OD (zero defect) and 3" crystal requirements of Fairchild. It will improve silicon crystal technology of the Silicon Materials Plant which will be the best available in the

semiconductor industry. Fairchild has upgraded its crystal growing equipment (Siltec growers) to produce perfect material, which will result in higher yields in wafer fab.

"Zero defect" means a single crystal of silicon that is crystallographically free of defects, as opposed to other grown material which has lineage, slip and dislocations. OD material is necessary to make Isoplanar and other advanced integrated circuits.

According to operations manager Don Brettner, "Today we have just achieved the first phase on a new silicon materials facility. We will be providing bipolar memory, LIC, and Mountain View DIC with zero defect material. Our next phase will be supplying MOS and the South Portland plant. Eventually, all I.C. groups will be using this material. The next phase planned for 1972 is the installation of a new polishing process and polishing line.

## ALYCE WASHBURN HEADS PROMOTION SYSTEM



The results of 13 years of experience were brought together on May 15 when Alyce Washburn, former Employee Relations Manager, assumed the assignment of Manager of the Job Opportunity System.

*Continued on page 2*



Cutting the official ribbon is Phil Garcia, production manager. Joining him are, left to right: Tom Donovan, Cliff Roe, George Bangora, Jack Wilm, Elizabeth Sears, Don

Brettner, Jean George, Jo Ann Robles, Jack Bogan, Grace Wnuck, Naomi Lewis, Bob Lorenzini with Siltec, and Chista Tomasevich.



Continued from page 1

Alyce replaces Dale Jackson, who inaugurated the Job Opportunity System. Jackson left Fairchild to establish his own counselling and personnel placement service in El Cerrito.

Alyce knows more about promotion and the opportunities at Fairchild than almost anyone else. It was a constant series of promotions that brought her to her present job. Alyce joined Fairchild in July, 1959, after 16 years of devoting her energies to being a fulltime housewife and mother. "It was pretty frightening to enter the business world again after all those years of moving dust around," she remembers. Obviously, her early nervousness wore off. She was soon promoted to mask-maker; then to Employment Assistant responsible for interviewing applicants for clerical and production positions. She then became supervisor of the Personnel Records Department and in 1966 was appointed industrial relations administrator. In 1969 she became personnel administrator and in 1971 employee relations manager for the Discrete Products Division.

As manager of the Job Opportunity System, Alyce will bring all of her experience with the company into use interviewing and counselling employees who have made bids for promotion. Her initial assignments in her new job will be to continue the existing program and extend JOS to include all openings for Salaried Non-exempt positions.

The program will eventually be expanded to include all job openings within the Semiconductor Components Group in Mountain View and Palo Alto. Alyce is anxious to continue the expansion program and predicts that all non-exempt jobs will be included in the System by the end of June.

"I have had an extremely fine relationship with Fairchild," she states, "and I believe the same opportunities I received are available to others who would like to move up within the company. The Job Opportunity Systems," she continued, "gives everyone the chance to bid on jobs."

To others who would like to match her record of promotion, Alyce advises, "Decide what you want, and determine the training and experience you'll need to achieve it.

"... and keep your eye on the JOS bulletin boards to take advantage of the opportunities as they arise."

## A Dream Come True



And what do you want to be when you grow up little girl? A housewife, a mother, a secretary, a dress designer, a landscape attendant? A landscape attendant?

In this day and age there is nothing unusual about that. The truth of the matter is that many women are applying for different jobs and women at Fairchild are no exception.

Carol Balegno always wanted to be a gardener but there just weren't any jobs around for women. For seven years, Carol worked at Fairchild in slicing, plating, and Hi Rel burn-in assembly. When the Job Opportunity System posted a landscape attendant's position on the bulletin boards, she decided to try her luck. After two interviews, Carol's dream came true. She became Fairchild's first female landscape attendant.

"I was totally surprised when they told me," comments Carol. "All I had to offer was previous experience with gardening while growing up in Massachusetts. My mother used to let me do all the outside chores."

Carol's chores have changed since her childhood days. Now she is responsible for weeding, planting, watering, and mowing the grass at MOD, R&D, and Mountain View. Her supervisor Joe Aboussleman shares the responsibilities with Carol. "On the first day, I followed Joe around as part of my training. He gave me helpful tips on how to cut back ivy growing around the trees. Planting flowers is one job I really dig. Flowers are like kids—you care for them, talk to them, and watch them grow."

Carol's most interesting experience happened on her first day. She was becoming familiar with her new responsibilities, when Joe asked her to drive over to another building. "That didn't seem like a difficult thing to do until I jumped in the truck and realized it was stick shift. Then it became difficult! But with a five minute lesson from Joe, I had no problem!! Carol loves her work but admits it's not all fun and games. "Mowing the lawns at all the facilities takes 2 or 3 days, and that's a job.

Carol Balegno may be the first female to move into a formerly "man's world" at Fairchild, but certainly not the last. Job Opportunity System wants to give Fairchild women a chance to expand their job careers. Thanks to this outstanding program, women can progress through the ranks to responsible jobs.

## MOVING DAY

Following the \$3.6 million sale of the Systems Technology Division plant in Sunnyvale to Hewlett Packard, two major moves have been scheduled. The Microwave & Optoelectronics Division (MOD) will shift from its current location on Deer Creek Road in Palo Alto to the R&D facility on Miranda Avenue in that city. Systems Technology will move into the former MOD building. This transfer, in addition to making fuller utilization of existing plant space, will consolidate MOD operations, since MOD wafer fabrication and R&D are currently conducted in the Miranda Avenue facility. The moves are scheduled for completion within three weeks.

## WHY? WHAT? WHEN?

I would like to know if Fairchild offers any scholarships to the children of Fairchild employees?

At present, the company does not have a scholarship program aimed specifically at children of employees. However, the entire subject of educational assistance, including scholarships for employees' children, is under intensive corporate study at this time.

If your children are not yet seniors in high school, the Fairchild educational assistance program may be of benefit to them. This program should be announced and implemented within the next year.



## **SUPERVISORY TRAINING PROGRAM Inspires, Motivates**

Recently, a group of general foremen completed the new Supervisory Training Program and made their recommendations to further strengthen the program. The Task Force incorporated the recommendations into the program after review. They now have a comprehensive training program containing valuable courses for all level supervisors. The foremen received certificates and lapel pins at their graduation ceremony from Wilf Corrigan, vice president and group general manager.

The first course was initiated Monday, May 1, for first and second shifts. There are 23 classroom meetings covering 15 topics, and a total of 17 regularly scheduled sessions. In addition to regular instruction by Jack Higbee, Wayne Carlson, and Al Watkins, guest speakers will be scheduled.



The following supervisors are the first participants in the new program: Clay Wilson, Hank Miranda, Kumar Patel, Zeno Gellatti, Tony Lentini, Duane Buell, Ron Little, Jim Robinson, Bill deCarbonel, Ken Mogodam, Pete Fletcher, John Herrera, John Tripp, George Wardwell, Lyle Allee, John Cartwright, Larry Wolfe, Mary Mudrick, Tony Besmer, Jim Hoff, Maxine Glass, Joe Steele, Al Northwood, Donna Bailey, Chuck Patterson, Anna Larsen, Dennis Leach, Joe Lopez.



## **MOS Maintenance Model New Uniforms**

Ask any MOS Line Maintenance employee what's new in his area and you'll see a proud look come across his face. The next question won't be necessary. He will immediately point to his new uniform.

Under Jim Adams, the MOS Line Maintenance group received their new brown uniforms on May 1st. They have their names, with MOS, on the front.



*Left to right: Woody Hurley, Juan Moraida, Jim Adams, Tom Wallis, Mike Baranti, Armand Velarde and Ray Oshiro.*

## **New ECL/MSI Devices**

Digital Products Division, under Tom Longo, vice president and general manager, has added four new MSI devices to its 9500 family of temperature-compensated ECL products.

Three of the new devices, the 95H00 4-bit universal shift register, the 95H55 high-speed 5-bit comparator and the 9580 triple 2-input multiplexer are the only such functions currently available in ECL logic. The other new device is the 95H28, a high-speed version of the 9528 dual-D flip-flop. Another product, the 95H90 divide by 10/11 320-MHz prescaler, previously only available in evaluation quantities, has now been phased into volume production.

The 95H00, 95H55, 9580 and 95H28 are aimed at high-speed data processing, peripheral controller and minicomputer applications, as well as the instrumentation market. The 95H28 and 95H90 are expected to find broad application in RF generating and measuring equipment, TV and FM receivers and transmitters, aircraft receivers and transmitters, as well as in counters and frequency synthesizers.

## **Doctor Dickerson Granted Fellowship**

Dr. O. Bruce Dickerson, corporate director of health and safety services, was one of 56 physicians granted Fellowship by the Industrial Medical Association on April 19th in Chicago, for outstanding achievement in industrial medicine.

The Association is an international organization of physicians who provide health care for the employees of private enterprises, government services, or other institutions. Association membership in the United States and 31 foreign countries exceeds 3,500.

## **Hi REL CONTROL LINE AWARDED CERTIFICATES**

Certificates of Achievement were awarded to the Hi Rel Control Line on April 27th for their "hard" work testing production parts for the Martin Marietta Line. After the Transistor Control Production Line assembles the transistors, they are sent directly to Larry Piper's Hi Rel Control Line.

The certificates, signed by Wilf Corrigan, vice president and group general manager of Components Group, and Sid Stark, vice president and general manager of Martin Marietta, stated that each individual met the exacting requirements and demonstrated her ability for producing high reliability components.

Congratulating each girl were Greg Reyes, Discrete Products Division general manager; Ralph Miller, manager of transistors, and Larry Piper, Hi Rel Control Line supervisor.



*Left to right: Ralph Miller, Alice Dean, Nell Scott, Theresa Vasquez, Larry Piper, Alice Ruiz, Grace Marines, Marcia Perguidi, Connie Tanaka, Greg Reyes, and Bev Delos Santos.*



# Rec Association Elects New Officers

Since the reorganization of Fairchild Semiconductor in November, 1971, the Recreation Council reconstructed their charter and by-laws to meet the standards of the new organization. The Rec Council has consolidated MOD and R&D with Mountain View under the new name Recreation Association. Representatives from these facilities make up the council. From these representatives, officers were elected.



**Ray Phillips**  
*President*

Ray is supervisor for chemical services, reclaim precious metal, D.I. water and gases, and engineering support in Plating. He has

had previous experience on the Rec Council.

His outside activities include membership on the Board of Directors of the Credit Union, and a member of safety committee. Ray joined Fairchild in June, 1965.



**Ann Dixon**  
*1st Vice President*

Ann is executive secretary to the MOD controller. In the year she has been a member of the MOD Council, Ann was responsible for the company picnic and Christmas Dance. She has been with Fairchild since October, 1970.



**Bob Pantzer**  
*Treasurer*

Bob's position is appointed by Semiconductor Components Group controller. Bob was a member of R&D's Rec Council for one year. He is product line accountant for Digital Products Division responsible for R&D account.



**Rudy Robles**  
*2nd Vice President*

Rudy is a reclaim technician in Plating. He has been a member of the Rec Council for 1½ years and employed at Fairchild for 3½ years. Rudy has organized many sports activities for the Rec Council.



**Marge Hartman**  
*Secretary*

Marge came to Fairchild in 1970 as executive secretary. She is a newcomer to the Rec Council but is highly qualified to handle the secretarial duties.



**Toni Gill**  
*Assistant Secretary*

Toni has been with Fairchild 3½ years. She became a member of the Rec Council in December, 1971. Toni is a secretary in accounting.

## '72 BASKETBALL LEAGUE



Ten Fairchild teams have been competing since March 20th at Awalt High School in Mountain View. Games are played on Monday and Wednesday evenings from 7:00 - 10:00 p.m. During the week of May 22nd, each team will vie for the top four positions which will put them in the finals on May 31st.

### LEAGUE STANDINGS

No.	Wins	Losses
1 Plating	8	0
2 Discrete Marketing	7	1
3 LIC Production	5	1
4 IMS	5	3
5 DIC Team 2	4	4
6 R&D	4	3
7 Systems Technology	3	4
8 DIC Team 1	1	8
9 Distribution	1	7
10 LIC Engineering	1	8

## Moving Up

**ANALOG PRODUCTS DIVISION**  
Helga Schonfeld/STS Instructor  
Audrey Berg/Junior Test Specialist  
Corrine Jack/Process & Device Specialist  
Margaret Bejanaro/Assembler B  
Grace Lewis/Assembler B  
Loretta Webb/R&QA Inspector B  
(Job Opportunity System)

**MOS PRODUCTS DIVISION**  
Linda Verdoorn/Programmer  
Kaye Anderson/Mask Designer A  
Terry Scott/Mask Designer A

**ADMINISTRATIVE & PLANT SERVICES**  
John Ernsberger/Director of Financial Planning

**DIGITAL PRODUCTS DIVISION**  
Valeria Pau/Assembler B  
Marlene Tripoli/Assembler B  
Sandy Black/Assembler B  
Steve Scialabba/Supervisor, Product Engineering

**DISCRETE PRODUCTS DIVISION**  
Dennis Ferraz/Engineer B  
A. Gonzales/Work Leader  
J. Bennett/Test Program Clerk

## SERVICE AWARDS

### TEN YEAR

Rosario Rodriguez  
Bonnie Pascale  
Kathryn Doss  
Betty Swiggart  
Anna Larson  
Symiye Yamauchi  
Herman Martin  
Margaret Bejarno  
John Sussenberger  
Emike Fumoto  
Becky Azevedo

### FIVE YEAR cont.

Glady's Aguilar  
Lois Logan  
Doris Houseworth  
Edward Krumwiede  
Marie Taylor  
Wilhelmina Ayson  
Neal Lambert  
Janet Ramey  
Barbara Chapman  
Sophie Keefe  
David Deardorf  
Robert King

### FIVE YEAR

Alfred James  
Marilyn Kloes  
Mary Ann Henderson  
Margaret Fouts  
Linda Blanchard  
John Flanigan  
Martin Weisberg  
Elizabeth Bernhard  
Theodore Asousa  
Nancy Bohnet  
Louise Groene  
Imelda Trevino

Ruby Dallas  
Glenn Taylor  
Florence Kulaga  
Edwin Jones  
Laura Finkelstein  
Patricia King  
Jeanne Eagle

### FIVE YEAR

Corporate  
Mary Metcalf  
Eugene Zimmerman

MICROWIRE I - May 1972

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# Microwire

Published for the Employees of Fairchild Semiconductor Components Group

## Can You Imagine



Two more Fairchild employees have put their imaginations to work and they submitted ideas to the Suggestion Program.

IMS assembler workleader **Lee Lobo** earned a \$100 value Savings Bond for her suggestion to wash in-process parts in alcohol after ceramic attach and before lead bond. All minute foreign material acquired during processing on the product will be washed away without causing product damage. These minute foreign particles can cause the downgrading of a product.

Lee's suggestion will increase our yield of high grade in-process parts.

**Terry Truesdale**, former Fairchild employee, submitted a suggestion before he left the company. This suggestion earned him a \$100 value Savings Bond award and a certificate of merit. The suggestion has been implemented in the MOS production Nitrox reactor. Terry designed a new sled for the Nitrox reactor, which consists of 10 mm, quartz rod, and framework, sufficient enough to carry the graphite susceptor. The new sled has cut heating time in half, and has given a more uniform distribution of heat over the susceptor.

When an employee submits a suggestion that is adopted and implemented, he or she is entitled to an award even though he or she has left Fairchild.

### Suggestion Tips:

1. If there is a suggestion publicized in the Microwire and you would like additional information on it, please contact the Suggestion Program Administrator on EXT. 2148.
2. Occasionally, an employee will make a verbal suggestion to his supervisor. When it is a good suggestion, the supervisor may implement it immediately. If this happens, you may submit the suggestion within 30 days on a Suggestion Program form and be eligible for an award.

## ATTENTION

Fairchild needs your help! Do you know of anyone looking for work? Personnel would like for you to spread the word outside the company that positions are available on swing and graveyard shifts. Fairchild is interested in both experienced workers and trainees in production. These openings have been posted on the Job Opportunity bulletin boards but not all were filled.

Please refer interested applicants to 465 National Avenue (Personnel building) or call 962-3201/3396.

## New Department Name Announced

**Floyd Adams**, assistant engineer, submitted the winning name in the Name Calling Contest held to develop a new moniker for Administrative & Plant Services. Central Services was the name selected by the judges who are members of the Public Relations and Employee Communications departments.

Held during the month of April, every member of the department was eligible to enter the name calling contest. The functions within Central Services are:

Business Systems ■ Bill of Material/ Requirements Planning Systems ■ Central Production Control ■ Import & Export, Logistic Programs, Packaging ■ PICs ■ Reproduction Services ■ Shipping & Receiving ■ Specification Control ■ Transportation ■ Business Planning Coordination ■ Central Equipment Engineering ■ Chemical Service & Di Water ■ Communications ■ Facilities Engineering, Machine Shop & Shop Services, Maintenance ■ Mask Making ■ Plating Shop ■ Precious Metal Reclaim ■ Purchasing, Silicon Plant ■ Mt. View Quality Assurance.



Presenting the \$50 award to winner **Floyd Adams** is his supervisor **Berl Bragg**. On hand for the presentation are, left to right: **Jim Hazle**, manager of central services; **Jack Bogan**, manager of manufacturing support operations; and **Leo Czarnecki**, manager of central engineering.



# WHY? WHAT? WHEN?

## Question

A deep concern and interest is shared by many Fairchild employees regarding the specific products we manufacture and their ultimate use. For myself, I am interested in the extent of the military products manufactured by Fairchild Semiconductor and what systems they are contracted for.

It is my feeling—and I am certain it is shared by the majority—that every employee should be informed of the products they help produce and exactly what they are to be used for. This is only fair to the employee and the only manner in which interest and some sense of satisfaction can be achieved.

I am requesting that the Microwire publish the full list of Semiconductor products we manufacture and to what systems they are to be used.

## Suggest Reply

Your request is virtually impossible to fulfill as the list of applications for Fairchild Semiconductor products, from diodes to large scale integrated circuits, could read like the yellow pages of the phone book. Semiconductor products are in use in systems from automobiles to aircraft, and there are thousands of variations of the basic products the Semiconductor Components Group manufactures.

Our prime customers are computer and peripheral equipment manufacturers and producers of consumer products. The consumer market has displayed the healthiest growth in the past year and this trend is expected to continue through 1972. Fairchild presently supplies linear and digital integrated circuits and transistors to manufacturers of products ranging from television sets to automobiles.

The aerospace/defense segment of Fairchild's markets declined in 1971 and another slight decline is expected in the present year. In the area of government application, the ultimate use of a component is not usually divulged unless the supplier has a "need to know" and there

are few instances in which Fairchild has a justifiable need to know whether the components ordered are going to be used in a computer system, an aircraft or a missile system. Two continuing applications for Fairchild Semiconductor products delivered to the government that are known are the use of radiation-hardened digital devices for the Poseidon missile guidance system and high reliability components for the Safeguard anti-ballistic missile system.

We agree totally that employees should know the application of our products where publication of that information would not jeopardize our relations with our customers. MICROWIRE will, in future issues, include stories on the ways in which some of our customers use Semiconductor Components products.

## SALESMAN OF THE MONTH MARCH · APRIL

Keith Kilerus was selected "Salesman of the Month" for March, 1972. After several months of hard work at a major account in the Chicago area, Keith was able to obtain a very large linear IC order. The amazing fact is this customer has a division which also produces semiconductors devices. Keith showed a strong desire to win and the ability to maintain confidence even under strong competition.

For April, 1972, "Salesman of the Month" was Herb Perry of the Los Angeles office. Herb was able to complete negotiations with two major accounts. He then succeeded in obtaining major order releases from each customer.

## JOS Promotes

The following employees were promoted through the Job Opportunity System in May.

- John Denman — Mechanic Specialist/  
Bipolar Memory
- Charles Hale — Landscape Attendant/  
Janitorial
- Judy Williams — Assembler B/Discrete  
Hi-Rel
- Margie Espinoza — Assembler B/Discrete  
Hi-Rel
- Mary Gene Sedillo — Assembler B/IC Hi-  
Rel Q.A.
- Helen Garcia — Assembler B/Hi Speed  
Wafer Sort
- Suzy Sandoval — Inventory Control Clerk/  
Inventory Control

## 192 YEARS WITH R&D



By Joan Borges

Dick Parker, R&D supervisor of material control, is the senior member of a very elite group at R&D. In October, Dick will celebrate his 15th anniversary with Fairchild. There are now about 65 employees in the central R&D organization and 25% of these people are in the "over the ten year" category. Erma Stites is the volunteer group historian. She recalls many things that have happened over the years. One instance stands out in her mind. It was the day ground was broken in 1961 for the Miranda Avenue building and employees had to shove cows aside so the ceremony could continue. In the old days, the Miranda Avenue facility was known as the "COUNTRY CLUB" of Fairchild. At noon the employees would get together for a picnic at Mitchell Park.

10 years	13 years
Rudy Dyck	Doris Hall
Gopala Reddi	Betty Hee
Maurits Pieteron	Gene Held
Kitty Christensen	Bert Person
11 years	Erma Stites
Lillian Peterson	Betty Van de Erve
12 years	Lloyd Walsh
Danny Gentile	
Don McCall	14 years
Bill Phy	Dick Parker

## ATTENTION SWING SHIFT

Beginning Monday, June 5th, Building 20 cafeteria will serve hot meals to swing shift employees. The cafeteria in Building 1 will continue their hot meals. Dinner will be served from 7:00 to 8:30 PM.



# Purchasing Buyers Control FSC's Shopping List

Suppose you need a typewriter and desk for your new secretary; or a new piece of equipment for manufacturing; or some piece parts to build devices to satisfy a customer order.

An employee can't just hop in his/her car and drive down to the local furniture store or thumb through a catalog to pick out just any piece of equipment or piece part. The proper method for accomplishing these types of purchases center around Fairchild's Purchasing department under Connie Pasqua, manager of materiel.

"I guess you could call us the big spenders of Fairchild," comments Connie. "Many look at our function in terms of spending money, but we view it as obtaining necessary materials and services at the lowest possible cost to Fairchild consistent with quality and delivery requirements and at the same time insuring that Fairchild gets adequate contract coverage."

Purchasing is divided into four areas—contract administration, indirect material, direct material, and inventory control.

Contract administration group is responsible for such items as leasehold improvement, capital equipment, construction, maintenance and service contracts, lease purchase and rental of office equipment, vehicles and computers. This group handles outside consultant contracts. Chemical and gas purchases are also under this group, as is precious metal reclaim which recovers a large number of dollars for Fairchild each year. Ted Leno supervises contract administration with four buyers and three clerks assisting him.

Indirect material, under the supervision of Bob Smith, includes office supplies, forms and printing, shipping containers and packaging supplies. Other commodities are outside services (for indirect production support such as mask making, X-Ray, burn-in, and testing), smocks, tweeters and safety glasses. Bob's staff consists of four buyers and five clerical girls.

The commodity list for the direct materials includes all ceramic packages, lead-frames (including TO-92 and TO-66), headers, metal cans and wires. This group is headed by C. R. Walsh with four buyers and clerical support.

Inventory Control, managed by Larry Worth, operates the stockroom on National Avenue. Stores maintains a

large amount of supplies for immediate use. They support all plant locations world-wide.

Purchasing also offers support to the community and bargains for Fairchild employees. Last year, purchasing sponsored a surplus sale for employees and their families. The sale offered various equipment and materials at a big discount. Purchasing also provides work for handicapped and disadvantaged groups on the Peninsula. Reclaimable transistors were sent to the Hope For Retarded Children and Adults where handicapped adult workers removed transistors from their carriers.

During the past year and a half, purchasing buyers have attended training sessions on a monthly basis. The buyers review case studies and films of various purchasing problems. One session was held with sales personnel from our Los Altos sales office. The buyers and salesmen discussed their problems. As expected, each viewed the problems differently. It was beneficial to each group because of the difference in views.

The meetings cover cost analysis, legal contracts, and customer traffic. Members of purchasing tour manufacturing areas which helps them become familiar with equipment and materials purchased. The three purchasing managers feel the training exposure has increased the buyer's efficiency and has kept them on top of their responsibilities.

"In our business the primary concern must be cost reduction," says Pasqua, "but it cannot be accomplished without regard to receiving good solid workable equipment and materials for the company. It's essential that employees take advantage of our services by using what's available to them and let us handle the money and contract definition end of it."



Marchel Jones, electronics senior buyer, reviews a purchasing requirement with Bob Smith, manager of indirect material.



A team effort was involved with purchasing, silicon material engineering, and a manufacturer representative to improve manufacturing processes. Left to right: Sid Mitwall, Electronic Semiconductor; Phil Barca, silicon material; Bill French, purchasing; Cliff Roe and Don Brettner, silicon material.



Teri Mead, fleet administration, assists the fleet administrator by assuring that our salesmen are adequately equipped with the proper vehicles for travel in their day to day sales activities.



Sylvia Whited, intermediate clerk, inspects records, maintains the purchasing file room, handles statistical records, reviews requisitions for proper signature levels of approval, and distributes requisitions to buyers.



Adrienne Hernandez, buyer for indirect materials, is the only female buyer in purchasing. She has been involved with purchasing functions for fifteen years. Her primary job is to support the requirements of the indirect materials storeroom.



## SECURITY OFFICER OF THE QUARTER



Henry A. Bizzozero (center) accepts an award for his performance during the period January through March, 1972, from Norn Zalfa, Security Supervisor (right), and Captain Jim Martin of the Security Department. This is the first award to be made in a continuing program of recognition of outstanding performance by members of the security force. Henry is one of 27 security officers who serve the Fairchild facilities in Mountain View. Every three months, the four lieutenants in the Security Department review the performance of each of the security officers to determine one who demonstrated superior performance in his job. At the end of each year, one of the officers will be named Security Officer of the Year. The selection of the awardees is based on performance of their duties in insuring the security of Fairchild facilities and employees, their attitude and cooperation. Henry is on the swing shift at the 24-hour guard post which serves buildings 1, 2, 3 and 4.

## Generosity Overwhelms

Several weeks ago, Shelby Martensen, Fab 4 R<sup>2</sup>IC, had a traumatic experience during her lunch break. After cashing her paycheck, she left her bank and was confronted by a young man who demanded her money. He held something in his pocket that resembled a gun, and Shelby wasn't going to argue with his request. She reluctantly gave him the cash which represented everything she had earned that week.

Shelby's story spread wide and fast. By early the following week, fellow employees had donated enough to the Shelby fund to replace three-fourths of the money she lost in the hold-up. According to one source, Shelby was totally overwhelmed by the generosity of her co-workers and friends. She had never met some of the people who contributed to her fund.

## Simplified Process

By Lucky Zimmershead  
Corporate Benefits

New medical/dental forms available at your group insurance office make claim processing much easier. They are the result of many hours of intensive review by Fairchild Group Insurance Offices and the Travelers claim office.

Just think . . . you do not have to submit an Attending Physician's Statement if the medical bills being submitted clearly indicate:

- the diagnosis
- dates of service
- patient's name, and
- the bill is signed and dated by the employee.

The elimination of mandatory Attending Physician's Statements will make it much easier to file your medical claims.

### Better Ideas . . .

A statement of claim (the form the employee uses to tell the insurance company what family members are covered) now only has to be completed *once* each calendar year at the time you submit the first medical or dental claim.

### We Try Harder . . .

Are you tired of drawing in lines and dividing up the family's prescriptions on one form? We are, too! To simplify claim processing, we'd like to request that you use a separate form to list each member's prescription costs.

### Try It, You'll Like It!

A new dental form! Both you and your dentist will appreciate this form. If you choose to, you and your dentist can use this claim form to find out exactly what benefits will be paid *before* your work is done! Painless! (ouch)

## holiday calendar

Monday, May 29th — Memorial Day  
 Monday, July 3rd — in exchange for Saturday, July 8th, workday  
 Tuesday — July 4th — Independence Day — regular paid holiday  
 Monday, September 4th — Labor Day  
 Thursday, November 23rd — Thanksgiving Day  
 Friday, November 24th — Floating Holiday  
 Monday, December 25th — Christmas  
 Tuesday, December 26th — Day After Christmas

## MOVING UP

### DIGITAL PRODUCTS DIVISION

Emaline Swanson — Assembler A  
 Lorraine Little — Assembler B  
 Colet LeValley — Assembler A  
 Debora Ewing — Assembler B  
 Dorothy Bottley — Assembler B  
 Violeta Callejo — Assembler B  
 Leona Phillips — Assembler B

### DISCRETE PRODUCTS DIVISION

Margie Espinoza — Assembler B  
 B. Littlejohn — Assembler B  
 L. Tennant — Expediter  
 R. Sablan — Assembler B  
 S. Owens — Process & Device Specialist  
 P. Horrisberger — Intermediate Clerk  
 Barbara Chambers — Assembler A  
 Shirley Coad — Assembler A  
 Janette Lamb — Assembler A

### CENTRAL SERVICES

Betty Brooks — R&QA Supervisor A  
 Roger Arnold — Manager of Process & Device  
 Victor Mitrising — Manager of Mask Making  
 John Leith — R&QA General Supervisor  
 Christa Tomasevich — Lab Technician  
 James Fitzjearl — Senior Electronic Technician

Carol Stine — Technical Typist  
 Michael Custer — Electro-Plater A  
 Doug Neuman — Electro-Plater A  
 Daniel Pacheco — Electro-Plater A  
 Joe Flores — Electro-Plater A  
 Mercedes Celi — Electro-Plater A  
 I. Pittaluga — Process & Device Specialist

### CORPORATE

Eugene Young — Systems Analyst

### ANALOG PRODUCTS DIVISION

J. Shelton — R&QA Inspector Specialist  
 E. Montes — R&QA Inspector Specialist  
 M. Valdez — Expediter  
 A. Amaro — R&QA Inspector Specialist  
 M. Sedillo — Assembler B  
 Barbara Hook — Assistant Accountant

## R&D Service Awards

TEN YEARS	FIVE YEARS
Rudy Dyck — May	Frank Grasso — April
	Albert Yu — May
	Ed Pool — May

MICROWIRE II — May 1972

EDITOR: Vicki Heinsheimer  
 REPORTERS: Geri Hadley, Marge Killian, Millie Dawson, Clint Haines, Margaret Elliott, Pat Alfred, Lorette Hayes, Bev Delos Santos, Judy Curiel, Marlene Souza and Edie Beem

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# Microwire

## A Family Affair

Fairchild is a family affair for *Paula* and *Jacques Nyburg*. The couple will celebrate their tenth anniversaries with Fairchild this summer. This is the first husband and wife team to share ten years of service with the company.

Paula was the first to join Fairchild. She was hired as an assembler in incoming inspection in June, 1962. Three months later, Jacques joined the company as a line mechanic in Line Maintenance. Today, Paula is an incoming inspector B and Jacques heads a manufacturing section.

Within seven months after he was hired, Jacques was promoted to leadman in equipment service for wafer fab. Though he enjoyed working with machine parts, he saw that increased attention was required in the service and maintenance of microscopes and optical instruments used in production.

He made a proposal for a new section and December, 1964, Jacques became the first supervisor of microscope and optical instrument services.

Before coming to Fairchild, Jacques was employed as a research engineer for Geological Survey in the Belgian Congo. He served ten years in one of the world's richest diamond mines. Jacques, Paula and their daughter lived in a small village thirty miles from civilization where they communicated in the native language "Tshiluba" and French.

Before beginning their joint Fairchild careers, Paula and Jacques agreed that they would keep their business and personal lives separate. In ten years of working in the same building they have never had lunch together and rarely see one another during the day.



## Salesman of the Month

After many months of effort, *Dave La Rock* of the Minneapolis office was successful in obtaining a major order for bi-polar memories. Dave was selected "Salesman of the Month" for May by Mountain View's field sales managers.

## Two or More Employers During 1971?

If so, you probably have a refund due on State Disability Insurance Deductions. The law requires *each* employer to withhold 1% of your first \$7400 earnings or \$74 while employed. You must *apply* for refund before June 30, 1972. Forms are available in the Payroll office in Building 4, or call EXT. 3629.

## First Non-Exempt Promotion Made Through JOS

In less than 24 hours after the non-exempt positions were posted, *Don Gee* applied for a senior mechanic technician in IMS, Analog Division. After two interviews, he became the first non-exempt promoted through JOS program.

Don has been with Fairchild 3½ years. He started in Materials as a lab technician and then transferred into EPI and Slicing.

Don will be working on a new product line in Consumer IMS under *Dick Wood*. It will involve new processing and assembly processing techniques and increase production rates. Don will report to his new job on June 26th.

### Making it happen . . .

"Making the Job Opportunity System work, takes more than applicants and applications, *Alyce Washburn*, JOS System Manager, reveals.

"It takes the cooperation of supervisors and managers." And it is for this reason, that Alyce is extending a formal "Thank you" to all Fairchild supervisors who have cooperated so willingly in making the Job Opportunity System truly effective. They're making JOS happen through their eager cooperation."



*Don Gee* (left) checks the equipment he will be using with new supervisor *Dick Wood*.





## Shiprock Appoints Health Counselor

In the past, Shiprock employees have visited the Public Health Hospital, five minutes away from the plant, for minor medical problems. But times have changed. In April, *Sherry Shatz*, R.N., became the first health care counselor at Fairchild's Shiprock facility.

Sherry will serve the 650 Shiprock employees and coordinate employees health needs with the community public health services and a relatively large day care center. "My job is a totally new and challenging assignment for me," comments Sherry. "I have always worked in large hospitals and industrial nursing is quite different." Sherry's new challenge not only involves the learning about Fairchild but becoming acquainted with Shiprock employees. "I'm not just their plant nurse but also offer health counseling to the employees and their families."

To perform her job, Sherry works with the local day care center and public health hospital. "If an employee's child becomes ill at the day care center, the center's nurse will call me and I will contact the mother to explain the illness and assist in securing the proper care for the child."

In the two months Sherry has been with Shiprock, a new in-plant dispensary has taken shape. New equipment and supplies including an examining table have been purchased to equip the dispensary. This is just the beginning of Shiprock's medical department. Sherry has many projects she would like to implement at Fairchild and it's Shiprock community in the

(Photo, top left) *Bonnie Page*, R.N., visited Shiprock from Corporate headquarters to introduce Sherry into the world of Shiprock and occupational health.

(Photo, top right) While visiting Mtn. View in June, Sherry was shown around the various dispensaries and examined the medical equipment available to Fairchild employees. *Helen Hutson*, R.N., and *Dana Goodrich*, R.N., showed Sherry the new eye machine Fairchild acquired recently.

future.

Sherry came to Fairchild with a wealth of experience. She graduated from Temple University in Philadelphia and received degrees in nursing and education. She worked at Wills Eye Hospital in Philadelphia and the United States Public Health Hospital in Arizona.

Now, Fairchild employees at Shiprock won't have to make that five minute drive to the Public Health Hospital for minor injuries. They just have a one minute walk to their new and modern dispensary.

## WHY?

## WHAT?

## WHEN?

Everything you've ever wanted to know about Fairchild, but were hesitant to ask . . . can be answered in the What, Why and When column. Send your questions to the Employee Communications Office, mail stop 20-2284, Mountain View.

## Employee Wins Name Product Contest

*Robert Waits*, senior engineer in R<sup>2</sup>IC, Digital Products Division, attended the Semicon Electronics Show on Friday, May 27th, at the San Mateo Fairgrounds. Like so many other visitors to the show, he entered the Bell & Howell Electronics Materials Division name-the-product contest.

The product was a Bell & Howell chrome mask blank. Robert submitted the name "Duochrome" to describe the two mask chromium film on a glass photographic plate.

On May 31, Robert received a telephone call from Bell & Howell representative *Bill Kiba* announcing that he had won the contest. Within an hour, Robert received a beautiful Bell & Howell stereo outfit. According to Robert, "it was the first contest I have won since kindergarden."



## Vacation Time Cards

Summer means vacation for most employees.

Summer also means increased pressure on the payroll section.

Supervisors are reminded that time cards for vacation periods must be submitted to the Payroll office, mail stop 4-224, two weeks before the employee leaves for vacation to assure that the appropriate checks will be prepared in time.



# Front Line of Customer Relations

There's perpetual motion in every Fairchild field sales office during every work day. The motion is supplied by the force of field office secretaries, file clerks, telephone operators and the versatile "girl Fridays" who staff these all-important sales organizations.

Juggling the multiple duties of a field office secretary takes a healthy helping of patience, a good dose of poise, top notch clerical skills, and unflagging energy. Because, to the customers, these girls are Fairchild when the salesmen are out on the road. And Fairchild salesmen, in the unrelenting pursuit of new business, are out on the road most of the time. It is the girls in the field offices, then, who man the telephones logging orders for products, expediting orders already in process, getting product information from Mountain View and smoothing an upset customer who has not received a shipment on time, and still have the stamina to offer a smile and sympathy when her boss returns from a particularly difficult day in the field.

"I have been with the Fort Washington sales office for ten years and believe I've seen every type of frustration and satisfaction that is available to a field sales secretary," comments Florence Smith. "I am extremely proud

to be the field secretary with the longest service with Fairchild. Matter of fact, the five girls in our office have a total of twenty-four years with the company."

Field office secretaries may be the voice with the smile to the customer, but it is not always so when they place the phone receiver in its cradle. "Some days I just want to scream and pull my hair," says Bev Freitas of the Los Angeles office. "We face many problems during an eight-hour day that can tax your disposition. I guess the greatest problem is contacting the factory to obtain product information. Sometimes, we have a customer holding on the other line while we're tracking down a product marketing engineer in Mountain View. Our salesmen have been very good about keeping us informed on new product information. We have training sessions every other Tuesday for all field sales secretaries. It's very satisfying for each one of us because we are constantly up against new happenings at the factory." The field sales secretaries are continuously on the move keeping pace with the demands of customers, salesmen, distributors, and the "factory." But, a day in the life of a sales secretary can best be described by the girls themselves.



Fort Washington office left to right: Florence Smith, Elsie Hoff Sue Prickett, Mary Heist and Joan Keebler.



Los Angeles office left to right (sitting): Linda Ellsworth and Maureen Kinsella; (standing) Debbie Marcione, Bev Freitas, Jill Portugal, and Regina Ford.



Wellesley Sales left to right: Lynn Mac Kenzie, Mary Lou Seaver, Nancy Callahan, and Barbara Vegh.



Schiller Park left to right (sitting): Barb Bowser, Ann Marie Zasisbida, Chris Blackburn and Peggy Craig. Standing are Joyce Le Starge and Pat Kinzey. Sandy Powell Sharon Haines

## A Day With Field Sales Secretary

By Katie Guida, Los Altos Sales Office

*What's it like to be a field sales secretary? I'd like to tell you a little about what is expected of us and share some of the experiences of a typical day.*

*When a sales girl arrives in the morning, she consumes a good strong cup of coffee. She then checks the TWX to see what devices were shipped the day before. She knows that during the course of the day customers will be calling for this information and it's better to have it handy. The sales secretary jumps for joy and silently thanks all those wonderful people at the 'factory' when she sees a shipment that is on time, and cringes a little when she doesn't see a shipment that a customer has been expediting for several days.*

*Our duties are: keeping customers happy, being a sounding board for the salesmen, getting out reports on time, maintaining competitive/product liter-*

*ature/customer and sales order files, keeping up on the latest product information, coordinating appointments, greeting various customers who visit the office, and maintaining a friendly liaison between the customers, the salesmen, and the 'factory'. Keeping track of bookings and billings, entering sales orders is probably top priority on the list.*

(continued page 4)

LOS ALTOS:  
Katie Guida

Judy Post





## JOS Promotes

PAULINE BARLOW — R & QA  
Inspector Specialist/Receiving  
Quality Control

MARGARET HARMESON — Inventory  
Control Clerk/Production Control  
Specialist/New Process

JOSEPHINE GONZALES — Assembler  
B/Production - Wafer Sort

IRENE LEAL — Assembler B/MOS  
Wafer Fab

HELEN SILVA — Assembler B/  
MOS Test

MARY MARTINEZ — Process & Device  
Specialist/MOS Wafer Fab

VADA RIAL — Assembler B/LIC  
Assembly

JOYCE VERGA — R & QA Inspector  
Specialist/Small Signal Transistor  
Power Assembly

(DONALD GEE 6/26) — Senior  
Laboratory Technician/  
Consumer - IMS

KATHY MC CARTY — Assembly Work  
Leader/Memory Wafer Fab

ALICE AMARO — R & QA Inspector  
Specialist/LIC Quality Assurance

JEROME ZAWISTOWSKI — Mechanic  
C/Mark and Pack

SEVERINA CELESTE — Assembler B/  
Wafer Sort

AVELINA SALVADOR — Assembly  
Work Leader/Small Signal -  
Wafer Fab

ANN MATTOS — R & QA Inspector  
Specialist/Epitaxial Growth

PAT O'BRIEN — Shipping & Receiving  
Clerk/Purchasing

LEE MAULE — Shipping & Receiving  
Clerk/Shipping & Receiving

AMELIA ANCHETA — Assembler B/  
MOS Wafer Fab

TERRY MAC KINNON — Mechanic  
Specialist/Small Signal  
Wafer Fab

SUSANNE KINNEY — Assembler B/  
Memory Assembly

MARGARET GUZMAN — Training  
Technician/Memory Wafer Fab

DORIS GENETTE — Training  
Technician/Memory Wafer Fab

DELLA RODRIGUEZ — Assembly Work  
Leader/Memory Wafer Fab

DEE MC GOWAN — R & QA Inspector  
Specialist/Receiving Reliability &  
Quality Control

## Front Line

(continued from page 3)

After talking to "factory personnel, salesmen and customers all day, a secretary usually has inhaled about 18 cups of coffee. By this time, a field sales secretary has covered such subjects as:

—information and data sheets on FSC products

—expediting and coordination of FSC shipments to customers (on time or otherwise)

—the fact that factory personnel are so hard to reach

—the cup of coffee you just spilled all over the desk in a fit of frustration

—and then you think how great it is to work in this office because you're right in the middle of all the activity.

Then it happens again—price and delivery of FSC devices for quotes and bids, referrals to distributors—but what a marvelous job the salesmen did this week in bookings (not minding all the hours it took to TWX them in). Here we go again—the pending visit from a prime customer—the fact is we appreciate all the cooperation from marketing and production personnel because being on the firing line can sometimes produce ulcers and loss of hair. And you remember the break you forgot to take several hours ago!

You will sit back at the end of the day and count the emotions you've felt—elation, frustration, joy, anger and satisfaction—and feel in your heart that you've been successful and rewarded in just being able to "keep everything together" (yourself included).

If you are ever in the area of Los Altos sales office, feel free to come in for a personalized visit. We'd love to see you!

### Mini-Bikes Must Be Registered

Effective July 1st, most trail bikes, dune buggies, and mini-bikes used exclusively off-the-highway for recreation on public land in California must be registered.

A major portion of the revenue from registration fees will provide special off-highway vehicle recreation areas. The \$15 registration fee is for a two-year period ending June 30th in even-numbered years.

For further details, please contact your local Department of Motor Vehicles office.

## MOVING UP

### DIGITAL PRODUCTS DIVISION

JOSIE ORTIZ — Assistant Lab Tech/  
Bi-polar Memories

MICHAEL DE LA ROSA — Engineer B

ZENO GELATTI — Production  
Supervisor B

LARRY DRAKE — Senior Design  
Engineer

MARIA URIBE — Assembler B

EVELYN DIXON — Assembler B

### MOS PRODUCTS DIVISION

BILL BINGHAM — Production  
Supervisor A

### CENTRAL SERVICES

GLORIA STEVENS — Assembler B

SHIRLEY SEARCY — Assembler B

ROSEMARY CHAVEZ — Electro-  
Plater A

NELLIE MARTINEZ — Electro-Plater A

MARGE LLAMAS — Lab Tech

TRACEY HARMON — Assembler A

RICHARD DOWD — Manager of  
Business Performance Evaluation

LAURIE LE BON — Assembler A

GORDON DUFF — DI Plant & Service  
Operator

### INDUSTRIAL RELATIONS

ROGER BARNEY — Manager of  
Personnel Administration

### DISCRETE PRODUCTS DIVISION

TOM SIBBALD — Senior Electronic  
Technician

DIXIE CAITO — Assembler  
Work Leader

T. DUNN — Assembler A

V. PARISI — Assembler B

J. HIGGINS — Mechanic Specialist

D. JOHNSTON — Production Assistant

MICROWIRE I — June 1972

EDITOR: Vicki Heinsheimer

REPORTERS: Geri Hadley, Marge Killian, Millie Dawson, Clint Haines, Margaret Elliott, Pat Alfred, Lorette Hayes, Bev Delos Santos, Judy Curiel, Marlene Souza and Edie Beem

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# Microwire

## 1,024-Bit Isoplanar TTL Memory Bows

The biggest, fanciest and most complicated bipolar integrated circuit was announced on Monday, June 5.

The industry's first 1,024-bit TTL (Transistor/Transistor logic) random access fully decoded memory is high speed—60 billionths of a second access time. When used in a computer, it serves as a "scratch pad" for fast access memory. This incredible memory is fabricated with Fairchild's Iso-planar process, which was first announced as a laboratory technology in March, 1971.

"The 93415, organized 1,024 words x 1 bit, is the most complex bipolar semiconductor memory produced to date," reveals Tom Longo, vice president and general manager of Digital Products Division. "Its complexity allows the 93415 to be used to construct large memories which operate at the same speed as their associated logic circuit."

The 93415 memory is designed for use in high-speed buffer, controller and main storage elements or in add-on memory units in digital systems.

## Dartmouth Builds Fairchild Center

Dartmouth College, located in Hanover, New Hampshire, broke ground the end of May for a new physical science center. The center will be named in memory of the late *Sherman Mills Fairchild*, chairman and founder of the board at Fairchild Camera & Instrument Corporation. Mr. Fairchild died March 28th, 1971.

The new \$5.3 million center will have classrooms and laboratory buildings surrounding a core tower and library.

The Fairchild Foundation, one of two foundations established by Mr. Fairchild during his lifetime to underwrite enterprises in which he was interested, donated \$3 million to Dartmouth.

## What Is F.E.A.A.???

F.E.A.A. stands for Fairchild Employees Activities Association (formerly the Recreation Council). The newly organized Association will plan and sponsor sporting events, Christmas parties, picnics, and special discounts with travel clubs, appliance stores, Disneyland tickets, etc.

Under the revised by-laws, Fairchild Employees Activities Association requests that all sports activities and clubs seeking financial support from the Association follow these procedures:

1. Requests must be made prior to the start of the activity. Forms will be available in reading racks outside cafeterias.
2. Requests should be addressed to the Employees Activities Association in writing. They must contain a breakdown of expected expenditures, employee contribution to expenditures and amount requested. Please include number of employees who will participate, and length of time involved.
3. Requests should be submitted to Marge Hartman at R&D, M/S 30-976 or Toni Gill at Mt. View, M/S 4-153.
4. If the request is approved, the requestor must submit a copy of the group's by-laws and a list of all employees participating in the proposed activity.
5. No advanced checks will be issued. Groups must submit bills for payment to Treasurer Bob Maydeck at the Mt. View Credit Union.

The Association will be offering new and unique activities and events for 1972-73. Topping the list is the Fairchild Annual Company Picnic (see insert). Mollie Shears, newly elected first Vice President, will coordinate the picnic.

## Education With A Twist

Interested in learning about the basis of our business? The Vocational Division of Adult Education is offering a six-week course in Semiconductor Fabricating Techniques. The course starts Wednesday, July 5, 7-10 p.m., with three sessions per week (Monday, Wednesday, Thursday).

Instructing the course is Fairchild training specialist Georgia Washington. She will cover such topics as: general wafer fab techniques, steps in masking, vocabulary lessons on MOS and integrated circuits. You will learn to use a microscope, handle a wafer using tweezers, and discuss safety procedures.

If you are interested or have friends or relatives who would like an introduction to semiconductor fabricators, please call 266-9282 or San Jose Regional Vocational Center.



## More Financial Strength

Within hours after 500,000 new shares of Fairchild Camera common stock were offered on June 13, the nationwide investment banking group managed by Lehman Brothers, Inc. of New York announced that all available shares had been sold.

Net proceeds from the offering, which was priced at \$34 per share, will increase Fairchild's equity base and initially constitute working capital for the corporation as well as being available for general corporate purposes.

There are now approximately 4,890,620 shares of Fairchild common stock outstanding.





Taking a short break from their duties is the Shipping and Receiving group.

## Shipping and Receiving: Fairchild's Post Office

Packing and shipping over 95,000 pounds of products and materials is an average month's work for one man in Shipping and Receiving. Virtually every item shipped from Fairchild—whether it's a handful of transistors or a large crate of electronic equipment—must have styrofoam "flowing packs" packed around the product. This secures and protects it while traveling.

Under the management of Howard Hickock, Shipping and Receiving is divided into six groups: physical distribution, direct and indirect receiving, central shipping, international shipping, product shipping, and Fairchild's mailroom.

Known as the "traveling squad," physical distribution makes two daily trips to San Rafael, MOD/R&D, Systems Technology, and the Los Altos Sales Office to distribute incoming packages, sales literature, small equipment and raw materials. Heading up this group is Joe Escalante.

Direct and indirect receiving, under Nico Kaldis, checks and verifies each item that appears on Fairchild's loading dock. This means endless lists of shipping numbers and p.o. numbers for Mt. View, MOD and R&D.

Central shipping sends all direct and indirect materials to satellite plants and domestic sales offices. It is their responsibility to check and weigh materials for the correct quantity. Alberta Seeley prepares all paperwork for outgoing materials.

Product shipping, supervised by Bill Hamrol, has five employees who divide their time and energy between checking and securing materials to be

packed and developing route procedures by truck or plane per the customer's request.

Unlike product and central, International shipping deals solely with customers and Fairchild plants outside of the United States. Each country has its own custom regulations which means that personnel in this group must prepare special forms and documents for every item leaving the U.S. Pat Ahumada underwrites the documents for shipping.

Scotty Hamilton, long-time employee, manages the mailroom for the Mt. View complex. Scotty and his two assistants receive and deliver all incoming and outgoing mail. In order to serve the complex effectively, they make two mail runs a day—even in rain, sleet, and high winds.

Six months ago, Shipping and Receiving management developed and implemented a cross-training system for their employees. "We want each employee to become familiar with their neighbor's responsibilities and problems," reports supervisor Roger Royster. "Eventually, these people will become eligible for promotion. It's really working out well for us because now we're a team, not a combination of separate groups." The success of this program was realized when Frank Varano was recently promoted from clerk to supervisor.

This is just the beginning for Fairchild employees who handle everything "with care." With the upswing in the economy and Fairchild business, there should be plenty of opportunity for this hard-working crew to better themselves and Fairchild.



Roger Royster supervises the Shipping and Receiving/Mailroom operation.



Bruce Simpkins weighs a boxed product being shipped to Wiesbaden, Germany.



Receiving all international shipments is Genny Ramano.



Warren Edwards prepares a bill for outgoing shipment.



## Funny You Should Ask

# "What do you think of the Women's Liberation Movement"



**Margaret Ochoa**  
Executive Secretary  
Mt. View  
"I think it's great for some women, especially those who feel strongly about equality (such as opening doors for men, taking out garbage, changing tires, etc.). Personally, I enjoy being female and have no need to be masculine in any way (*equal that is!*)"



**Richard Nathan**  
DIC Engineer  
Mt. View  
"It is analogous to forming a community of Lions and Sheep; and then enacting a law to prevent the sheep from killing and eating the Lions. It reads like a script from the theatre of the absurd. Actually, I'll probably become a Women's Lib supporter when I believe that Raquel Welch belongs in a coal mine, swinging a pick axe, while trying to wipe the perspiration off her face with the grimey sleeve of her dirt covered denim overalls."



**Diane Maue**  
Switchboard Operator  
"Phooey! Show me a woman that says she does not like her car door opened or her chair pulled back and I'll show you a fibber. Myself, I like it."



**Bonnie Salgado**  
Lab Technician, R&D  
"Unfortunately, some activists are as sexually insecure as the men who ridicule and resist the liberation of 'their women'."



**Bill Ply**  
Research Staff, R&D  
"I think they are being idiotic. They have it made now."

## Shipping (continued)



**Bill Hamroll, leadman, handles a distributor shipment.**



**Dick Francis packs a shipment marked United Parcel per customer's request.**



**Oliver Connelly (left) and Frank Varano inspect government bags for return to vendor by pulling them over their heads to check for holes. They are considered "rejects" if a hole is found.**



**Rodney Montre (left) and Scotty Hamilton prepare the mail cart for morning deliveries.**



**Robert Tobin places all field sales, domestic and foreign Fairchild outgoing mail into individual boxes.**



# JOS Promotes

BETTY COMBS—R & QA Inspector  
Specialist/Transistor-Quality Assurance

MARIE JUSSEN—Assembler B/Bi-Me-sar Wafer Feb

SALLY RODRIGUEZ—Assembly Work Leader/Wafer Sort

IRMA STEENS—Intermediate Clerk/Customer Administration

SUSAN M. SCOTT—Intermediate Clerk/Customer Administration

PENNY MOODY—Assembler B/Design Support

LYDIA OCHOA—Assembler B/Mark and Pack

JEAN MacDONALD—Laboratory Technician/Mask Making

JACK LOFTIN—Senior Electronic Technician/DME—Non Sat. Design

HILDEGARD VAN KOL—Laboratory Technician/Mask Making

DARLENE EDWARDS—Intermediate Clerk/Production & Inventory Control Stores

MELBA CHADWICK—Assembler B/Mark and Pack

LISA SOLTYS—Assembler B/Classification

CORAL PEREZ—Assembler B/Discretes—Class

HENRIETTA La VELLA—Senior Clerk/Discrete Marketing

RENEE GRENIER—Assembly Work Leader/Planar Wafer Fab

YOLANDA WEEMS—Assembler B/Discrete Products

MARIE LUSK—Assembler B/Digital Products

## R&D Service Awards

### MAY

#### 10-YEAR AWARDS

Rudy Dyke

#### 5-YEAR AWARDS

Ed Pool

Albert Yu

### JUNE

#### 10-YEAR AWARDS

Kitty Christensen

MICROWIRE II — June 1972

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REPORTERS: Geri Hadley, Marge Killian, Millie Dawson, Clint Haines, Margaret Elliott, Pat Alfred, Lorette Hayes, Bev Delos Santos, Judy Curiel, Marlene Souza and Edie Beem

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## Winter Bowling League Results

The final Bowling League game was played on Monday, May 15. The following teams placed in the top three positions.

### TEAM STANDINGS

Number 1 TAD'S ARCO

Team Captain - **Rich Rowell**

**Jerry Prichard, Tammie Prichard**

**Ed Hollister, Margaret Hollister**

Number 2 PIN POPPERS

Team Captain - **Frank Becerra**

**Ann Lima, Jude McGlashan, Bill Newton**

**John Phillips, Barbara Marshall**

Number 3 RAINY DAYS & MONDAYS

Team Captain - **Brent Knudson**

**Wilma Knudson, Elena Legarburo**

**Iz MacKay, Bob Anderson**

### INDIVIDUAL STANDINGS

#### MEN

Hi Scratch Series - **Don Ochse** (655)

Hi Scratch Game - **Guy Kennedy** (258)

Hi Handicap Series - **Jess Reeves** (713)

Hi Handicap Game - **Tom Bispo** (290)

Most Improved Bowler - **Bob Anderson**  
(13 pins)

#### WOMEN

Hi Scratch Series - **Ann Lima** (577)

Hi Scratch Game - **Iz MacKay** (237)

Hi Handicap Series - **Margaret Hollister**  
(674)

Hi Handicap Game - **Elena Legarburo** (269)

Most Improved Bowler - **Pat Johnson**  
(15 pins)

## For Sale

1970 Honda, 350 SL, 2800 miles, electric starter, \$475/best offer. Call 969-2377 after 5 p.m. or Ext. 351.

1964 Falcon, 50,000 miles, runs very well, needs paint. Asking \$175.00. Ext. 4445.

Truck & Trailer, \$1,800 as a complete unit.

1964 Dodge Truck, insulated camper shell with inside and outside lights, 3 cabinets and a crawl through window with new tires. Asking \$1,000.

1966 Trailer, Aristocrat Mainliner, 16 ft. long, -Z lift trailer hitch with new tires. Asking \$950. Len Cramer, Ext. 5122 or Bev Cramer, Ext. 2271. Evenings 356-3480.

1965 Ford Country Sedan with PS/PB, auto. trans, factory air, AM/FM radio, good tires, runs well, needs paint job. Asking \$550. Days, Ext. 2521 or evenings, 321-6852.

1967 Pontiac Catalina, very good condition, PS/PB, good tires. Asking \$800. Frankie Killeen, 656-8896.

Magnavox Stereo, 6 ft. with AM/FM radio, excellent tone quality, cabinet is beautiful black oriental design. Asking \$250. 656-8896.

1971 Capri, 2,000 miles, auto. trans., deluxe interior, AM/FM stereo radio, sunroof, excellent condition. Asking \$2,000. Adele Razellard, 657-5566.

## MOVING UP

### DISCRETE PRODUCTS DIVISION

Cecelia Perry—Expeditor

Sandra Davis—Assembler B

### MARKETING

Cheryl Parsons—Senior Clerk

Karen Garcia—Customer Satisfaction

Coordinator

Cynthia Shaffer—Intermediate Clerk

### CENTRAL SERVICES

Clinton Hobbs—Inventory Control Clerk

A

John O'Neill—Chemical Mixer

### DIGITAL PRODUCTS DIVISION

Grace Cole—Executive Secretary

## Service Awards

### TEN YEAR AWARDS

Elvira Montes	Floy Hummel
Robert Seeds -	Alan Ankerbrand -
Jesusa Madarang	Ruby Scott
Rosaline Christiansen	Ardith Webber
James Boyd	Louise Arias
Consuelo Vasquez	Osamu Uyeda -
Viola Trujillo -	Jack Jones
Cleva Goodman	James Mays -
Hermodea Huerta	James Marley -
Antoinette Warden	John Winding
Nellie Hodge	Lois Cross

### FIVE YEAR AWARDS

Robert Hogan	Virginia Hughes
Cora Ermoian	Margaret Reyes
Cathy Leach	Julia Parda
Retha Falconi	Patricia Devera
Beverly Thune	Donna Cooper
Jose Tuscano	Gloria Guzman
Inez King	James Bacon
Oleta Willhite	Barbara Capone -
Robert Fox -	Meysan Baghrmian -
Delores Wolterbeek	Virginia Glagola -
Fe Devera	Alan Portnoy -
Jack Kinnebrew	Douglas Usher -
Mary Valdez	Forrest Carroll
Dimokratia Patterakis	Karen Kanemoto



Maverick Mini-Bike, excellent condition, 4-speed, custom paint, expansion chamber. Asking \$150. 657-5566.

### WANTED —

Ride to and from work or even one way. Work swing shift for Lee Allee. Ride would be from 1947 Woodside Rd. in Redwood City to Mt. View. Contact Joan Jodocy. 368-7262.



# Microwire

Published For the Employees of the Semiconductor Components Group—Mountain View/Palo Alto

## MOS Announces First-In First-Out Memory

The industry's first available asynchronous first-in first-out (FIFO) memory was announced on June 27 by MOS Products Division.

According to Roy Pollock, vice president and general manager of MOS Products Division, "This versatile memory device, designated as the 3341, offers users a low-cost solution to many problems associated with interfacing digital systems that have different data rates."

FIFO should be used by anyone handling digital data. For example: A person can operate a keyboard at the rate of approximately 120 words per minute. If that keyboard is on a time-shared computer terminal and had no buffer storage, the result would be an inefficient use of computer time. If, however, a FIFO were used as a buffer memory, it could be loaded at keyboard speed and unloaded into the Central Processing Unit at computer speed thus efficiently utilizing the speed capabilities of both systems.

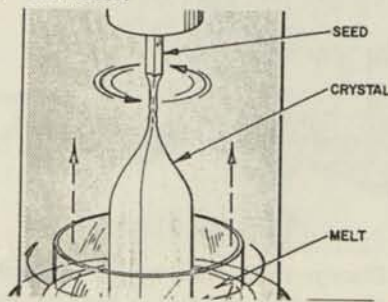


Elsie Hoff, Ft. Washington field sales secretary, just celebrated five years with Fairchild on July 17. Matter of fact, the five secretaries in the office have a total of 24 years with the company.

## Silicon Materials: Where It All Begins

Some 20 years ago, a large single crystal piece of silicon was developed at Bell Labs and it became the first crystal seed. This seed established the beginning for all silicon semiconductor devices.

New seeds are made by cutting crystals into three-inch-long pieces. Ultra-pure polycrystalline silicon is placed in a crucible (a large quartz cup) to be melted. Premeasured dopants (finely ground powder of impurities such as antimony, boron or phosphorus) are added. The polycrystalline silicon and dopant combination is referred to as a "charge." Depending on the type of dopant added, the final silicon crystal will be either P (positive) type or N (negative) type. The positive or negative characteristics of the crystal are remotely similar to the characteristics of the positive/negative terminal on a flashlight or transistor radio battery. The crucible and charge is placed into a crystal growing furnace. The furnace is tightly sealed, water cooled and continuously purged with an inert gas atmosphere (Helium or Argon). It's melted down at 2300°F. This takes about 40 minutes. The seed is dipped into the molten silicon and then slowly withdrawn to freeze out silicon on the end of the seed. The process takes about 10 hours and the result is one single crystal of silicon 20-30" long and 2-3" in diameter.



(continued page 4)

## Ray Bortener Accepts \$ Check

On April 21, at the Fairchild Sales Conference in Palm Springs, California, Ray Bortener, product marketing engineer in Discrete Products Division, was presented the Sherman Fairchild award for outstanding performance in a support group. Ray received the traditional Steuben Crystal symbol from Walter Burke, chairman of the board.



In June, Greg Reyes (left), general manager of Discrete Products Division, presented a check for \$1,000 to Ray as the recipient of the Sherman Fairchild award. It was accepted by Ray over coffee and cake in the Building 3 cafeteria.

## In Memoriam

We, of Fairchild, extend our sincere sympathy to the family and friends of David Krupp. Dave was killed in a light plane crash in the southern California mountains on July 2. He joined Fairchild in 1969 and has been working in Automotive Products under Bob Hood. At the time of his death, Dave was involved in vehicle emissions control and automotive safety equipment.



# Moving From College To The Corporation

Leaving the security of college and entering into the job market can be an intimidating experience. All of a sudden it's time to apply all that knowledge you've gained and to evaluate your future in terms of who you are and what you want in the "business world."

What does a college student go through during his/her senior year? How do they approach large companies for interviews? Will they benefit from a large company and will the large company benefit from the graduate?

All new college graduates must face the "whats" and "hows" of launching a career in today's world.

Pat Anderson, Mary Waters, George Brown and Steve Borochoff are four recent college graduates who are establishing their careers at Fairchild.



Pat Anderson's move from the campus to the corporation was more rapid than she had planned. Pat graduated from University of Oregon in June with a B.S. degree in physics. Bob LoPresto, Fairchild's Professional Recruiting Manager, read of her graduation in a newspaper article and contacted her by phone to visit Fairchild for interviews.

Pat visited Fairchild and interviewed in three areas: computer programming, purchasing and engineering. She decided that programming would most fully use the knowledge she had developed and simultaneously was offered a spot as a computer programming trainee. At present, after less than two weeks on the job, Pat is deeply immersed in becoming acquainted with her new responsibilities. "It's much like being in the classroom," she states, as she lifts her eyes from programming textbooks, "so the transition to corporate life should be relatively easy for me."

Pat has made some radical life changes in the past month. "I believe that women today are far more willing to leave their home communities for job opportunities. Most women getting out of school are not committed to marriage in the near future and realize that they will want to work for many years. Therefore, they, like men, are willing to make the life changes that will enable them to take advantage of opportunities."

Pat's early views of life at Fairchild: "It's a liberal company. The people I'm working with are extremely help-

ful and friendly; that has made my first days with Fairchild pleasant. I have a great deal to learn about computer programming, so I find my job challenging.



Mary Waters' future is in electrical engineering. She received her BS degree at Healds College in San Francisco. "I definitely wanted to work for a large corporation because it gives you variety," confides Mary. "What really scared me was being the only female in my class to stick it out in electrical engineering." After graduation, Mary started interviewing with large companies in the San Francisco Bay Area. She lost little time in finding her way to Fairchild's professional employment office. After several interviews, Mary was offered a position as trainee in Advanced Manufacturing under Jim Smith.



George Brown had not quite finished college when he went to work for General Dynamics' Aerospace plant. "I

finally realized that I must continue my education if I want to prepare myself for the electronics world," explains George. In June, 1972, George received his B.S. degree in electrical engineering at University of Santa Barbara.

During his senior year, George was introduced to Dr. C. Lester Hogan, president and chief executive officer of Fairchild Camera & Instrument Corp., while Dr. Hogan visited the University. George was impressed with Dr. Hogan and Fairchild.

Immediately after graduation, George made the trek to Mountain View for an interview. "The semiconductor field is where it's happening and I want to be involved." George joined Peter Verhofstadt's engineering group in Digital Products Division designing the new 95100 series.



Steve Borochoff, trainee in field sales, was located across the country from our other recent college graduates. Steve graduated from Georgia Tech in Atlanta, Georgia. "Competition for jobs is stiffer at Georgia Tech because it's strictly a technical school. We have some 125 companies interviewing on campus during a school year," comments Steve. "And still you really have to hustle for an interview. In order to get on the list at the bulletin boards for an interview, you literally have to write your name upside down over heads and shoulders."

When Steve was out in California visiting his parents, he decided to review literature from companies in the Bay Area. Fairchild came out on top of the list. "I had various interviews with Marketing personnel and they made me an offer in field sales. After two months training in each product marketing division, I will head for the Los Altos sales office for training in the field."

Pat, Mary, George, and Steve have made a smooth transition from the college life to the hustle and bustle of a large corporation.





**F E A A**  
**MEMBERSHIP CARDS**

**Available from your representatives**

**July 24 - August 8**

**Get yours during your lunch period in the cafeteria.**

**Watch the bulletin board for date and time membership cards will be distributed for your building.**

**Free Fairchild Employees' Activities Association membership cards allow you and members of your family to attend FEAA events**

**including**

**The 1972 Employees' Picnic**

**(see other side)**



It's all set

# The Annual Fairchild Picnic

for employees of the Semiconductor  
Components Group - Mt. View and Palo Alto  
and members of their families

**Sunday, August 20**

**6 p.m. to midnight**

**Frontier Village, San Jose**

(this date and time allows all employees on all shifts to attend)

**Free Food  
Free Beer  
Balloons**

**Free Rides  
Free Soft Drinks  
Popcorn**

**Lollipops  
Live Entertainment  
Talent Show by Employees**

If you would like to participate in the talent show,  
contact Jean McNeal at MOD, 17-2375

Bring the whole family

You must have a membership card in the Fairchild Employees' Activities Association to be eligible for picnic tickets for yourself and members of your family



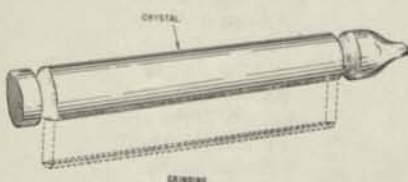


# Where It All Begins

(continued from page 1)



After crystal growing, the nose and tail of each crystal is sawed off. One side of the crystal is ground flat along its entire length. This is critical because this flat will become the wafer reference flat when the wafers are diced into individual devices.



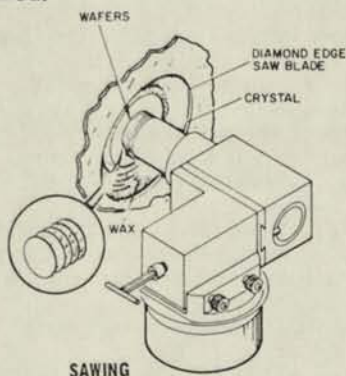
The next operation is slicing the crystal by mounting it on a block with an adhesive. Crystals are sliced into individual wafers by an automatic saw using circular blades coated with small diamond particles. The thickness (depending on what is specified) ranges from as thin as this paper to the thickness of your Fairchild badge.

After the wafers have been sliced, they are then etched in acid. This is to give the wafer a semi-glossy finished surface and to remove surface damage.



Polishing is done with diamond slurry (similar to dishwashing liquid in appearance). The liquid is used to polish the surface of one side of the wafer to a mirror-like finish.

The  $1/80''$  thick wafers are loaded on rotating plates (eight wafers to a plate) for two predetermined polishing cycles. During the first polish cycle a coarse diamond compound is used to polish the surface until the desired wafer thickness is reached. At this point, the plates are removed and washed and then placed in another machine for the second cycle. The second polishing compound used is much finer in texture. The wafers are polished until final surface conditions and thickness ( $1/90''$  thick) are attained.



SAWING

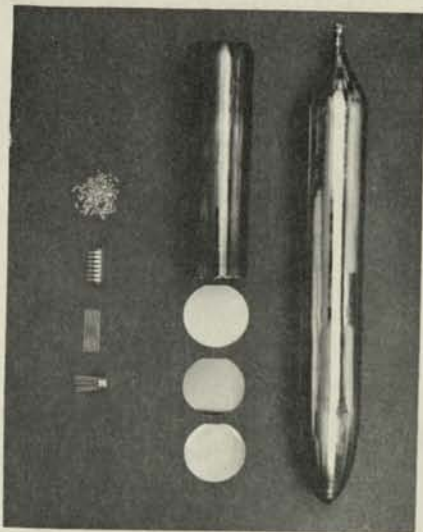


After the wafers are polished, each is inspected, cleaned, rinsed and dried. The necessity for a highly polished wafer surface is to remove surface damage (scratches or pits) that would prevent good quality devices in final production operations.



POLISHING

These wafers are ready to be packed and shipped to Fairchild's MOS and Discrete Divisions.



Wafers going to South Portland, LIC, DIC, and Bipolar Memory go through an oxidation process. Oxide (protective coating) is grown on the wafer by heating in a furnace for 6 hours at  $1900^{\circ}\text{F}$ . After removal, the oxidized wafers are checked again for oxide thickness and surface quality.



The final process is known as epitaxial deposition (from the Greek word epitaxy, meaning "arranged upon"). This is a very thin layer of silicon grown on top of the underlayer or substrate. The layer is typically one thousandth of an inch thick and is doped differently than the substrate. Wafers are placed in a furnace at  $1900^{\circ}\text{F}$  for 30 minutes. Thickness, resistivity and surface condition is checked again, before being packed and shipped to San Rafael, Power Transistor, and Small Signal operations in Mountain View.

The Silicon Plant, under Don Brettner, has 190 employees working on these various processes to serve all Fairchild Semiconductor divisions and plants. Recently, a new crystal growing area was built with up-to-date crystal growing equipment. This equipment will produce perfect crystals which allows higher yields to be achieved in wafer fab.

This review of the Silicon Materials Plant is the first in a series of articles describing the processes used to make semiconductor devices.



## Fairchild Employees Activities Association News

All discount cards and tickets are available from your building's representative.

**DINING OUT**—If you really like Mexican food, try the El Pomeroy Mexican Restaurant. Special discount cards are available.

**FUN NIGHT**—Friday, August 11, 1972 is "Fairchild Fun Night" at the Santa Cruz Boardwalk with unlimited rides 7:00 to 11:00 P.M. for \$2.25 per person. Employees need discount cards.

**WILDERNESS WORLD**—For those around Fairchild who like camping, the Wilderness World brochures should give you some help. There are special rates for large groups, and charter trips can be arranged.

**GIFT CHECKS**—Interested in a gift check booklet? The 1972-73 Santa Clara Merchants Edition booklets are available at the Recreation office.

**NEW DISCOUNT TICKETS** for those traveling to the Los Angeles area. Busch Gardens Friendly Eagle Club is now open and Fairchild is a member.

**FLASH FROM SANTA**—Just received notice that the Santa's Village ride books are now 12 rides for \$3.35.

## For Sale

**RCA 1969 Color TV 18"** (Console)—dark walnut finish. Asking \$250 or best offer. Contact Bill Shine, Ext. 3784.

**1952 Red MGTD convertible** in excellent condition. Asking \$1500 or best offer. Janice Nuttall, Ext. 3551.

**Home in Cambrian Park** near Los Gatos—3 bedrooms, 2 baths, w/w carpeting and drapes included, fireplace in spacious living room, separate family room, 2 car garage, backyard with roses and apple tree. Asking \$29,850. Phone 377-4789.

**Harley Davidson Sportster**, 900 cc, fully customized, rebuilt, lots of chrome, immaculate. Call 591-3835 after 6 P.M.

### FOR RENT

**Share rent** with three males in Spanish style 4-bedroom house located in Redwood City (20 minutes from MOD/R&D and Systems Tech). Furnished with fireplace, 20x40 heated pool, private dressing room, lighted patio with bar-b-que, beautifully landscaped (full-time gardener), no responsibility to tenant. \$130/mo. Available July or Sept. 1st. Tom, 365-1539.

**Mountain Cabin Rental** on stream near Twain Harte, 2½ hours from San Jose. Swim, golf, horseback riding, many fishing, boating, and hiking areas within minutes. Sleep 9 plus 1 crib. \$150/week, \$25/day. Call 371-2685.

MICROWIRE I—July 1972

EDITOR: Vicki Heinsheimer

REPORTERS: Geri Hadley, Marge Killian, Millie Dawson, Clint Haines, Margaret Elliott, Pat Alfred, Lorette Hayes, Bev Delos Santos, Judy Curiel, Marlene Souza and Edie Beem.

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## MOVING UP

### DIGITAL PRODUCTS DIVISION

Barbara Welsh to Assembler B

Irene Garcia to Assembler B

C. Galvan to Assembler B

Joyce Cole to Assembler B

Donna Jackson to Assembler B

Loretta Cardenas to Assembler B

Aldean McCullough to Assembler A

Loretta Valencia to Assembler A

### DISCRETE PRODUCTS DIVISION

R. Martinez to R&QA Inspector Specialist

J. Thrash to R&QA Inspector Specialist

Hildegard Solti to Lab. Technician

John Leith to Senior R&QA Engineer

Joyce Verga to R&QA Inspector Specialist

### CENTRAL SERVICES

Jim Staley to Production Supervisor A

Ann Ramirez to Process & Development Specialist

### MARKETING

Dennis Sabo to Senior Sales Engineer

Terry Morphet to Field Sales Coordinator

### MOS PRODUCTS DIVISION

Cindy Ochs to Assembler B

Carol Tompkins to Assembler B

Rin Remedios to Assembler B

### ANALOG PRODUCTS DIVISION

N. Gabhart to Assembler B

L. Hansen to Assembler B

I. Riviera to Assembler B

C. Vasquez to Assembler B

S. Celeste to Assembler B

I. Schrader to Assembler B

R. Sablan to Assembler B

S. Escamilla to Assembler B

Jim Robinson to Production Supervisor B

R. Venticinque to Production Engineer B

R. Yamashiro to Production Supervisor B

## JOS Promotes

Juanita Haket—Accounting Clerk II/West Coast Accounting

Patricia Prause—Assembly Work Leader/Wafer Fabrication Products

Paula V. Arndt—Assembler B/LIC—Assembly

Winnifred Williams—Laboratory Technician/R & QA Mask Making

Mary J. Zolotorow—Assembler B/LIC—Assembly

La Verne Thornhill—Production Scheduler/LIC Production and Inventory Control

Isabel Nava—Assembler B/ R & QA Silicon Materials

Rosa Garza—Master Mask Making Specialist/Mask Making

Kathery A. Burkett—Process & Device Specialist/Small Signal Transistor

Matthew Harris—Machinist A/Equipment Fabrication

Charlotte Winkler—Assembler B/ LIC Assembly

Chung Ok Oh—Assembly Work Leader/MOS Wafer Fab

Myrna R. Hyatt—Junior Specification Designer/Production Marketing

Ruth Gilley—Assembler B/High Speed Wafer Sort

Hope Gonzales—Assembler B/High Speed Wafer Sort

Paula E. Wisdom—Assembler B/Wafer Fab

Catherine Conard—Assembly Work Leader/Small Signal Wafer Fab

Carl Van Buren—Mechanic C/Power Assembly

Margarita J. Charles—Assembler B/Martin Captive Line

Melba Chadwick—Assembler B/LIC Assembly

Barbara J. Chapman—Executive Secretary/Digital Finance

Paul Sosa—Mechanic Specialist/ MOS Equipment Maintenance and Engineering

Marie N. Johnson—Assembler B/LIC Assembly

Edwin R. Damm—Senior Electronic Tech/Design Engineering

Geraldine Gordon—Senior Clerk/Computer App. and Test

Carole Stanger—Assembler B/Classification

James W. Keith—Senior Electronic Tech/Linear Microcircuits Engineering

## July

### TEN YEAR AWARDS

Ruby Smith

Bonnie Knox

George Jelich

Joan Major

Paula Nyburg

Henry Mahler

Edwin Barrett

Angela Abad

Angie Garcia

Jean Legall

Barbara Thomas

Hilaria Tomacder

Eugene Vaatveit

Nellie Hodge

Alma Espinoza

Frances Daugaard

Angie Gonzalez

Geraldine Rice

Felice Phipps

Lilly Takiguchi

### FIVE YEAR AWARDS

Denzel Green

Irma West

Roger Carlson

Neva Ollendorf

Christine Jones

Marilyn Sellers

Robert Bailey

Bill Strickland

Elsie Hoff

Virginia Glagola

Ronald Page

Alice Amaro

Virgil Williams

Virginia Alvarez

Mary Gonsalves

Linda Minnich

Sally Escamilla

Gerald Schoonhoven

Geraldine Anderson

Marcia Sturm

Henry Sun

Gloria Simons

Socorro Sanchez

K. Thinh Pham

Jacqueline Duclos

Mary Blender

Elisabeth Pazmany

Mary Ellen Ruiz

Hazel Lee

Helen Stein

Terry Beckman



# INTERNATIONAL INSIGHTS



(A REVIEW OF WHAT'S HAPPENING ON THE INTERNATIONAL SCENE)



. . . . meet Mike Larro

Mike Larro first joined Fairchild Semiconductor in Mt. View California in 1966.

Initially, Mike worked as a fab foreman, then as a General Foreman in DIC final test. Later, he worked as TTL MSI Product Engineer.

In August 1972, Mike Larro joined the International Marketing Support Group. At International, Mike is our Product Marketing Engineer, whose responsibility is to service our Fairchild Plants and Sales Offices in Europe. Mr. Larro is liaison between Mt. View and our overseas European facilities. As Mike puts it, "he has found his home at International" he really enjoys his work.

Mike Larro is an alumnus of San Jose State, where he received his B.S. in 1963, and his M.B.A. in 1966.

Mike lives in Sunnyvale with his wife and a young son and daughter.

Mike's hobby is art. His interest includes painting, etching, and silk screen

printing. During his spare hours, when he isn't studying German to help him better assist our European Market, he works on his old car. Mike is currently restoring a 1934 Austin Bantam.

\* \* \* \* \*

MERRY CHRISTMAS AND

A



HAPPY NEW YEAR

We, at International Marketing, wish you a Joyous Christmas. May you be blessed with a New Year of Peace and Happiness.



\* \* \* \* \* NAMES IN THE NEWS



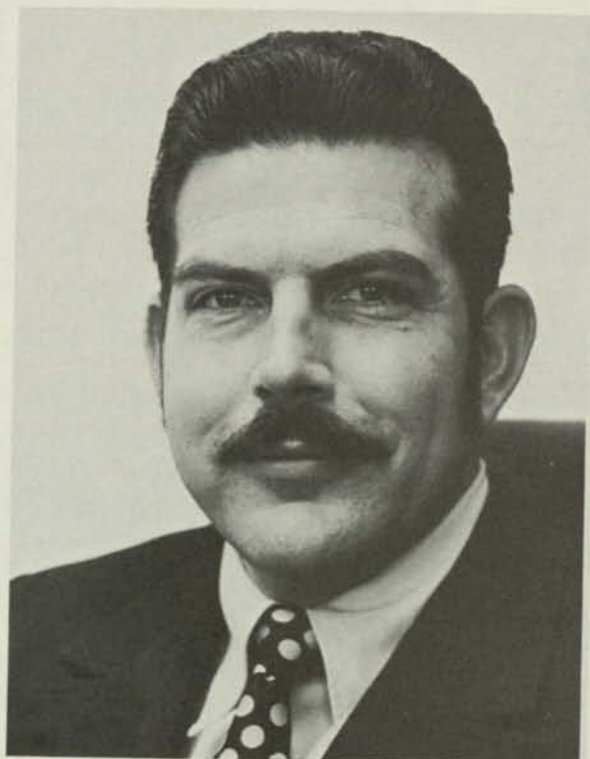
Mr. K. Omori, from our Fairchild Tokyo Office, has been assigned to Mt. View International Marketing. While in Mt. View, he will be coordinating all Japan business and acting as interface on a daily basis on all marketing problems between Fairchild Mt. View and our new Joint Venture T.D.K. Fairchild. Mr. Omori will be with us approximately one year.

Omori, is a graduate from Nippon University with a B.S., in Electronic Engineering. He has been employed in Japan and Hong Kong for a number of years designing consumer equipment. Since joining Fairchild two years ago, Omori-san has been responsible for sales to consumer accounts in Tokyo.

Mr. Omori is married. His wife and two children will join him in Mt. View soon.

Omori's special interests are skiing and he is a keen golfer.

Welcome to the U.S. Mr. Omori, we hope you enjoy your stay and have a successful year.



Mr. Chuck Smith has been appointed Manager of Central Services Operations, reporting to Wilf Corrigan. Prior to his new assignment Mr. Smith was responsible for all our Far Eastern assembly plants. He replaces Jim Hazle.

Welcome to Mt. View Mr. Smith, we wish you success in your new assignment.

\* \* \* \* \*

International Insights - December, 1972

Coordinating Editor - Marion Johnson

REPORTERS:

Jason How	Singapore
John Houston	Australia
Shigeru Miyagi	Okinawa
Mickey Siemsen	Germany
S.J. Lee	Korea
S.K. Sze	Hong Kong
M. Kimura	Tokyo



State of the Semiconductor Components Group  
and  
Projections for 1973-80

The semiconductor industry worldwide, is expected to grow from \$2.8 billion in 1973 to \$6.2 billion in 1980, and Fairchild will attempt to maintain a leadership position in world markets throughout this impressive growth period.

Fairchild will greatly expand its multinational interests with the establishment of manufacturing plants in Europe in the coming years. The Joint Venture company created in Japan with TDK Electronics will give Fairchild entry to the growing Japanese market for semiconductor devices.

Through 1976, Fairchild projects that the semiconductor industry will increase 10% percent annually in the U.S. markets; 10% percent in European markets and 12% percent in Japan.

Knowledgeable economic sources, inside and outside of the company, anticipate the U.S. will realize an economic growth rate of seven to eight percent annually in the United States in 1973-76. It is expected that the European and Japanese economies will exceed the U.S. growth figures during this period.

The computer industry will continue to be the primary market for semiconductor devices, but consumer and industrial applications for semiconductor devices demonstrate enticing possibilities. As the computer industry converts from core to semiconductor memories, an even greater demand for semiconductor products will be created to serve this vast market.

One of the most promising markets lies in the automotive industry, where demands for safety and pollution control devices have created increasing dependency on electronics. Today, the market for automotive semiconductors is approximately \$250 million. It is projected that this market could grow a billion dollars annually in less than a decade.

MOS Products, recovering from a slow start, will make in-roads into virtually every growth area; automobiles, industrial process equipment, and computer peripheral equipment.

Polaroid's new SX-70 pocket-sized color camera opened up another fantastic opportunity for growth. Fairchild is building three major electronic modules for the product which gives Fairchild pioneering technology in camera systems. The total market for these systems could reach \$600 million by 1980.

Light emitting diodes and other visual displays for calculators, test equipment, wrist-watches and computer terminals provide another area of major growth; industry-wide market for these products is expected to reach \$250 million by the last half of the decade.

Fairchild is approaching each potential application for its semiconductor products with caution. We will be selective about the markets we pursue knowing that we cannot be all things to all people. All industry and Semiconductor Group forecasts through 1980 have been established as the result of lengthy economic studies by the newly created business analysis system which includes the Semiconductor Group



1973 Projections continues . .

Market Research Department with support from corporate planning offices and outside economic consultants.

To assure that Fairchild participates in every market area it chooses to pursue, the Semiconductor Group will continue to operate in the decentralized division mode to encourage decision-making to be conducted at the most knowledgeable point in the organization. Each division is structured with its own product marketing, engineering, manufacturing and finance activities in order to provide the operating structure which allows it to respond with speed and knowledge to changing market conditions.

To the individual, this growth potential opens vast, new opportunities for realization of personal career goals. It will also mean broadened exposure to the demands of world wide business

1973 Business Objectives

- o To meet or exceed sales goals
- o To achieve profitability objectives.
- o To become the number one I.C. supplier in industry
- o To establish Fairchild Semiconductor as a multinational marketing leader
- o To continue development of the successful Joint Venture in Japan
- o To expand European business more rapidly than our competitor
- o To capitalize on the extraordinary business opportunities that lie ahead
- o Most important - to enhance the development of our Employees by providing opportunity for all Fairchild people.

Speech was presented by Wilf Corrigan Vice President, and General Manager of Fairchild Semiconductor .

George Wazinski, Sales Manager of ROE, visited Mt. View, to resolve some product problems. While here in Mt. View he visited each division for an update on all new Fairchild Products.

\* \* \* \* \*

Mr. T. Takahashi, from TDK, Fairchild in Tokyo, is visiting Mt. View. He is here to discuss Bi Polar Memories. Mr. Takahashi is a Sales Engineer, handling the Hitachi account at TDK, Fairchild.

\* \* \* \* \*

Effective December 1st, Jim Perry will be Manager of Korea.

\* \* \* \* \*

Chris Reardon, is now Manager of the Singapore Plant.

\* \* \* \* \*

Happy New Year

Employees around the world will usher in the New Year - January 1, with parties and celebrations. They will recognize the January 1st of the Gregorian Calendar, but will save most of their energies to bring in the Chinese New Year which begins February 3rd. The Year of the Ox will be brought in with parades and festivities and special customs designed to bring luck in the coming year. The Chinese New Year is usually accompanied by visits to relatives and friends, gifts for the children and greetings of "Kung Hey Fat Choy". I wish you good fortune.

Happy New Year and Kung Hey Fat Choy from the Editorial Staff of International Insights.



# Microwire

Published For the Employees of the Semiconductor Components Group — Mountain View/Palo Alto

## Low Cost Color TV Sync Generator On A Single Chip

Until recently, the concept of using digital devices in consumer equipment was dismissed as impractical, unnecessary and highly expensive. New developments in semiconductor technology, transmission systems and FCC regulations have brought about a situation where digital techniques are now not only economically and technically feasible but also necessary.

Since video tape recorders and cameras are now being introduced into the consumer market in quantity, the time is ripe for the introduction of a low-cost monolithic sync generator.

Halfon Hamaoui, consumer business development manager in Marketing, designed a new 3261 color TV sync generator which provides the timing of scanning a television system. "It all started when I was given a circuit that was a total mess," confides Halfon. "After viewing that circuit, I decided that a sync generator could be done digitally on a single chip." When Halfon joined Fairchild as an applications engineer in 1969, he was given the opportunity to pursue the one-circuit theory with assistance from Fairchild's MOS designers, production and marketing personnel.

In June, Fairchild officially announced the new one-chip color TV sync generator at the Annual IEEE Electronics Conference in Chicago. This sync generator will be used in both color and black and white television cameras, portable video tape recorders and future TV receivers.

"The key is to take advantage of our present technology to integrate a complex circuit at a low cost and high performance," concludes Halfon.

## Fairchild Supplies IC's For Polaroid's Pocket Color Camera

The Analog Products Division, under John Sussenberger, general manager, is supplying integrated circuits for use in the exposure and film processing control sections of a pocket-size instant color camera which will go on the market later this year.

Under the major contract with Polaroid Corporation, Fairchild will supply I.C.'s and assemble electronic subsystems for the new camera. The small instant camera will automatically produce a dry, color photograph an instant after the shutter is snapped.

## HOLIDAY CALENDAR

Sept. 4 (M)—Labor Day

Nov. 23 (Th)—Thanksgiving

Nov. 24 (F)—Floating Holiday

Dec. 25 (M)—Christmas Day

Dec. 26 (T)—Instead of Christmas Eve

Jan. 1 (M)—New Year's Day

## Salesman of the Month

Bob Hoffman, district sales manager at the Los Angeles office, was selected the Salesman of the Month for June. He is responsible for coordinating and supporting Fairchild's efforts at all Burroughs divisions in southern California. In addition to his Burroughs responsibilities, Bob services nine Group II accounts.

Bob earned this recognition for consistently doing an exceptional job with Burroughs and his rapidly growing Group II business.

## GM President Visits Fairchild

Edward N. Cole, President of General Motors, made a dramatic visit to Fairchild on July 17, arriving via helicopter which landed behind building 1. Cole was accompanied on his flight from San Francisco by Dr. C. Lester Hogan, Fairchild President and Doug O'Connor, Manager, Business Development. The men had spent the previous night in the City preparing for the opening of the First International Automotive Congress on Safety which began July 17 at the St. Francis Hotel. Cole was keynote speaker for the event and Dr. Hogan delivered an address on the role of electronics in the automotive industry during Tuesday's program.

The pressure of a tight schedule prompted the unusual means of transportation. Cole arrived at Fairchild at approximately 8.30 a.m. to talk with members of the Automotive Products Department about current developments in semiconductor controls for automobiles. He completed the visit, which included a demonstration of Fairchild's two test vehicles equipped with state-of-the-art safety and emission control semiconductor devices, and returned to San Francisco to open the automotive conference at noon.

Cole's interest in semiconductor technology as it relates to automotive safety and emission control is shared by all leaders in the automobile industry. It is estimated that the costs to comply with recent legislation in auto safety will be more than \$20 billion by 1977.

Automotive manufacturers are looking to the electronics industry to help them meet the new safety and environmental control demands.





## Wafer Fab

# Second Step in the Semiconductor Process



The first process step in wafer fab is done by Cruz Hernandez. She is operating the International Photoresist Spinner.



Sarah Valenzuela is exposing, aligning, and designing a pattern on the wafer before it goes to final checking.



Kathy Trowbridge is doing final checking for quality of etching, cleanliness and overall condition.



Loading the diffusion furnace with a run of wafers is Judy Nelson.

Over 470 hourly employees at Fairchild Semiconductor/Mountain View and Palo Alto work under yellow lights and sliding glass doors. They are wafer fab personnel. Discrete, Analog, MOS, Digital and MOD have one or more wafer fab areas for their own masking, diffusion and metalization.

Using the Analog Products Division as an example, you will view the wafer fab processes without putting on smocks, protective eye glasses and taking a tour.

Once the raw wafers have arrived from Silicon Materials, they are immediately assigned a device number which determines what type of product will be made from the wafers. A lot number allows the computer to trace the wafers as they progress through the wafer fabrication area. This information is punched into an IBM card, which transmits information to the computer system. Each time the lot moves to the next major step (masking or diffusion), the IBM card is used to transmit the current location and quantity of wafers in the lot. This requires a daily status report listing all lots in wafer fab.

The three basic processes involved in fabricating Planar type devices are gaseous diffusion, photolithographic techniques (masking) and metalization.

Gaseous diffusion and photolithographic techniques (masking) are done on an alternate basis to build the basic structure. Depending upon the number and sophistication of the masking and

diffusion steps, a variety of components may be fabricated in each device. Devices may have the simplicity of a single transistor or combine numerous resistors, diodes, capacitors and transistors—all on the same chip.

The entire masking process selectively removes the oxide from portions of the wafer, where diffusion is desired. This area varies during the process and requires several (up to six in LIC) independent masking steps.

Initial step is the application of photoresist, normally by spinning, which is followed by bake and expose. During the expose cycle the image on a glass mask is transferred to the photoresist. This is accomplished by bringing the glass plate (mask) between the wafer and a high intensity ultraviolet light. The light traveling through the glass strikes the surface and polymerizes the resist. This is a photochemical reaction which changes the molecular structure. (Note: Because of the photosensitivity of the resist very little blue or ultraviolet light is allowed in the masking area but strong yellow light is acceptable.) During the develop cycle, the resist which has not been exposed to the ultraviolet light (masked) is dissolved and carried off in an etch solution, leaving behind exposed silicon oxide. It is the develop check operator's responsibility to inspect each wafer for correct pattern alignment and to insure that the process is under control to that point, by inspection of the photoresist for good line definition, adherence, etc. The wafer then proceeds to bake and etch. Removal of the exposed oxide is accomplished by the use of a buffered hydrofluoric acid solution. The photoresist protects the oxide not exposed. Wafers are then cleaned and sent to final inspection station. At this point all wafers are checked for complete removal of oxide in the selected area, as well as, complete removal of the photoresist.

The above process is typical of all masking steps although resist thickness and etch solution will vary when aluminum and vapox masking steps are performed.

In the diffusion process, the purpose is to obtain the desired in-purity-concentration necessary for device oper-

(continued on page 3)

Millie Baumier is adding the aluminum on wafers by using an evaporation machine.





## Wafer Fab (continued from page 2)

ation. Operators are concerned with both the depth of diffusion and surface concentration. Although the process and types of diffusion vary, the main principle remains common to all diffusion steps. The exposed areas of silicon from the previous mask step are exposed to the dopant at an elevated temperature (1832°-2282°F) for a predetermined time dependent on the three basic elements: time, temperature, dopant concentration, the level of concentration and depth of diffusion will be reached. To prepare the wafer for the next masking step, oxide is grown over the exposed silicon during the initial diffusion step or as an additional procedure after the dopant diffusion is complete.

The wafer then proceeds to the third basic area—metalization. At this

point the surface of the wafer is covered by aluminum in an evaporator. The aluminum is used as a thin metallic film for interconnections between the components as well as for a pad for wire bonding in the assembly operation. The wafers once again go through the masking area to remove the undesirable aluminum.

The principal disadvantage in aluminum metallization is that the soft aluminum is very susceptible to mechanical damage, it can be scratched easily during normal processing. Phosphovapox, a protective coating, is deposited on the wafer in a reactor. Wafers are returned to masking where openings are made in phosphovapox glass to expose the bonding pads.

The wafers proceed to backlap where the final wafer thickness is at-

tained. The wafers are then returned to the metalization area where gold is evaporated on the back side, this is to be used in the die attach area of assembly.

After the final step of putting gold on back wafer, wafers move to the Wafer Sort area. The next article will describe the wafer sort and test areas. LIC Wafer Fab facts:

- 1) Output up 150% last 8 months.
- 2) Anticipate additional 50% increase next six months.
- 3) New facility for additional capacity beyond above numbers now going into San Rafael Plant.
- 4) Starting products of 3" wafers this month.
- 5) Overall wafer fab yield up 20% from 2nd quarter compared to 4th quarter 1971.

## JOS Promotional Schedule Increase

Employees on the salaried, non-exempt payroll who receive promotions through JOS are granted a salary increase of five percent at the time of promotion in addition to merit increases ranging from one-half of one percent to three percent depending on the time that has elapsed since their last merit increase. For example, an employee promoted through JOS who received his or her last merit increase six or more months before the promotion would receive the maximum increase of eight percent, or if, with the eight percent increase, the employee's new base rate is still below the minimum of the range for the new job, his or her salary would be raised to the minimum for the job range.

Hourly employees in grades one through four receive 13 cents per hour

at the time of a JOS promotion PLUS from two to nine cents additional merit increase depending on the date of their last merit review. Employees in grades five through seven receive 15 cents per hour plus merit increases ranging from two to ten cents per hour. Grades eight and nine receive 17 cents plus two to 11 cents per hour. Grades ten and 11 receive 19 cents promotional increase plus from two to 12

cents merit increase and employees moving into or within grades 12 and 13 receive 22 cents and from two to 14 cents merit increase.

Again, if the combined promotional and merit increase does not bring the person to the minimum of the range for the new job, the employee will be granted an increase to the new range minimum. (See chart.)

### JOS PROMOTIONAL INCREASES SALARIED NON-EXEMPT

Grade of Job Promoted to	Promotional Increase to be Granted at Time of Promotion	Merit Increase to be Granted in Conjunction With Promotional Increase						
		Number of Full Months Since Date of Last Increase Over 6 Months						
		1	2	3	4	5	6	Over 6 Months
ALL GRADES	5 PERCENT	0.5	1.0	1.5	2.0	2.5	3.0	3.0

### HOURLY

Grade of Job Promoted to	Promotional Increase to be Granted at Time of Promotion	Grade Promoted from	Merit Increase to be Granted in Conjunction With Promotional Increase						
			Number of Full Months Since Date of Last Increase Over 6 Months						
			1	2	3	4	5	6	Over 6 Months
1 - 4	.13¢	1 - 4	2¢	3¢	5¢	6¢	8¢	9¢	9¢
5 - 7	.15¢	5 - 7	2	3	5	6	8	10	10
8 - 9	.17¢	8 - 9	2	3	5	6	8	11	11
10 - 11	.19¢	10 - 11	2	4	6	8	10	12	12
12 - 13	.22¢	12 - 13	2	4	6	8	11	14	14

The combined increases would be granted at the time of the promotion. The only limitation would be the range maximum of the new job.



# JOS Promotes

**Alberta Stidman**—Production Scheduler, MOS Wafer Fab  
**Margery Bland**—Process & Device Specialist, Bipolar Wafer Fab  
**Mary Burgess**—Process & Device Specialist, LIC New Products  
**Martha Tapia**—Master Mask Making Specialist, Mask Making Production  
**Jeanette Lister**—Assembler B, Hi Rel Manufacturing  
**Delia Martinez**—R & QA Inspector Specialist, Small Signal Transistor R & QA  
**Imelda Trevino**—Assembler B, Power Assembly  
**Aurora Ahymada**—Assembler B, Hi Rel Manufacturing  
**Duane Lighthiser**—Mechanic C, Equipment Maintenance  
**Larry Matthews**—Experimental Machinist, Mark and Pack  
**Patricia Cava**—Process & Device Specialist, I.C. Hi Rel  
**Consuelo Vasquez**—Assembler B, IMS Consumer  
**Kay Thorson**—Production Maintenance Clerk, Inventory Control  
**Kathy Duffek**—Assembler B, LIC Assembly  
**Alice Gange**—Assembler B, Bipolar Wafer Fab  
**Dorothy Doudell**—Accounting Clerk II, West Coast Accounting  
**Illuminada Javier**—Assembler B, Special Products  
**Ellen Hurd**—Master Mask Making Specialist, Mask Making  
**Donald Kraft**—Laboratory Technician, New Process  
**Mary Voss**—Executive Secretary, Administrative Manufacturing Services  
**Carolyn Wade**—Assembler B, Power Assembly  
**Sylvia Magana**—QA Inspector Specialist, Vendor R & QA



The boys in the Mail Room have nothing on Mae Walker (left) and Flo Warfield who handle distribution for Marketing Services. On a recent day, the outgoing mail included these sacks containing 550 packages which Flo and Mae packaged, sealed and posted. These gals handle the distribution of all printed advertising and sales promotion material which Fairchild sends throughout the world.

MICROWIRE I—August 1972  
 EDITOR: Vicki Heinsheimer

# Employees' Activities Association News

The following FEAA representatives in Mountain View and Palo Alto have up-to-date discount cards and information covering entertainment and services available to employees.

NAME	BUILDING #	MAIL STOP	EXTENSION
LYDIA LOPEZ	2	2-233	2015
BEV DeLOS SANTOS	3	3-652	5356
JENNY BOCHMAN	13	13-001	3602
MARY JANE O'BRIEN	14	14-1070	3664
RUDY ROBLES	18	18-221	5579
MARGARET ELLIOTT	19	19-110	5642
JUDY CURIEL	20	20-1788	2838
SHIRLEY ADAMIK	20	20-2805	3741
JAN DAHLIN	Systems Tech	40-27	16-215
BONNIE LEWIS	MOD	MOD	17-2601
JESS REEVES	3rd Shift	999	2555

## ODDS <sup>n</sup> ENDS

### FOR SALE

**1960 Chevrolet** 2-door. Needs fuel pump but otherwise in good condition. Best offer. Cheri Baker, 969-3804 after 5 P.M. or EXT. 3605.

**1964 MGB**—engine rebuilt, 3,000 miles, overdrive, excellent condition, radio and heater. Make offer. Call EXT. 3562 or 325-5144.

**Colonial Furniture**—good condition. Lamp, (lamplighter), \$25; Doe Box (pine), \$15; Sorroco Rooster Set, \$5; Chair (ladder back / rush set / arms), \$15; Deacon's Bench (naugahyde seat), \$20; 3-piece living room set, all or separate—sofa (fab & wood trim), \$100; chair (naugahyde & wood trim), \$75; chair (naugahyde & small), \$35; 10-gallon fish tank complete with light, heater, filter, gravel, \$20. Call 732-1321 after 6 P.M.

### FOR RENT

**Share rent** with three males in Spanish style 4-bedroom house located in Redwood City (20 minutes from MOD/R&D and Systems Tech). Furnished with fireplace, 20x40 heated pool, private dressing room, lighted patio with bar-b-que, beautifully landscaped (full-time gardener), no responsibility to tenant. \$130/mo. Available Sept. 1st. Tom, 365-1539.

**Mountain Cabin Rental** on stream near Twain Harte, 2½ hours from San Jose. Swim, golf, horseback riding, many fishing, boating, and hiking areas within minutes. Sleep 9 plus 1 crib. \$150/week, \$25/day. Call 371-2685.

## Moving Up

### DISCRETE PRODUCTS DIVISION

**Coral Perez**—Assembler B  
**Charlotte Winkler**—Assembler B  
**Hope Gonzales**—Assembler B  
**R. Gilley**—Assembler B  
**Kathy Burkett**—Process & Device Specialist

**Carl Van Buren**—Mechanic C

### MARKETING

**Paul Breen**—Senior Sales Engineer/  
 Stamford, Connecticut Sales Office  
**Scott Seaver**—Senior Sales Engineer/  
 Wellesley, Massachusetts Sales Office

### DIGITAL PRODUCTS DIVISION

**Janet Larson**—Mask Designer A  
**Edith Pricolo**—Mask Designer C  
**Jane Scharfen**—Mask Designer C  
**Mattie Moorer**—Mask Designer B  
**Barbara Welch**—Mask Designer A  
**Linda Olson**—Mask Designer A

### ANALOG PRODUCTS DIVISION

**Anna Larson**—Production Supervisor A  
**Judy Shelton**—Failure Analyst Specialist

**Pat Cava**—Engineer Operator

**Richard Yamashiro**—Production Supervisor B

### CENTRAL SERVICES

**Gene Amato**—Manager of Engineering Services

### INDUSTRIAL RELATIONS

**Josie Peralta**—General Employment Interviewer

### CORPORATE

**Lois Mallory**—Accountant A

### MOS PRODUCTS DIVISION

**Ron Osmun**—Production Control Manager A



# Microwire

Published For the Employees of the Semiconductor Components Group—Mountain View/Palo Alto

## System Expands Working World of Women

There's a noticable absence of the feminine touch in several jobs within the Semiconductor group; jobs which should appeal to women as well as men.

To encourage women to look into these jobs, the Industrial Relations Department has established a system which allows women to investigate assignments in several job categories and to obtain career counselling which will guide them in preparing for promotion into others.

Alyce Washburn, Job Opportunity System Manager, is offering counselling to women who are interested in preparing for promotion into assignments for which we would like to increase the representation of females. These jobs include: Assistant Electronic Technician, Electronic Technician, Senior Electronic Technician, Laboratory Technician, Draftsman, Draftsman Trainee, Senior Draftsman, Shipping/Receiving Clerk, Computer Operator, Senior Computer Operator, Designer, Senior Designer, Machinists A, B and C, and Facilities Craftsman A, B and C.

In cooperation with the Fairchild Manpower Development office, Alyce has gathered educational information from local schools and colleges which offer courses of study which would prepare women for entrance into these assignments. By calling for an appointment, Alyce or another member of the JOS staff will outline a program of formal study and/or on-the-job training requirements, based on the individual's experience, which would prepare her for entry into the listed jobs. Members of the JOS staff will also describe how the company's Tuition Refund Program will aid in covering the cost of studies at outside institutions.

Other Fairchild assignments which have also been identified as having inadequate representation of women include: Security Guard, Mechanic, Chemical Mixer, Material Handler, Janitor A & B, Shipper/Receiver and Chemical Technician.

If any woman at Fairchild is interested in investigating the duties within any of these assignments, she can arrange for a familiarization preview of the job by contacting Alyce Washburn, JOS Manager. The previews of jobs are aimed at allowing female employees to become acquainted with the specific duties in the listed job assignments. Once acquainted with the job responsibilities, interested women will be encouraged to bid on the jobs through the Job Opportunity Systems as openings occur.

The previews will be conducted at times other than the employee's normal work hours and will allow the employee to perform representative tasks within the job assignment in order to give her a first hand look at what the job involves.

The job preview and counselling programs have been inaugurated to provide full encouragement and opportunity for women to bid for promotion into all job openings as they are posted in the JOS program.

## New G.M. Heads Analog Division

On Friday, July 21, John Sussenberger was named general manager of the Analog Products Division in Mountain View.

The Division manufactures and markets a broad line of linear integrated circuits and integrated microsystems.

John Husher, who previously headed the division, was appointed manager of advanced analog programs with primary responsibility for the automotive and camera controls market segments. His assignment was termed a key step in enabling Fairchild to focus greater attention on these growing high potential markets, according to Wilf Corrigan, vice president and group general manager of Semiconductor Components Group.

John Sussenberger has been with Fairchild since 1962 in various engineering and management positions, most recently as manager of combined digital integrated circuit operations in the Digital Products Division. Before joining Fairchild he held engineering positions with Westinghouse Electric Company and Raytheon.



## Were You There?

..... at the 1971 Fairchild picnic? Map of the grounds with directions have been inserted in each employee's paycheck. On the map of the grounds, areas marked A, B, C and D (right hand side) represent food lines and eating facilities for Fairchild employees.

Employees must have their picnic tickets prior to the day of the picnic. Tickets will not be issued at the gate.



## Two Employees Cited For Suggestion Awards

Donald Gee and Cordelia "Cordy" Lovato became the recipients of \$100 Savings Bonds for submitting valid suggestions to the Suggestion Program Committee. Their suggestions have improved quality and service, increased production, prevented waste and reduced cost in their departments and for Fairchild Semiconductor.

Don Gee, senior technician in LIC, made his suggestion while employed in Silicon Materials. He recognized that all rejected back oxide wafers were scrapped because of excessive stress lines after the silicon had been cut. He suggested that the wafers be recycled using a polishing process to remove the stress lines from the polished surface. The suggestion was immediately implemented by Don Bretner, manager of Silicon Materials.

"Cordy" Lovato, inventory control clerk, receives QA material from Fairchild's Hong Kong plant. The boxes are not labeled or stamped when they arrive at Mountain View. This means "Cordy" has to unpack each box and check the material for damage and then pass the material on to QA production, where the girls spend hours labeling and stamping each box for QA inspection. "Cordy" suggested that Hong Kong provide their own labels and stamps to cut processing time.

Your ideas can claim \$25, \$100 or \$250 U. S. Savings Bonds in the Suggestion program. Forms, with detailed

instructions on submitting an idea, can be found in your cafeteria or personnel office. If you can't locate a form, call Terri Muessig, on Ext. 2148.



Don Gee (left) receives his \$100 Savings Bond from supervisor Don Pezzolo.



"Cordy" Lovato proudly displays new labels from Hong Kong plant. She also received a \$100 Savings Bond.

## Fairchild Hosts College Placement Directors

Santa Clara University, San Jose State, Stanford University, and the University of California at Berkeley college placement directors were guests at Fairchild Camera and Instrument Corp. for an informal luncheon and plant tour on Wednesday, July 19th.

Roz Hopkins, director of college relations, invited the eight representatives from the local colleges to tour Fairchild and meet the professional employment staff. "I felt it would be advantageous for these directors to become familiar with our company to establish a rapport between the company and the colleges," comments Roz. "The visit gave the placement managers knowledge of which is helpful when they refer candidates to us from their universities."

Hosting the luncheon were Warren Bowles, corporate vice president of industrial relations; Dean Peskin, corporate director of manpower planning, Bob LoPresto, manager of corporate staffing; and Roger Barney, manager of Semiconductor personnel and administration.

Since the luncheon, two graduates from Santa Clara University and U.C. Berkeley joined Fairchild Semiconductor. Bill Wield recently graduated from Santa Clara with an MBA in Business Administration/Marketing & Management. He was referred by his placement center to Fairchild. Bill is in Production Control, MOS Products Division. R&D welcomed David Wen to their research engineering staff. David received his Ph.D in Electrical Engineering from Berkeley.

## Employees' Activities Association News

F.E.A.A. membership cards will be available from Toni Gill, Ext. 3644, until August 18th.

The back of the membership card has a space for the number of members in your family. This applies only to spouse and children. It is important that you indicate the correct number. The F.E.A.A. only has sufficient funds to cover the cost of activities for employees and members of their immediate families.

Picnic tickets are available. Please watch your bulletin boards for specific time and place of distribution for all shifts.

A special thank you to everyone for the excellent cooperation for the expeditious distribution of membership cards.

Fairchild's Winter Bowling League will start its 30-week schedule on September 11th at Cherry Bowl in Sunnyvale. Employees and their spouses are welcomed to join the league. Single employees may bring a guest. Team and individual signups must be complete by September 1st. If you are interested, please contact Marian Oswald on Ext. 2644 (R&D) or Jim Vinzant on Ext. 2856 (Mt. View).



## Wafer Sort: Third Semiconductor Process

Joe Fulginiti, Doug Hunt, John Tripp, Pat Lafferty, Wayne Carlson and Jim Molinari have something in common—they are managers of their division's wafer sort operation. These operations are relatively small in manpower—just over 80 operators in Mountain View/Palo Alto—compared to wafer fab and assembly operations, but they represent a significant step in the semiconductor process.

Wafer sort operators are responsible for electrically testing each individual die while it is still in wafer form.

After receiving wafers from their division's wafer fab area, the operators program a computer for assigned test conditions on each wafer. With the test conditions, the individual wafer is placed on a vacuum chuck on the wafer sort machine. The vacuum holds the wafer to the chuck so it won't move while being electrically sorted.

Looking into the microscope on the wafer sort machine, you can see several pencil-like pointers jutting down on the wafer. These pointers are called probes. The operator must line up the probes with the first horizontal line on the wafer. This assures the operator that the probes will maintain a straight line while in motion. Once the probes are lined up with the first horizontal line, the operator presses a start button and the process becomes automatic. Each individual die is tested as the probe moves back and forth over the surface of the wafer. If a die does not meet the test conditions programmed by the computer, it is inked. Electrically Good Die, or EGD, remain free from the ink.

Continuing the process, the operator loads the probed wafers on a baking tray and places it in the oven at 100°F for fifteen minutes. This allows the ink spots to dry on the wafer. After removing the baking tray, she determines the total number of die tested versus number of good die—which equals yield output.

In the next article, MICROWIRE will cover the scribing process for semiconductor devices.

# Why, What, When?

**On our Medical/Dental Insurance, how is the Individual and/or Family Deductible Calculated?**

At Fairchild's request, our carrier keeps track of two deductibles:

- an individual deductible
- a family deductible

As you may be aware, the "deductible" is usually spoken of as being \$75 for an individual or \$150 per family.

### INDIVIDUAL DEDUCTIBLE (\$75)

This means that one person meets the individual deductible by accruing \$75 of covered expenses; at any time an insured person has \$75 of covered expenses, his benefit payments will start. However, an individual may not be credited with more than \$75 in covered expenses toward the family deductible.

### FAMILY DEDUCTIBLE (\$150)

A family may combine their covered medical/dental expenses to qualify for the family deductible of \$150. Since an individual cannot satisfy more than \$75 toward the family deductible, family units of two members satisfy the family deductible when each satisfies his individual deductible. In family units of three or more, however, the family deductible can be satisfied if each member has covered expenses even though none of them has as much as \$75.

Benefit payments begin AFTER meeting either of the deductibles. Here are some examples of how the deductibles can be satisfied.



After receiving paper work from the engineers, Jackie Urbanski begins programming on the Teradyne Computer for wafer test conditions.



Pat Barnes aligns a wafer prior to the actual sorting process.

### Individual Deductible

(1 or 2 member families)

Employee (ONLY)  
(\$75)

Employee & Spouse (ONLY)  
\$75      \$75

Employee & Child (ONLY)  
\$75      \$75

### Family Deductible

(examples of combinations)

Employee	Spouse	Children
\$ 75*	60	15
	OR	
\$ 50	40	60
	OR	
\$ 10	65	75*

### Family Deductible

(examples of combinations)

Employee	Spouse	Child	Child	Child
\$ 0	\$ 0	\$ 0	\$75*	\$75*
		OR		
30	30	30	30	30
		OR		
5	75*	15	20	25

ETC.

\*Benefits are paid to these members regardless of bills incurred by other family members because they have satisfied an individual deductible of \$75. in the process of gathering a family deductible of \$150.



# Fairchilders Trek to Mountains Over July 4th Weekend

Hitting the rapids again over the July 4th weekend were five Fairchild employees. The Klamath River, located in northern California, provided the group with some of the most treacherous rapids west of the Colorado and some of the most beautiful scenery in the country.

The group, which included the Fairchilders, headed out aboard four and six-man rafts (similar to the Navy survival rafts), camping equipment, May West life preservers and tranquilizers! During the two-day trip down the river, there were many agonizing groans but more squeals of delight when a raft made it through the unpredictable rapids without giving the occupants an unwelcome bath.

Admired for their courage but doubtful sense are Tom Donovan, Geri Hadley, Dave Hall, Ginger Jenkins and Vicki Heinsheimer.



On your mark . . .



Get set . . .



Go!



Gone? ? ? ?



And now . . . intermission

Several miles down the road at Lake Shasta another group of Fairchilders were enjoying the mountain air and clean water. Ed Bennett, Vic Baker, Joyce Todd, Barbara O'Brien, Dennis Alexander, Carol Davis, Maureen Spiotta and Chris Wallace took advantage of the four-day weekend basking in the sun, water skiing and catching a few fish.



"That really was a dumb ghost story, Ed"



"Let's get the show on the boat!"



"Is that a big bird or Vic Baker?"  
questions first-time camper  
Maureen Spiotta.

## August Service Awards

### TEN YEAR AWARDS

Dolores Cannon  
Jacob Nyburg  
Carmen Ynzunza  
Elizabeth Pak  
Mary Barashas  
Theresa Torres  
Beatrice Sanford  
Rachael Lira  
Margaret Sanders  
Irene Jacobson  
Stella Dussart  
Irene Poirier

### R&D SERVICE AWARDS

#### 5 YEAR

Ed MacKenna

### FIVE YEAR AWARDS

Dennis Szyndrowski  
William Bertetta  
Lupe Alvarez  
Rosa Garza  
Eugene McCabe  
Marsha Tyrfinngsson  
Irene Gonzales  
Steve Lindsay  
Ib Larsen  
Virginia Fulgar  
Faust Gutierrez  
Roberta Frank  
Rose Koolhof  
Craig Jorgensen  
Helen Woods  
Rose Marie Brown  
Dorothy Roberts  
LaVerne Thornhill  
Natalie McKinnon  
Mary Ann Lilley  
Ralph Bestock  
Charlene McDonald  
Wanda Lingo  
Victoria Risso  
Dessie Rogers  
Jeannine Coleman  
Marie Troche  
M. Gay Castleman  
Katherine Harrison  
Charles Stoner  
Edmund E. Farrell  
Edgard Parrales

MICROWIRE II — August 1972

EDITOR: Vicki Heinsheimer

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# Microwire

Published For the Employees of the Semiconductor Components Group — Mountain View/Palo Alto

## Analog Initiates TLC Program

In July, a new Analog Products Division product promotional program was introduced to over 300 members of the Fairchild field and distributor sales force. The intent of TLC, which stands for Total Linear Capability (with overtones of Tender Loving Care), is to clearly identify the Analog Products Division's product line for the field sales engineers. By concentrating on different building blocks of product information and tying the theme into promotional material, it is felt that the division will increase their awareness of the Fairchild's sales force.

The TLC poster (shown below) and seven individual product mailers with product information, product guides and designs have been distributed to all sales offices. The overall effect, which has already been experienced, is a higher sales level based on the salesmen's newly generated awareness of Fairchild's linear product line.



## First Supervisory Training Course Ended

In June, twenty-five Fairchild Semiconductor Components Group first line supervisors completed their final session in supervisory training.

Highlighting the end of the twelve-week course was an awards dinner on August 23 given in honor of the first graduating class. Each graduate received a certificate of attendance and pins for completion of the program. Also on hand for the graduation ceremony were special guests Warren Bowles, vice president and director of corporate industrial relations; Leo Contois, manager of the Components Group industrial relations; Tom Longo, vice president and general manager of the Digital Products Division; and Greg Reyes, general manager of Discrete Products Division.

The program was established in January by a group of operations' managers in Mountain View. The course covers human relations, motivation, leadership, communications, problem-solving, performance appraisal, finance, and business planning. Instructing the first course were Wayne Carlson, production manager in DIC; Jack Higbee, production manager in Bi-Polar Memory; and Jim O'Neill, corporate manager of manpower development.

"It was an extremely successful training course. The interest and enthusiasm of the participants made it a successful experience," comments instructor Jim O'Neill.

The following supervisors graduated: Zeno Gelatti, Tony Lentini, John Cartwright, Donna Bailey, Al Northwood, Mary Murdrick, Dennis Leach, Charles Patterson, Sid Demos, Hank Miranda, Clay Wilson, Lee Allee, Ron Knott, Jim Robinson, Jim Huff, Jess Duran, Pete Fletcher, John Tripp, John Herrera, Cody Dudley, Bob Smith, Joe Fulginiti, Joe Lopez and Goldie Williams.

## Fairchild Announces Birth of 3" Wafers

By Emil Glosel

Another technological milestone of progress has been achieved in the Fairchild Semiconductor Components Group. It was the successful introduction of three-inch silicon wafers into the wafer fabrication facility of the Analog Division. New techniques in wafer fabrication were developed coincident with the introduction of larger wafers. Larger furnace tubes, masking plates, alignment chucks, and epitaxial susceptors were required in the transition to the new wafers.

Along with the introduction of the larger fabrication equipment came a flurry of new process innovations. Processes had to be altered and improved to properly utilize the new wafer fabrication equipment. Operators had to be retrained in the special techniques used in handling the large wafers.

How does the three-inch wafer benefit Fairchild? Ultimately all Fairchild Analog products will be fabricated solely on three-inch wafers. The surface area increase in going from two inches to three inches is 225%. This means that for about the same amount of effort a three-inch wafer will have about 2.25 times as many circuits as present.

This can only mean greater productivity, higher yields, and a more efficient method of producing circuits.





## Assembly & Test: Fifth Semiconductor Process

Inside the 313 Fairchild Drive building is a manufacturing area that is the most highly mechanized plastic transistor manufacturing facility in the world—Fairchild's TO-92 assembly and test operation.

From the time that a scribed and broken wafer arrives at the front of the line until tested and marked units are bagged and ready for shipment, only three operator actions are required. Sophisticated assembly and test equipment handles the rest.

In the Mt. View TO-92 assembly area, under Dave Francisco, the first process is die attach. The die attach equipment developed jointly by Fairchild and K&S permits die attach at rates much greater than can be achieved with conventional manual die attach techniques. The operator visually chooses a good die, squeezes the trigger and the die attach is made. The lead frame is then automatically advanced to the next position.

Following the die attach process, the dice are carried to the lead bonding operator. This operator activity involves locating the bonding pad on the die itself. The thermocompression gold ball bond is made with the squeeze of the trigger and the post bond is automatic. The excess gold tail is removed and a hydrogen torch forms a new ball on the end of the wire for the next bond. The lead frame steps every other bond.

After the bonding, the units are processed through a controlled wash station where they are bathed in hot deionized water and isopropyl alcohol. Drying is accomplished in a nitrogen environment. Units are then ready for two baking processes.

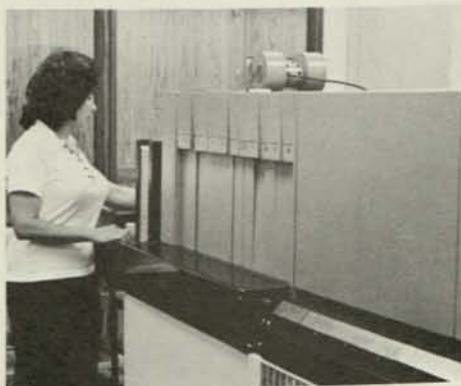
Following the second bake, the units go to molding. Units are transfer molded in a 200 ton press built for Fairchild by Inland Manufacturing, Inc., a newly formed division of Fairchild Camera and Instrument Corp. The molding compound used is specially selected silicon chosen for its purity, high temperature properties and the ease with which it molds.

Fairchild has the most sophisticated semiconductor test capability available in the industry. The tester has a long sleek body which is comprised of 12 test modules, each capable of being programmed to simultaneously perform up to 300 tests including not only conventional DC (direct current) testing but AC (alternating current) testing. The tested units are then ejected into one of 32 sort bins determined by the priorities set with the computer.

Fairchild has four TO-92 assembly and test operations—Mountain View, Hong Kong, Korea and Australia. With more than 450 employees servicing these operations, they are producing the most reliable plastic transistor package in the industry. According to a TO-92 advertising slogan, "Fairchild TO-92 is 33% more reliable at twice the standard industry power dissipation rating. At standard industry power dissipation rating, the Fairchild TO-92 is at least 25 times more reliable."

TO-82 plastic packages are used in such end products as computers, color television sets, stereos, transistorized antennas on automobiles, calculators, and digital equipment.

Following assembly and test, the semiconductor process continues to Fairchild's Quality Assurance operation.





## Fairchild Sponsors Explorer Post

Fairchild Camera & Instrument Corporation will sponsor a speciality post for boys and girls of the Explorer's Division of the Boy Scouts of America. Over 35 posts within the Stanford Area Council have been formed to familiarize Explorers with specific career interests.

Fairchild's post will be Electrical Engineering. The Explorers will meet in the evenings at the Mt. View complex on a monthly basis. A committee, made up of five Fairchild volunteers, will head the post. The committee chairman will plan programs for the Explorers with the support of other committee members. The programs will include lectures, slide presentations, and field trips to other electronic companies in the area. In addition to the regularly scheduled meetings, the committee chairman will invite guest speakers from Fairchild to discuss specific fields within engineering.

As the Explorer Post will be a continuous project at Fairchild, new Explorers will periodically join the program. If you are interested in becoming a committee member for the Explorer Post, please contact Corporate Communications on EXT. 2452.

## SEMI & SYSTEMS JOIN FORCES

The Semiconductor Components Group and the Systems Technology Division are currently working in cooperation in the international marketplace. Systems Tech, which recently had a task force in Europe, is now beefing up its sales operations abroad and members of the Semiconductor sales force are introducing Fairchild's test systems to European customers. In fact, the Fairchild Semi salesmen now use Systems Tech demonstration testers for customer device comparisons.

Getting rid of the good old American Green is about the easiest thing in the world. Everywhere you turn there's somebody ready and willing to help you. So you keep making it, and you keep spending it.

But, saving money is another matter.

That's why you should know about the Payroll Savings Plan. It makes saving about as easy as it's ever going to get. When you sign up for the Plan where you work, the amount you specify is set aside from each paycheck. That money is used to buy U.S. Savings Bonds.

The beautiful thing about the Payroll Savings Plan is that your money is saved for you before you, or anybody else, can get his hands on it.

And, now there's a bonus interest rate on all U.S. Savings Bonds—for 8 Bonds, 3 1/2% when held to maturity of 5 years, 10 months (4% the first year). That extra 3/8% payable as a bonus at maturity, applies to all Bonds issued since June 1, 1970 . . . with a comparable improvement for all older Bonds. Join the Payroll Savings Plan where you work. Make saving as easy as spending.



Bonds are sold in \$25, \$50, \$100, \$200, \$500, and \$1,000 denominations. They are insured by the U.S. Government. Bonds are a smart way to save.

**Take stock in America.**

Now Bonds pay a bonus at maturity.

## R&D Employee Develops New Dual-In-Line Plastic Design

The hottest news in semiconductor packages is a new dual-in-line plastic design developed by Ralph Olberg of the R&D Research Staff. It is first being used for the Analog Product Division's new uA706 5-watt audio amplifier IC. The new package, called DIPP for dual-in-line power package, greatly reduces moisture problems experienced with other plastic power packages and can dissipate up to 2 watts without any added components. With additional heat-sinking, the DIPP/706 combination can provide 5.5 watts continuous output. This specially formulated epoxy material used in the package has a thermal expansion coefficient that matches that of the IC die. In reliability testing, the DIPP has proved to be several times better than the next best plastic power packages currently available.



## New Signs Instruct Emergency Exits

Have you noticed the new directional exit signs located throughout the corridors? Lee Neal, fire prevention supervisor, arranged for "THIS WAY OUT" signs to be posted in all Mt. View buildings. The new signs' purpose is to guide visitors and employees to the nearest exit if an emergency should arise.

During an emergency, all exits can be used to evacuate the building. However, during normal operating conditions, employees will use the presently established exit ways only.



Noticing a new emergency exit sign is Sharon Shay, R&QA Inspector for Bi-Polar Memory in Digital Products Division.

# Weight Watcher Program Comes to Fairchild

By Helen Hutson, R.N.

Do you feel overweight . . . sluggish . . . uncomfortable . . . but can't stand the thought of dieting? Then join Fairchild's Weight Watcher Program.

On September 19th at 8:00 p.m., the first class will start for first and third shift (male and female) employees. Second and third shift employees' class will meet on the same date at 1:00 p.m. Classes will be held in the Personnel Building at 465 National Avenue in Mountain View. On a weekly schedule, the first class will last 1 1/2 hours and the following classes one hour.

The Weight Watcher Program provides recipes, counselling and individual and group instruction aimed at weight reduction and maintenance. There will be no visitors or guests at any of the meetings. To support the Weight Watcher Program, the initial visit will be \$7 and each additional visit \$3. These are standard prices for all Weight Watcher groups.

The introduction of the Weight Watcher Program will be handled by Fairchild's Medical Department in cooperation with Barbara Smith, cafeteria manager, and Fran Rodriguez, food administrator.

All Bay Area divisions, including Systems Technology, are invited to join the program. If you are interested in becoming a weight watcher, please contact Helen Hutson on EXT. 3711.



# JOS Promotes

**Margie Lopez** from Process & Device Specialist to Training Technician  
**Lupe Alvarez** from Assembler A to Master Mask Making Specialist  
**Carol Balegno** from Landscape Attendant to Prod. Maint. Clerk  
**Paul Rocha** from Mechanic B to Mechanic C  
**John Fisher** from Mechanic B to Mechanic Spec.  
**Olga Chibras** from Assembler A to Assembler B  
**Delma Hauser** from Assembler A to Assem. Work Leader  
**Gloria Kirby** from Assembler A to Inventory Control Clerk  
**Harry Handly** from Mechanic B to Mechanic Spec.  
**James Krider** from Electronic Technician to Sr. Electronic Technician  
**Robert Gardner** from Electronic Technician to Sr. Electronic Technician  
**Bonnie Knox** from R&QA Inspec. Spec. to Master Mask Mak. Spec.  
**Betty Hunter** from Assembler A to R&QA Inspec. Spec.  
**Angelina Ortega** from Assembler B to Proc. and Device Spec.  
**Adonna Alexander** from Material Handler to Assembler B  
**Mattie Jordan** from Assembler A to Electr. Inspec. B  
**Elinor M. Ahmad** from Assembler A to Assem. Work Leader  
**Barbara Hays** from Assembler A to Assembler B  
**Lupe Quinones** from R&QA Inspector B to Engineering Operator  
**Marie Lattman** from Assembler B to Assem. Work Leader  
**Margaret Piontek** from Assembler B to Process & Dev. Spec.  
**Glenda Tamimi** from Assembler A to Process & Dev. Spec.  
**Carmen Lowder** from Electroplater A to R&QA Inspector Spec.  
**Filomena Sousa** from Assembler B to Process & Dev. Spec.  
**Marjorie M. Cook** from Assembler A to Assembler B  
**Helen Halmi** from Assembler B to Test Specialist

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## Employees' Activities Association News

Fairchild Employees' Activities Association (F.E.A.A.) provides employee discounts at local amusement parks, recreational areas, and businesses. Additionally, discounts are provided at some Southern California recreation areas.

*Local Area:* Frontier Village, Santa Cruz Beach and Boardwalk, Santa's Village, San Francisco Bay Cruise, Roaring Camp, and Nite Life.

*Los Angeles and San Diego Area:* Sea World, Movieland Wax Museum, Knotts Berry Farm, Disneyland, Palm Springs Aerial Tramway, San Diego Zoo, and Busch Gardens.

*Local Business:* Capitol Tire, Keith's Tire and Brake Service, Gerard Tire, Palo Alto Tire and Brake Service, House of Karlson, Dahnken, Pacific Car Rental, Carriage Trade Dinner Club.

Discount cards may be obtained from the following employees:

NAME	BUILDING #	MAIL STOP	EXTENSION
LYDIA LOPEZ	2	2-233	2015
MAIDA JIMENEZ	3	3-414	2771
JENNY BOCHMAN	13	13-001	3602
MARY JANE O'BRIEN	14	14-1070	3664
RUDY ROBLES	18	18-221	5579
MARGARET ELLIOTT	19	19-110	5642
JUDY CURIEL	20	20-1788	2838
SHIRLEY ADAMIK	20	20-2805	3741
JAN DAHLIN	Systems Tech	40-27	16-215
BONNIE LEWIS	MOD/R&D	MOD	17-2601
JESS REEVES	3rd Shift	999	2555

## Moving Up

### DIGITAL PRODUCTS DIVISION

**Jim Bartlett** from Staff Engineer to Manager of Design & Test Engineering

**Pat Castro** from Senior Product Device Engineer to Member of Research Staff

**Conrad Dell-oca** from Staff Engineer to Manager of Process Development Engineering

**John Kardash** from Manager of Circuit Design to Senior Staff Engineer

**Jack Livezey** from Supervisor Engineer LSI to Member of Research Staff

**Hank Miranda** from Production Supervisor B to Production Supervision Group Leader



Mollie Shears (left) Secretary in the Labor Relations Department, and George Pressley, Personnel Administrator at the San Rafael plant, greet visitors to the Fairchild booth at Black Expos '72 which was held at San Francisco's Brooks Hall, September 7-10. The exhibition featured art works by Black artists, entertainment by Black performers including Ray Charles, and exhibits by Bay Area companies interested in doing business with or employing members of the Black community. Mollie and George distributed Fairchild literature to the exposition visitors and answered questions about the company's products and employment practices.



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Published For The Employees of the Semiconductor Components Group — Mountain View/Palo Alto

## "Thanks To You It's Working"

Approximately 1,500 Fairchild employees, working in Santa Clara County, gave their Fair Share in the 1971-72 United Fund campaign. Thanks to them and others like them the United Fund has been able to support more than 100 health and community agencies. Five employees were asked why they supported the campaign whole heartedly on the Fair Share Plan.

The Fair Share Plan amounts to one hour's pay per month for those with incomes of under \$10,000, and 1% for those with incomes of over \$10,000.



Mary Kato, process & device specialist in Analog, feels if her Fair Share will help someone, she will continue to do it. Mary has been a Fair Share giver since 1968.



Pat Ahumada, international shipping clerk in Shipping & Receiving, has given her Fair Share for three years. This year will be no different. She has confidence in the United Fund, knowing that her money will be used where needed.



Roger Arnold, production manager in Mask Making, is eager to give his Fair Share each year. He believes in helping people by donating a certain amount of his money to community agencies. Roger knows it will be allocated to the agencies who need it most. He feels there may be people working at Fairchild who have and are using one or more of the United Fund agencies. It gives him personal satisfaction to help a co-worker.



Dr. Rudy Dyke, section manager of CCD Opto Electronics at R&D, attended meetings of the Community Council of Santa Clara for ten years. He became aware of how the United Fund disseminated money to each agency. Rudy believes in sharing with people less fortunate. The United Fund has opened the door for Rudy to give on the Fairchild Fair Share Plan.

## Suggestion Program Pays Off

A \$100 Savings Bond was awarded to Leo Chavez, mechanic specialist leadman in Analog Products Division on Monday, October 2nd.

Leo designed and installed an alignment exposure light adjustment device for the photo resist machines used in wafer fab areas. This device simplifies the adjustment of the exposure light intensity, and insures a more consistently accurate setting of the alignment tool.

Using this method will not only insure proper light parameters, but operators will be able to spend time on good wafers. In addition, it frees technical personnel from time consuming adjustments on the alignment tool.

Your suggestions will bring you extra money and recognition. Mail suggestions to Terri Muessig, 7-604 or call EXT. 2148 for information.



Leo Chavez (left) receives his suggestion program award from supervisor Paul Daudet.



## Mark & Pack: Seventh & Final Semiconductor Process

After completing R&QA tests, the units are sent to each division's Mark & Pack operation for identification codes and packing.

In the MOS Mark & Pack area, under Jim Molinari, four women handle the dual operation of marking and packing units. Charlene McDonald, assembly work leader, Helen Silva, Goldie Vasileff, and Olga Chribas are responsible for marking all MOS devices with necessary data for shipping to customers.

When units arrive in Mark & Pack, they are placed on a scheduling shelf for marking instructions. After the instructions have been received, the units are logged and prepared for marking.

The marking operation is done on a machine shaped like a microscope but with inked rollers. In black ink, the machine stamps the Fairchild logo, MOS identification, device and grade type, package type, and the date code (work week and manufacturing year). At this point, the operator inspects her markings against the scheduled instructions for possible mistakes. If the ink has been smeared or letters and numbers are crooked, the operator must correct it by chemically removing the wet ink and placing the device in the machine again. The units are then deposited in an oven at 302°F for half an hour to dry the ink.

Occasionally, devices are electrically damaged during the marking or baking process, therefore, they must go through a final QA electrical test. Damaged devices are completely retested. If they don't meet the standards, the devices are scrapped.

Before units can be packed, the leads attached to each device must be straightened and inspected for visual rejects. These units are packed with carbon impregnated foam or conductive shunts and other materials to keep the units from being damaged en route. The shunts and foam serve to protect the devices from damage by static electricity.

Devices are packed together in Fairchild labeled boxes. The boxes are marked with unit numbers, date codes, and the division's name.

MOS devices are shipped to domestic distributor warehouses, directly to

customers, or to European distribution points. Fairchild's MOS components are used in such end products as television sets, desk calculators and credit card verifiers.



Olga Chribas marks devices in a 64 Lead Flat Package which is done on a special marking machine. An operator can mark up to 2100 units a day.



Charlene McDonald, assembly work leader, places units in 302°F oven for half an hour to dry the markings before final electrical test.



Helen Silva straightens leads on devices prior to the actual packing process. Approximately 1000 units can be straightened per hour.



Packing TO-5 units in conductive shunts is Goldie Vasileff. There are usually 250 units packed in one container for shipping.

## New Ad Campaign Has Unique Appeal

The unique display ads aimed at prospective Fairchild employees have been running in Sunday editions of all local Bay Area newspapers. These ads are designed to inform prospective employees in the area about job opportunities at Fairchild. The second in a series of ads scheduled for the newspapers describes Sue Scott's (pictured) views on the Job Opportunity System which opened new career opportunities for her.



Sue has moved up from Assembler B to Intermediate Clerk in the order service department. Sue used the JOS system to gain her new job. JOS was established to provide all Fairchild employees with company-wide career advancement opportunities. Is it working? Sue thinks so. "I really believe in JOS because it provides advancement from within the ranks. I hope others will realize the benefits they can achieve through JOS at Fairchild." If you have a friend or relative who would like more information about employment and promotion opportunities for wafer fab operators, electronic technicians, and many other occupations at Fairchild, tell them to contact the Fairchild Employment Office, 962-3396.



## Employee Foresees Space Age Automotive Gear

In the October 5th issue of the San Jose Mercury News, Bob Hood, Fairchild manager of automotive development, was interviewed on automotive electronics and how they will affect the cars and roads of the future.

Bob predicted that car buyers may eventually be informed of the vehicle's condition or approaching traffic from a glowing, computerized dash-board display. He also feels that electronic roads lie in the future.

"I think that by the 1980's we will have several automatic highways around the country," declares Bob. In 1966, Bob was a member of the crew that began work to put electronics into the automotive industry.

In the last few months, Bob and his staff have developed electronic devices that are now available to auto manufacturers. The prototype devices are being used in test cars at Fairchild and major automotive firms.

The future spectacular semiconductor controls include electronic

automatic transmissions, anti-skid controls, tire pressure monitors, and communications systems that could warn the driver that an emergency vehicle is approaching.

Another major automotive breakthrough, now under study, will come in two to five years. It is a collision avoidance system—a detector to awaken a dozing driver and electronically-controlled air bags for collision cushion.

In addition to many people in product groups such as MOD, MOS, and LIC engineering and production, Bob Trabucco, Dave Krupp (deceased), Ron Eichorn, Mike Staal, Jim Madden, Norm Sturn, Larry Kendall, Don Pezolo, Alene Wallace, and Jack Geisinger are the key people in Fairchild's automotive commitment.

With government demands forcing auto makers to equip cars with protective devices, Fairchild, Bob Hood and his staff will be involved totally in the auto of the future.



## Employee's Son Breaks Records

By Orban Wilds

Literally thousand and thousands of people are becoming back-packing enthusiasts. In fact, sportswriters concede that it has passed the "fad" stage and is here to stay.

In 1970, Eric Ryback, age 18, of Michigan, made the first complete (in one summer) trek of the Pacific Crest Trail alone, which he describes in his book: "The High Adventure of Eric Ryback," making it from Canada to Mexico in 132 days. However, 1972 has been the best year for "firsts" set by back-packers. Mary Carstens and Jeffrey Schmukler (both of Santa Rosa, Calif.) left the Mexican border on April 11th for their journey to Canada. One hundred and sixty-one days later, they reached Canada. Mary became the first woman to ever complete the Trail in one season.

On June 3rd, Henry Wilds, the son

of Marilyn (DIC Assembly) and Orban Wilds, and a senior at Irvington High School in Fremont, left the Mexican border and trekked into E. C. Manning Provincial Park in Canada 110 days later. He completed the 2,437 mile Pacific Crest Trail alone on September 20th. At age 17, this means Henry is the youngest, and fastest, to make the P.C. Trail alone from Mexico to Canada. He was the second to make it alone in back-packing's short history.

Henry walked about 1200 miles on his first pair of boots and 1400 miles on the second—not to mention what he was walking on—the earth's roughest trails in the High Sierras and the Washington-Oregon Cascades. His pack often weighs 80 lbs. Henry had several scrapes with rattlesnakes, lava beds, 109 degree heat and 12 below zero weather with snow. In essence, you can't allow the trek to be regarded

as a Sunday afternoon hike.

When Henry started his journey, he was 16 years old and weighed 186 lbs. By the time he reached his eighth "food-drop" in Cascade Locks, Oregon, he was 17 and had evaporated down to 144 lbs. of skin, muscle and bones. To Henry it was worth all the encounters with nature. After all, he broke two back-packing records.



Marilyn Wilds and her son Henry relax after his long back-packing journey from Mexico to Canada.

## Odds 'n Ends

### FOR SALE

**Four Ansen Mag wheels**, 6 x 14 with lug nuts, never been used. Asking \$110. Call EXT. 3627.

**1966 Sunbeam Alpine Sports Car**—convertible, low mileage, 25 M.P.G., in excellent condition. Call EXT. 3913.

**1966 VW Bug**—brand new engine with warranty, new tires, sunroof. Asking \$750 or best offer. Call John Leith (Fremont) 656-0442 after 7 p.m.

**1963 Pontiac Convertible** with radio, heater, 4 mags, good second car. Asking \$100. Call Bev on EXT. 2915.

**1972 Porsche 914** in excellent condition, 10,000 miles left on warranty, 8-track stereo. Asking \$3,775. Call Phil Lulewicz on EXT. 4115 or (408) 353-1916 after 6:30 p.m.

**Girl's Bedroom Set** with canopy bed, extra trundle bed, hutch, 3-dr. dresser base, 3½ years old, antique yellow. Asking \$250. Call 736-7457.

**9 Ft. Fiberglass Sloop** complete with oars, life jackets and car top carrier. Asking \$400. Call EXT. 2304 (days) or 591-1840 (evenings).

**Home in Northeast Foothills, San Jose**—very clean Colonial 2 story home, 5-br. (1 now used as formal dining room), 2½ baths, shake roof, used brick fireplace, hardwood floors, w/w carpeting, drapes, AEK (self clean oven), corner lot, large free-form patio, exposed aggregate, all mature trees and shrubs, easy care, fenced service area all concrete, large storage building n service area. Asking \$33,500. Call 287-9252.

### WANTED

Buy girl's 3-speed, 24-in. bike for reasonable price. Call 948-7741 after 9 p.m.



## JOS Promotes

**Peggy Russell** from Mask Designer A to Mask Designer B

**Joy Collier** from Assembler B to Process and Device Specialist

**Donna Rennels** from Assembler A to Assembler B

**Lee Lobo** from Assembly Work Leader to Production Scheduler

**Elizabeth Tan** from Assembler B to Process & Device Specialist

**Jean Shade** from Assembler A to R&QA Inspector B

**Becky Patton** from Assembler B to Assembly Work Leader

**Linda Huerta** from Assembler A to Inventory Control Clerk

**Janet Odom** from Assembler A to Assembler B

**Irma West** from Assembler B to Process & Device Specialist

**Sally Escamilla** from R&QA Inspector B to Mask Making Specialist B

**Linda Arrowood** from Assembler A to Assembler B

**Mary Hughes** from Accounting Clerk I to Accounting Clerk II

**Mary E. Harmon** from Assembler A to Assembler B

**Wilma Smith** from Intermediate Clerk to Senior Clerk

**Nancy Lee Metz** from Assembler A to Assembler B

**Ruth Camacho** from Assembler A to Assembly Work Leader

**Barbara Matajcich** from Assembler A to Assembler B

**Barbara Harmon** from Assembler A to Training Technician

**Bruce Welch** from Mechanic B to Mechanic C

**Jean Santangelo** from Accounting Clerk II to Assistant Accountant

**Mildred Baumeier** from Assembler B to Process & Device Specialist

**Arlene Altman** from Assembler B to Process & Device Specialist

**Jean Windham** from Inventory Control Clerk to Assembly Work Leader

**Fay Massoletti** from Intermediate Clerk to Expeditor

**Mary Branco** from Assembler B to Assistant Electronic Technician

**Virginia Agard** from Assembler B to Process & Device Specialist

**Siglinda Gottschlich** from Assembler B to Assembly Work Leader

**Gerry Thon** from Inventory Control Clerk to Data Reconciliation Clerk

**Andrew Schweighardt** from Mechanic B to Mechanic C

**Carmen Martinez** from Assembler B to Assembly Work Leader

**Patsy Thornton** from Master Mask Making Spec to Mask Designer B

**Mary Bolz** from Secretary to Executive Secretary

**Evelyn Pangelina** from Assembler B to Process & Device Specialist

## F.E.A.A. NEWS

Jean McNeil has been appointed temporary Assistant Secretary to the Fairchild Employees Activities Association Board of Directors.

Second and third shifts need representation on the F.E.A.A. Board of Directors. If you are interested in being a member, please contact Marge Hartman at MOD/R&D on EXT. 2047. Meetings, held monthly at the MOD/R&D facility, are optional. Minutes of the meetings will be sent to you each month. Representatives are needed in all buildings at the Mountain View complex.

A New Car Purchase Plan is now available for members of the Fairchild Employees Activities Association at Fairchild.

Through the Plan arrangements have been made with United Buying Service Corp. for members to purchase new cars for "Fleet Price." Cars included in the plan are:

<b>Buick</b>	<b>Ford</b>
<b>Buick-Special</b>	<b>Imperial</b>
<b>Chevelle</b>	<b>Lincoln</b>
<b>Chevrolet</b>	<b>Mercury</b>
<b>Nova</b>	<b>Oldsmobile</b>
<b>Camaro</b>	<b>Opel</b>
<b>Cougar</b>	<b>Plymouth</b>
<b>Chrysler</b>	<b>Pontiac</b>
<b>Comet</b>	<b>Rambler &amp; American</b>
<b>Continental</b>	<b>Thunderbird</b>
<b>Dodge &amp; Dart</b>	<b>Valiant</b>
<b>Mustang</b>	<b>Trucks</b>

### And many Imported Cars

Under the purchase plan, there are participating dealers throughout the Greater Bay Area. They are Authorized New Car Agencies and deliver all vehicles with full factory warranty. Trade-ins will be accepted. Any member who wishes to take advantage of this plan, must first decide the make of the car he or she wants. To obtain a Purchase Certificate for the specific car selection, contact United Buying Service of the Greater Bay Area, 4 West Fourth Avenue, San Mateo, California 94402. Telephone: (415) 342-2060.

On September 11, the Monday Night Bowling League held their first meeting. They set up a thirty week schedule for the fourteen teams participating this winter. Also on the agenda was the election of officers. Newly elected officers for the 1973 season are: President, Brent Knudson; Vice-President, Barbara Butler; Treasure, Clemmie McGee; and Secretary, Marian Oswald.

## MOVING UP

### MOS PRODUCTS DIVISION

**John Hambidge** from Processing Engineer to Manufacturing Engineer

**Ray Zarnegar** from Supervisor Product Engineering to Manager of MOS Product Engineering

**Jerry Faerber** from Senior Process Engineer to Supervising Engineer

**Jerry Schoonhoven** from MOS Production Control Manager to MOS Operations Manager

**Roger Boates** from LSI Engineer B to Senior LSI Engineer

**Cory Chan** from LSI Engineer B to Senior LSI Engineer

### ANALOG PRODUCTS DIVISION

**Janita Flud** from Production Assistant to Production Supervisor A

### MARKETING

**Jary Stahl** from Customer Services Coordinator to Customer Satisfaction Administrator

A fund was recently established to give summer jobs to deserving high school or college students looking for direct laboratory experience in medical electronics. This work was one of the many interests of Dave Krupp, a member of Fairchild's Automotive Products group, who was killed in an aircraft accident on July 2, 1972. Friends and associates of Dave's or those wishing to contribute to a worthy cause, should send their contributions to: The David M. Krupp Memorial Fund, Palo Alto Medical Research Foundation, 860 Bryant Street, Palo Alto, California.

## R&D

### October Service Awards

**15 YEARS**

Dick Parker

**10 Years**

Gopala Reddi

MICROWIRE II—October 1972

EDITOR: Vicki Heinsheimer

REPORTERS: Geri Hadley, Marge Killian, Millie Dawson, Clint Haines, Margaret Elliott, Pat Alfred, Lorette Hayes, Bev Delos Santos, Judy Wagner, Marlene Herman and Edie Beem.

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# Microwire

Published For The Employees of the Semiconductor Components Group — Mountain View/Palo Alto

## New Ideas Roll In To Suggestion Program

Dianne Leavitt, process & device specialist in bipolar memory, Digital Products Division, was awarded a \$100 Savings Bond by Fairchild's Suggestion Program Committee.

Dianne's award-winning idea was to build shelves with dividers inside a small box placed in an upright position. These shelves would hold unexposed wafer runs during the alignment process. In the past, both unexposed and exposed wafer runs were placed in the same area which caused a mix-up. When this happened, the operator would have to single out the exposed from unexposed which resulted in production loss.

"I was once an aligner and I know how it feels to be crowded with thousands of wafer runs and not knowing which is what," comments Dianne. "You can't work like that and maintain good service."

Dianne's suggestion will ensure not only organization but an increase in production for the align operators in bipolar memory.



Hank Miranda presents a \$100 Savings Bond to Dianne Leavitt for submitting a winning suggestion. Dianne's fellow employees congratulate her for an outstanding idea.

## "Pride" Patch Contest Held In Power Assembly

Thirty-two production operators, representing Power Assembly's three shifts in Discrete Products Division, became Van Goghs during a "pride" patch design contest. The girls submitted various designs ranging from cute cartoons to highly sophisticated drawings. After all entries were in, the designs were posted in the area and the girls voted on the design they most wanted as their patch. Winners were announced on Monday, October 16.

Cecelia Shull, second shift assembly work leader, submitted the winning design—Snoopy of "Peanuts" fame, carrying a large sign with "Power Assembly" inscribed on it. Helen Stein, third shift assembly work leader, was announced as second place winner for her outstanding design. Her design resembled a family shield with Power Assembly as the name.

The first and second place winners will be escorted to dinner at the Velvet Turtle by Ralph Miller, operations manager; Don Trenholm, power assembly manager; Cliff Heintz, manufacturing manager; John Bush, second shift supervisor; and Enzie Crabtree, third shift supervisor.



Pictured above are the various designs submitted to the Power Assembly "Pride" Patch Contest.



Cecelia Shull (right) and Helen Stein (holding their designs) pose with co-workers who also entered the contest.

## Lost & Found

Have you lost or found articles on the Fairchild premises? The Lost & Found box is located in the Guard House behind buildings 1, 2, 3, 4. They have such items as keys, glasses, pocketbooks, sweaters, gloves, watches, lighters, earrings, etc. If you have lost or found something, please contact the Guard House on Ext. 5145.

\*\*\*\*\*

## Holiday Calendar

- Nov. 23 (Th)—Thanksgiving
- Nov. 24 (F)—Floating Holiday
- Dec. 25 (M)—Christmas Day
- Dec. 26 (T)—Instead of Christmas Eve
- Jan. 1 (M)—New Year's Day

## Salesman Of The Month Announced

Bill Straus, Hollywood Sales Office, was named Field Salesman of the Month for August. To rebuild Fairchild's ability to do business at an account is always a challenge and Bill faced that challenge and succeeded. Because of his professional approach, Fairchild has added business to a large account.

September Sales of the Month was Paul Sullivan, Wellesley, Massachusetts Office. Paul displayed professional abilities that have resulted in increased sales at each of his assigned accounts. In addition to his own accounts, Paul received several more due to manpower shortage in the sales office. Within 60 days, he doubled Fairchild's business.



## TOM DYER



### GETS INVOLVED AT FAIRCHILD

Continuing the new Fairchild Ad Campaign, Tom Dyer was selected to be featured in one of the recruiting ads as a result of his outstanding participation in community involvement. The ad shown below will appear in the Sunday editions of Bay Area newspapers.

Tom is a product marketing engi-

neer at Fairchild. He is also one of the many Fairchild people who are actively involved in making our community a better place to live and work. During the past two years, Tom has headed up the Southwest YMCA Drug Abuse Prevention home discussion series which focuses on improved family communications. Sponsoring worthwhile organizations like the YMCA through United Fund contributions is another way Fairchild people lend a helping hand. Last year's United Fund drive resulted in 75 percent participation with some 3800 of our people voluntarily contributing over \$38,000. Additionally, Fairchild acted as area coordinator for United Fund's Mountain View campaign.

We're proud of employees like Tom Dyer who feel community involvement is as important as career involvement. Says Tom, "I like being part of a company that actively supports its employees in outside community activities." This active role is typical of the continued participation of our engineering, administration and production people in organizations and activities that benefit the community. If you're seeking a more rewarding career with a company that gets involved, send the coupon below or call us.

## New Service Bridging Policy Implemented

The Semiconductor Group is in the process of implementing a new policy which will allow employees to benefit from all of their service with the company even if it has been broken by lay-off resulting from a reduction in force; and in some instances, employees who have terminated and returned may benefit from the new policy.

Employees who are laid off and return to work as a result of recall within one year will receive full credit for past service.

Ex-employees who are rehired will receive back service credit if they had at least two years of continuous service during their original employment. However, rehired employees must wait one year from the date of their re-hire to receive credit for their original service. The maximum service break for employees who are rehired to benefit from the bridging of service is four years.

Rehired employees will be credited with the full term of their last period of prior service rounded to the nearest full month. Employees returning from layoff will receive full credit for past service.

## Fire Fighting Classes Offered To Employees

Fairchild is just as susceptible to fires as any other company. Fairchild uses fuel, heat and oxygen—the three basic ingredients for a fire. To eliminate the possibility of fires, Fairchild's Fire Safety department is holding classes at the Mountain View fire department on Whisman Road.

The classes are held to instruct Fairchild employees (production and maintenance personnel) on how to operate the fire extinguishers, gas masks, self-contained breathing apparatus, and on-the-job safety. Topics covered in the classroom are general house-keeping, flammable liquids, unsecured pressure cylinders, broken tile, leaking pipes, slippery walking surface, cleaning acid spills, etc.

Presently, nine classes have begun instruction from Lee Neal, Fire Safety Supervisor for an unlimited number of weeks. Classes are held on Tuesdays and Thursdays. There are morning and afternoon sessions with field trip par-

ticipation. Sessions can be scheduled for your convenience. Departments are encouraged to sign up for group instruction. Supervisors or individual employees should contact Lee Neal on Ext. 3853 for registration.



Lee Neal explains to Plant Maintenance personnel about magnesium fires. These particular fires cannot be put out with your regular fire extinguishers.



Plant Maintenance class practice with the CO<sub>2</sub> and dry powder extinguisher for a typical gasoline fire.

## Odds 'n Ends

### FOR SALE

**1968 XKE Jaguar**—AM/FM radio, midnight blue, auto. trans., wire wheels, in excellent condition. Asking \$3,200. Call 739-3817.

**House in Los Altos**—by owner at 1881 Newcastle, 2,000 sq. ft., custom built 3 br., 2 ba., din. & laundry rooms, 2 fireplaces, cpts, drps, heated pool, landscaped, nr. schools & shops. Open house on Saturday & Sunday from 1-5 p.m. Asking \$57,000. Call ext. 3156 or 964-1792.

### BABYSITTING

Linda Suda, a former Fairchilder, is interested in babysitting for Fairchild day shift employees. For one child \$25/wk. She is located in Mountain View between Fremont and El Camino Hospital. Call 964-2907.

Pros and Cons prepared by the League of Women Voters on the measures which will appear on the November 7 Santa Clara County ballot have been distributed to all cafeterias. A small quantity of material on measures that will appear on ballots is available in the Employee Communications Office, Ext. 3327.



# Fairchild's Most Popular Sport: Bowling

"Every time I make a strike or spare, it makes my evening."

"To me bowling is the most relaxing sport for a week night."

"I go to the bowling alley directly from work so I can practice before the league starts."

"Actually, it's the only sport my husband and I can enjoy together."

"I joined the Fairchild Mixed Bowling League to brush up my game and to meet other employees."

"I've been on the Fairchild Bowling League for 11 years. It's great fun plus you always meet new people."

There are those who enjoy bowling; and there are those who *really* enjoy bowling. Fairchild's bowling league has been around just about as long as Fairchild Semiconductor. Eleven years ago, several co-workers formed what is now the Fairchild Mixed Five Bowling League. It blossomed into the most popular sport at Fairchild. Each year the participation varies in numbers from 150 to 70 employees, spouses, and guests.

The 1972-73 season is under way. The 28-week schedule began in September at Cherry Bowl in Sunnyvale. Fourteen teams are represented from Mountain View, Systems Technology, R&D, and MOD facilities.

The Monday Night Mixed Five Bowling League is divided into halves. The first half winning team plays the second half winning team in the Sweepstakes on April 23, 1973. After the "Sweepers" a banquet is held for the presentation of trophies. Trophies are awarded to the top three teams and individuals with the highest series and highest game. The "Most Improved Bowler" awards are presented to a female and male.

During the season, two tournaments are scheduled—the State and Nationals. Fairchild is always represented at each of these tournaments. This year Fran La Valley (Systems Tech), Diane Eastman (wife of a Systems Tech employee), Vicky Risso (Mtn. View), Timmie Porroz (Systems Tech) and Marian Oswald (Corporate) are entering the National held in April in Las Vegas.

According to several bowlers, team names are important to many of the bowlers. "Nite Owls," "Rainy Days & Mondays," "Unpredictables," "Super Ragarms," "Square Ball" are just a few wild names claimed by the teams.

Fairchild bowlers come in all sizes, shapes and spirits. Some are excellent bowlers and some are beginners, but they all enjoy the sport and the com-

petition. It's one sport where women can feel just as competent as men. Many Fairchild bowlers come to have fun, meet co-workers, relax, and enjoy an evening out. After all, bowling is the number one sport at Fairchild . . . just ask Jim Boyd, Dale Turner, Barbara Butler, Bill Towler, Jim Vinzant, Ed Nunes, Ann Lima . . .

## MONDAY NIGHT BOWLING RESULTS—

Team Standings	Won	Lost
Super Ragarms	19	5
Alley Kats	18	6
No. 3	17.5	6.5
No. 14	15	9
Rainy Days & Mondays	14	10
Nite Owls	14	10
Tenth Framers	11.5	12.5
No. 5	11	13
Hot Shots	11	13
Climbers	10	14
Unpredictables	8	16
Super Lucky	7	17
Just Us	6.5	17.5
Square Balls	5.5	18.5



## An Introduction To Korea and Semikor

D. K. Chun, personnel manager at Fairchild Semikor in Seoul, Korea, visited Mountain View in late October.

During his meetings with members of Fairchild Management, he introduced California Fairchilders to employees in Korea through descriptions of the country's history, culture and contemporary business practices.

Fairchild produced the first transistor at Semikor on February 25, 1967. By the end of that year, more than 600 employees were members of Fairchild in Korea. That year, Semikor shipped \$741,000 in semiconductor devices. In 1972, the Korean plant anticipates shipments of well over \$6 million. Today the Semikor activity employes more than 2,500 people and is growing daily. Its peak employment occurred in 1969 when 3,537 employees were working on three shifts. The plant continues to operate round-the-clock, six days a week and is quickly outgrowing its existing facility. Plans are underway to add another, smaller building adjacent to the existing plant to house administrative personnel in order to free additional space in the existing facility for production.

Semiconductor operators who make up the greatest proportion of the Semikor workforce are primarily young, single women; many of whom have migrated from the country to find jobs in Seoul. (Married women in Korea do not work outside the home.)

Many of the Fairchild plant's personnel practices are determined by government rulings, including the necessity to maintain a Home Guard military unit made up of plant employees. Approximately 180 Fairchild employees make up the Semikor unit and report for military training once each quarter to be ready to defend the country from invaders, if necessary.

Seoul was destroyed and rebuilt twice during the Korean conflict; a reflection of the tenacity of the Korean people. The same quality is demonstrated in Fairchild's continuing improvement in operator production in Korea as they attempt to outdo last month's records. "It is difficult," reveals D. K. Chun, "to convince many employees to take vacations, they become so involved with their jobs."



# JOS Promotes

**Irene Schuler** from Senior Clerk to Material Planner  
**Masae Ost** from Process & Device Specialist to Mask Making Specialist B  
**Judy Rocha** from Assembler B to Process & Device Specialist  
**Carolyn Kay Gullo** from Senior Clerk to Graphics Illustrator  
**Regina Mogueillansky** from Assembler B to Engineering Operator  
**Tillie Baca** from Assembler B to Process & Device Specialist  
**Jacqueline Riley** from Process & Device Specialist to Assembly Work Leader  
**Lucil Rodrigues** from Assembler B to Assembly Work Leader  
**Marilyn Noddin** from Assembler A to Process & Device Specialist  
**Felice Phipps** from Assembler A to Process & Device Specialist  
**Margaret Flores** from Assembler B to Laboratory Technician  
**Carrie Cardona** from Assembler A to Assembler B  
**Stella Molter** from Assembler A to STS Training Instructor  
**Jackie Cassetta** from Assembler B to Mechanic A  
**Geneva Smith** from R & QA Inspector B to R & QA Inspector Specialist  
**Virginia Holsopple** from Electronic Assembler B to Probe Repair Specialist  
**Mary Lopez** from Process & Device Specialist to Assembly Work Leader  
**Janet Ramey** from Assembler A to Assembler B  
**Verna Riemer** from Process & Device Specialist to STS Instructor  
**Oilda Cabeza** from Assembler A to Assembler B  
**Carol Tenneson** from Accounting Clerk I to Accounting Clerk II  
**Anita Zumel** from Assembler A to QA Inspector B  
**Gloria Hansen** from Assembler A to Assembler B  
**Mary Kato** from Process & Device Specialist to Lab Tech  
**Mary Ann Gillikin** from QA Inspector A to Senior Clerk  
**Juanita Powley** from Assembler B to Assembly Work Leader  
**Diane Granado** from Clerk to Senior Typist  
**Doris Abel** from Assembler B to Assembly Work Leader  
**Marie Carreiro** from Process & Device Specialist to Assembly Work Leader  
**Rosemarie Turgeon** from Assembler B to Process & Device Specialist  
**Maria Magano** from Process & Device Specialist to Assembly Work Leader  
**Andrea Wild** from Assembler A to Assembly Work Leader

**Chris Alhona** from Assembler A to R & QA Inspector B  
**Janet Demaree** from Assembler A to R & QA Specialist  
**Gerry Pepper** from Assembler B to Assistant Lab Tech  
**Rose Brown** from Assembler A to Assembler B  
**Joyce Pink** from Assembler A to Inventory Control Clerk

## Nov. Service Awards

### TEN-YEAR AWARDS

Lillie McDonald  
 Carmen Delacruz  
 Norman Sturm  
 Thomas Acton  
 Johnnie Polk  
 Betty Lax  
 David Pilling  
 MaryAnn Garcia  
 Edmond Beaman  
 Loretta Gard

### FIVE-YEAR AWARDS

Pete Fletcher  
 Helen Hernandez  
 Marie Lattman  
 Carmen Trujillo  
 Saundra Barber  
 Judy Hayes  
 Dorothy Daly  
 Mary Whelan  
 Geneva Rizzuto  
 Earl Bishop  
 Therese Reinhardt

## MOVING UP

### MOS PRODUCTS DIVISION

**John Hambidge** from Process Engineering Manager to Manufacturing Engineering Manager

### ANALOG PRODUCTS DIVISION

**Hester St. Clair** from Production Assistant to Production Supervisor A  
**Lori Jennings** from Production Assistant to Production Supervisor A  
**Lucy Kirk** from Production Assistant to Production Supervisor A  
**Harriet Kendall** from Customer Service Coordinator to Production Controller

### INTERNATIONAL

**Walt Derrington** from Plant Controller (Korea) to Plant Controller (Hong Kong)

### DISCRETE PRODUCTS DIVISION

**Maxwell Maydew** from Plant Controller (Mtn. View) to Plant Controller (San Rafael)

### DIGITAL PRODUCTS DIVISION

**Robert Logan** from Corporate Financial Consultant to Plant Controller (Mtn. View)

## F.E.A.A. NEWS

Have the itch to gamble but don't want to head for the casinos alone? F.E.A.A. has a special deal for all you Fairchild gamblers. On Saturday, November 11, buses will be at the Ellis Street parking lot to drive you to Reno for an overnight gambling spree. The package includes a \$3.00 cash refund, \$4.00 bidding chips, two 60-cent Keno tickets, \$2.00 for a meal, and two drinks. The special discount price on the package—including transportation—is \$10.95. You will leave Fairchild at noon Saturday and return the following morning at 6:00 a.m. You must bring your Fairchild badge to board the bus. Hurry, space is limited. All reservations must be made no later than Wednesday, November 3, with Jean McNeal at MOD on Ext. 17-2320.

Travel fun presents "Salt Lake for Skiers" or "Salt Lake For Fairchild Skiers." Interested in spending a week or a weekend at Alta, Brighton, Park City, Park West, Snowbird, and Solitude? Travel Fun will handle the whole deal.

Cost per person	Double or		
	Twin	Triple	Quad
2 nites/2.5 days	\$181	\$179	\$167
3 nites/3 days	194	188	177
5 nites/5 days	256	239	222
7 nites/7 days	318	290	267

The package includes deluxe accommodations, Rent-A-Car, round trip air fare, lift tickets and much more. (Note: Checks must be in 60 days prior to departure.) For more information, call Anna Petrick on Ext. 3112, or Travel Fun, 941-8230.



MICROWIRE I—November 1972

EDITOR: Vicki Heinsheimer  
 REPORTERS: Geri Hadley, Marge Killian, Millie Dawson, Clint Haines, Margaret Elliott, Pat Alfred, Lorette Hayes, Bev Delos Santos, Judy Wagner, Marlene Herman and Edie Beem.  
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# Microwire

Published For the Employees of the Semiconductor Components Group — Mountain View/Palo Alto

## New Referral Program Implemented At Fairchild

Opportunity is knocking for Fairchild employees. Opportunity to help a friend or relative and an opportunity to earn \$50.

Industrial Relations has announced a new program—The Employee Referral Program. It is open to friends and relatives of employees who have skills and training which would be applicable in Fairchild's operations in Mountain View and MOD/R&D in Palo Alto.

If you know of someone seeking employment, send him or her to the Mountain View or Palo Alto employment office.

On the application form there is a space provided where the referred employee indicates your name. At the time a referred employee achieves 60 days of service with Fairchild, you will receive a \$50 award. The only positions not covered under the Referral Program are entry or trainee jobs that do not require previous experience, temporary part-time, temporary full-time and permanent part-time positions. Although, if an employee's status changes from temporary to permanent full-time, an award will be made to the referring employee once the new employee has been on the payroll for 60 days.

The Program covers all referrals made on or after October 30, 1972.

The first awards will be presented in late January. By the way, that \$50 award is net.

Listed below are just a few job openings being created daily in Mountain View and Palo Alto facilities. If your friend or relative doesn't match the openings, have him or her drop in to personnel and fill out an appli-

cation anyway. They will file the application for future openings.

<b>Assemblers</b>	<b>Process &amp; Development Engr.</b>
<b>Buyer</b>	<b>Product Engr.</b>
<b>Design Engr. (Digital or Analog)</b>	<b>R&amp;QA Engr.</b>
<b>Elec. Techs.</b>	<b>Senior Clerk</b>
<b>Engr. Oprs.</b>	<b>R&amp;QA Inspectors</b>
<b>Financial Analyst</b>	<b>Secretaries</b>
<b>Lab. Techs.</b>	<b>Sr. Engrs. Circuit/Logic Design</b>
<b>Manpower Development Administrator</b>	<b>Staff Engr.—Mask Making Technology</b>
<b>Mask Designers</b>	<b>System Analysis/Programmers</b>
<b>Mechanics</b>	<b>Prod. Supervisors</b>
<b>Mgr. Federal &amp; Foreign Taxes</b>	<b>Industrial Engineers</b>
<b>Mgr. MOS Test Engr.</b>	<b>Ass't. Acct's.</b>
<b>Packaging Engr.</b>	
<b>Process &amp; Device Spec.</b>	



### An Introduction To Semiconductor Processes Available

Over a three-month period, MICRO-WIRE devoted a page per issue to a description of the semiconductor process beginning with crystal growing and concluding with the Mark & Pack operation.

The seven semiconductor processes have been reprinted in a four-page brochure. If you are interested in copies, contact Employee Communications, Ext. 3327.

**It's Imagination!  
It's Original!  
It's A Winner!**

The Suggestion Program Committee has adopted another idea. On Tuesday, November 7, suggestion winner Yolanda Weems, Final Seal in Power Assembly/Discrete Products Division, was presented with a \$100 Savings Bond and a Certificate of Merit signed by Greg Reyes, general manager of Discrete Products Division.

Yolanda decided that it was a waste of time and money to throw away the styrofoam trays used to transfer units to Final Seal. The girls would remove the units from the trays and discard them. Yolanda suggested that the styrofoam trays be reused for the final packing for shipment to the customer.

**Keep those ideas coming in and Fairchild on top.**



Yolanda Weems (center) receives a \$100 Savings Bond from Suggestion Program Administrator Terri Muessig (right). Yolanda's supervisor Goldie Williams and co-workers were on hand for the presentation.



## AD CAMPAIGN FEATURES MYRNA HYATT

Since the beginning of the Job Opportunity System in February, 243 hourly and 152 salaried non-exempt employees have been promoted at Fairchild/Mountain View. Myrna Hyatt was one of those who used the system to move from hourly to non-exempt. The display ad below has been running in local Bay Area newspapers to tell others of the job opportunities that are available at Fairchild.

## MYRNA HYATT



After being rehired last March as a Senior Assembler, Myrna was recently promoted to a position as a Junior Specification Designer. She got her new job by taking advantage of JOS, Fairchild's highly regarded Job Opportunity System. How does JOS work? Each new opening is posted on bulletin boards, and any employee can bid on any opening for which he or she feels qualified. Selection is based strictly on the person's overall qualifications. Is JOS effective? Myrna Hyatt told us, "I sure believe in it! I'm very happy in my new job and I think JOS gives every employee a fair opportunity for a better job." If you would like more information about employment and promotion opportunities for wafer fab operators, electronic technicians, and many other occupations at Fairchild, come in and see us.

# WAS JUST PROMOTED AT FAIRCHILD

**FAIRCHILD**

FAIRCHILD SEMICONDUCTOR  
465 National Avenue  
Mountain View, CA 94040  
(415) 962-3201  
An Equal Opportunity  
Employer M/F

## Sandy Wyman Receives Special Award

The number "100" is usually not too significant to most people but to Fairchilder "Sandy" Wyman it is important.

Recently, Bradford "Sandy" Wyman, facility engineer in Central Services, was welcomed into the Santa Clara Chapter #39 of the American Institute of Plant Engineers as its 100th active member. He was presented with a framed membership certificate especially prepared for the occasion. The certificate was printed with the words "100th member Santa Clara Chapter #39."

The American Institute of Plant Engineers is a professional society which brings together those engineers and management personnel who are responsible for planning, layout, design, construction, and maintenance of plant facilities. The Santa Clara Chapter is now the largest and most active chapter in the A.I.P.E.

The Santa Clara Chapter welcomes and encourages management personnel who are responsible for any phase of Plant Engineering or Maintenance to attend the monthly meeting and to benefit from the exchange of ideas and techniques.

The A.I.P.E. contributes to the advancement of applied technology in critical areas such as pollution control, industrial safety, and industrial training. The Santa Clara Chapter is very active in the pollution control field through its Environmental Control Committee chaired by Hosea "Bud" Webster, Fairchild's Environmental Control Manager in Plant Facilities.



"Sandy" Wyman (right) receives the 100th active membership certificate from Eric Bergtraun, Chapter President.



# New Polaroid SX-70 Is Here

"Perhaps once or twice in a lifetime, there comes an invention so radically new, it actually changes the way we live our lives. Television was one.

We at Polaroid believe the SX-70 is another."

This quote is from Polaroid's advertising which introduces the SX-70 camera and film system to the public.

History is being made and Fairchild Semiconductor Components Group has an integral part in making it. John Husher is Program Manager of the team participating in this historic event in the evolution of technology. Fairchild's Analog Products Division, under John Sussenberger, general manager, is producing six types of integrated circuits for the new Polaroid SX-70 Land Camera.

Dick Belcher is manufacturing manager of Fairchild's Polaroid program. Over 100 production employees, under production manager Dave Roberts, have been participating in the program since June, 1972. The product consists of three separate electronic modules. The exposure control, motor control, and flash control modules were designed during a four-year period by Fairchild's R & D staff under Will Steffe and Howard Murphy. The pre-production development and engineering team at Mountain View is directed by Frank Perrino. The original engineers in Frank's group include Don Pezzolo, Jim Eick, Jim Feit and Jim Morris. Initial production of the system began in June, with just 20 assemblers on day shift. Today, it has tripled to 60 and a second shift has been formed with 40 employees. Because of the great demand by Polaroid for more systems, a third shift is in the making. Paul Newkirk and Bob Kocik are supervising the large assembly operation.

Fairchild's exposure control module is located in the shutter of the SX-70 camera. It measures the light level and controls the camera's aperture setting and exposure time. The motor control module operates a tiny precision electric motor which processes the revolutionary new film after the exposure

sequence. The flash control machine selects an unused flash bulb in the 10-bulb flash array and fires the bulb. The new flash array, which has more light output than any amateur camera flash system in history, was invented for the SX-70 camera by General Electric. The system takes flash exposures at distances greater than 20 feet.

After many months of work against time and striving for volume production of a highly reliable product, the Fairchild Camera Group, under John Husher, was invited to a special meeting on Friday, November 3, 1972. Special guest, Dr. Cliff Duncan, vice president of engineering at Polaroid, congratulated the assemblers on their performance and long hours spent on the Polaroid project. He also emphasized the important role Fairchild has played in developing and producing the SX-70 camera.

For those who did not attend the meeting, the Polaroid SX-70 Land



Showing off the new Polaroid SX-70 camera, attachments, and recent publicity are (left to right) Macrina Gonzales with photograph taken at the meeting; Fanny Gekas holds a recent issue of Life Magazine featuring the Polaroid story; Helen Varvitiotes models the slim, new SX-70; Genevieve Ferraz with a special Life Magazine insert on the camera; Margie Sosa examines the pack of special film used in the SX-70; and Connie Pina holds the flash bar and Time Magazine.

Camera is slim, elegant, and lightweight with six LIC chips containing more than 400 transistors and a comparable number of other electronic components. After you press the red electric button, it takes 1.3 seconds,

and wham-o, the picture ejects from the front of the camera. It immediately develops before your very eyes—even in broad daylight. No timing, no peeling, no throwing away. After three minutes the image begins to develop, and over a period of ten minutes, the image becomes a life-like photograph of the most brilliant colors ever seen in amateur photography. The camera is a single-lens reflex type with focus range from 10 inches to infinity. There are 10 pictures in the film pack and a fresh battery is contained in each film pack.

Because of the limited supply of the SX-70 cameras, Florida was selected by Polaroid for initial introduction to the public. They went on sale for the first time on November 10. According to Dr. Duncan, the SX-70 cameras will be available in California and at Fairchild early next year.

The Polaroid project is one of the most exciting happenings that Fairchild has today. It is without a doubt one of the toughest assignments undertaken by our design engineers and successful introduction into production has been a major challenge.

Dave Roberts described the program as follows:

"I believe the project is important for a number of reasons, the major ones being:

"It is an opportunity for Fairchild to develop volume business with Polaroid, a very substantial company that has an excellent rapport with its many vendors.

"For the first time, employees can really identify their daily efforts with an end product that will soon be available in retail stores across the nation.

"We are developing new and exciting assembly techniques that will set new trends in the semiconductor industry.

"I would like to take this opportunity to thank the many support functions in Fairchild for their hard work, help and understanding during the 'start up' of this project. Above all, we must remember that this is a company project."



# F.E.A.A. NEWS

The Ice Capades are coming to the Oakland Coliseum on November 21 through November 26. Employees may order their own tickets at a \$1.00 discount by using an envelope provided by the F.E.A.A. ticket representatives.

Howard Johnson Motor Lodges have extended an invitation to Fairchild employees to take advantage of their special rates. The rates vary in cer-

tain parts of California. Your ticket representative will have the brochure with the special rates.

Sea World's Dolphin Club is sponsoring a special added attraction until December 8. "The World's Zaniest Comedy Diver" and the "Great Northwest Logger Show" are the special attractions. Pick up your tickets from the F.E.A.A. representative in your building.

The following employees are F.E.A.A. ticket representatives:

NAME	BUILDING #	MAIL STOP	EXTENSION
LYDIA LOPEZ	2	2-233	2015
MAIDA JIMENEZ	3	3-414	2771
JENNY BOCHMAN	13	13-001	3602
MARY JANE O'BRIEN	14	14-1070	3664
RUDY ROBLES	18	18-221	5579
MARGARET ELLIOTT	19	19-110	5642
JUDY WAGNER	20	20-1788	2838
SHIRLEY ADAMIK	20	20-2805	3741
JAN DAHLIN	Systems Tech	40-27	16-215
BONNIE LEWIS	MOD/R&D	MOD	17-2601
JESS REEVES	3rd Shift	999	2555

# JOS Promotes

**Barbara Earls** from Assembler B to Assembly Work Leader

**Patricia Vigil** from Production Maintenance Clerk to Data Reconciliation Clerk

**Doris Watry** from Secretary to Executive Secretary

**Violet Fugate** from Process & Device Specialist to Technical Data Analyst

**Ramona Ortiz** from Assembler B to Process & Device Specialist

**Jo Ann Zamora** from Assembler A to Process & Device Specialist

**Mattie Burrell** from Assembler A to Process & Device Specialist

**Doris Davis** from Process & Device Specialist to Laboratory Technician

**Josephine Rodriguez** from Assembler B to Jr. Test Specialist

**Loreli Kirchner** from Process & Device Specialist to STS Instructor

**James Holligan** from Electronic Technician to Sr. Electronic Technician

**Loretta Hayes** from Secretary to Expeditor

**Byron Malechek** from Clerk Typist to Expeditor

**Katie Martinez** from Assembler A to STS Instructor

**Benet Jeffords** from QA Inspector B to Process & Device Specialist

**Emily Edmonds** from Assembler A to Inventory Control Clerk

**Elizabeth Hoefler** from Assembler A to Assembler B

**Jo Ann Scherf** from Production Maintenance Clerk to Senior Clerk

**Carol Parker** from Secretary to Executive Secretary

## Attention Retired Or Former Employees of the U.S. Navy

Public Law 91-121 requires that all former or retired employees of the U.S. Navy report the details of their employment to the Department of the Navy. Department of Defense Directive 7700.15 of 30 October 1970 specifies from whom reports are required. Secretary of the Navy Instruction 5314.5 of 1 March 1971 provides the details on the submission of the reports. These two documents may be obtained from the local U.S. Navy office.

## MOVING UP

### DIGITAL PRODUCTS DIVISION

**Heinz Nonnenmacher** from Sr. Product Engineer to Sr. Product Device Engineer

**Joe Singh Deo** from Sr. Product Engineer to Supervisor Product Development Engineer (South Portland plant)

### ANALOG PRODUCTS DIVISION

**Viola Tujillo** from Assistant Technician to Production Controller

### MARKETING

**Joseph Reichbach** from Sales Engineer to Regional Distributor Manager

## Odds 'n Ends

### FOR SALE

**Four 8.55-15 tires** off a Ford Bronco, including rims—like new, low mileage. Asking \$60. Call EXT. 2526.

**Ceramic and Weaving Sale** by Local Artisans (lovely Christmas Gifts)—Dec. 2-3, 1:30 to 5:00 at 328 Pope Street, Menlo Park.

**1970 Rieker Ski Boots (Female)**—Size 7½N, worn once, leather with buckles. New cost \$60. Will sell for best offer. Call 732-6433.

### FOR RENT

**House For Rent**—3 bedroom, 2 bath, range & refrigerator, carpets & drapes, fenced in yard, covered patio, water softener. Washer & dryer, & furniture available. Close to bus, schools, shopping, 5 miles from Fairchild/Mt. View—children O.K. Asking \$235/mo. Call EXT. 3562 or 246-8812, 296-7910.

**Unfinished Townhouse Apartment**—2 bedroom, 1 bath at 658 Arbutus (off El Camino and Fair Oaks) in Sunnyvale. Asking \$165/mo. Call 966-2946 (day) or 356-6578 after 5 p.m.

## Happy Turkey Day!

MICROWIRE II—November 1972  
 EDITOR: Vicki Heinsheimer  
 REPORTERS: Geri Hadley, Marge Killian, Millie Dawson, Clint Haines, Margaret Elliott, Pat Alfred, Loretta Hayes, Bev Delos Santos, Judy Wagner, Marlene Herman and Edie Beem.  
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# Microwire

Published For the Employees of the Fairchild Semiconductor Components Group — Mountain View/Palo Alto

## "Career Paths for People" "Opportunity For Employees"

On November 22, 1971, Fairchild Semiconductor was totally reorganized from eleven group organizations into five solid-state components divisions. The new group was called The Semiconductor Components Group, under the leadership of Wilf Corrigan, vice president and group general manager. MOS, Digital, MOD, Discrete and Analog make up the anatomy of Fairchild's Components Group. Beginning with Wilf Corrigan, MICROWIRE will interview each general manager on his division's state-of-the-business.

### What do you consider the most significant change since the reorganization last November?

Division managers can now concentrate strictly on their own operations, with near total autonomy. They are running \$20 to \$50 million businesses, rather than being just another part of a \$200 million operation. This sense of independence in specific product areas carries right through the division to every employee. Each operating unit has a clearer responsibility, tighter control on expenses, and its number of interfaces is cut in half.

From a Group management standpoint, it allows us to emphasize planning, with an improved overall view of Component operations. Business plans and readjustments are now being made in each division without significantly impacting the others. It also gives us more accurate measuring yardsticks for budget planning. Progress vs. plan is reviewed monthly within each division as well as on a group level.

In addition, we are better able to handle long-range planning procedures. For example, we now have a comprehensive five-year plan which was developed over the past several months and involved a number of management people in each division and at group level. This plan was reviewed this summer by top division and group management, and recently presented to corporate management.

All in all, I am convinced that better balance throughout our operations has

resulted from the establishment of the Group and this has been reflected by significantly improved earnings throughout this year.

### If you had one major priority in the Group, what would it be?

Without a doubt, it is an emphasis on people. It is no secret that our industry—and our company—has in the past had a poor record in its relationships with people. However, difficulties of the past two years brought home to most people the importance of having and retaining quality personnel.

Profits, operating efficiencies, organizational effectiveness, management success—these all stem from how well our people perform.

### What is the Semiconductor Components Group doing about this emphasis on people?



I have instructed all managers to give top priority to all programs impacting our employees. As part of our

long-range planning program, I established a people "task force" which included most of our top managers—to look at all areas of major concern regarding our expanding world-wide workforce. I view this as vital to our achieving our long term growth plans.

Positive results from this already have been realized in such areas as internal promotion programs, as well as emphasis on training and development such as the first line supervisory training program we have implemented. Other training programs are now being developed and should be available before year-end.

Equal employment and career opportunity for minority groups, especially for women, is another very important area on which we are concentrating. In fact, don't be surprised if you see saleswomen in the Semiconductor Components Group before long.

In addition, we are making every effort to provide broader, definitive career paths for people at every level. The Semiconductor industry always has been mobile and we at Fairchild are as concerned about turnover as every other company. My hope is to insure that every employee has opportunities from which they can and will progress to new job positions as their skills improve. Opportunity for employees is the only way in which a company can truly grow and prosper.

### What does the future look like for the semiconductor industry?

Very positive. This year will be a record one for semiconductor sales in the industry—approaching the \$1.4 billion mark. And we expect 1973 to be comparable. Fairchild is, and will continue to be, participating fully in this comeback.

### Could you expand on that? How has Fairchild compared with industry generally?

We are following the industry pattern in growth and profitability. During the first quarter, we went into the black

(Continued on Page 4)



## Female Employee Turns The Tide In An All-Male Area

Male chauvinism is not alive . . . at least not in Fairchild's Plant Protection department.

Ute Mazel has become the first woman to ever wear the uniform of a plant protection officer at Fairchild. Ute claims her fellow officers have gone out of their way to be extremely helpful in getting her acquainted with the new job.

"I have had this tremendous desire to become a plant security officer," reveals Ute. In September, 1972 her wish came true. "I was so excited when they accepted me that I just walked around in a cloud all day." After two and a half months, Ute has established a reputation as the "Green Beret of Fairchild". "You see I wear this beret instead of a regular cap and it just so happens to be green. I've even heard rumors that I once fought in Vietnam with the Green Berets."

Before Ute received her uniform with the green beret, she was wearing the regulation security uniform with cap. "When I wore that cap with my hair tucked under, people would constantly call me 'sir.'" On Monday, November 20, Ute was dressed like a female plant protection officer—skirt, blouse, boots, and a green beret.

Like her fellow officers, Ute went through a detailed course in plant security. The 32 hour program is divided into classroom instruction and on-the-job training. Ute's responsibilities are identical to her co-officers—they oversee the building entrances, control vehicle parking, issue badges to visitors, patrol buildings for potential fire and safety hazards and assume paging duties throughout the Mountain View complex. "I really like being involved in a job where something is always going on. This job gives me a chance to take on responsibility. My ultimate goal is to be the very best plant protection officer at Fairchild."

In 1967, Ute came to the United States from her native Germany to be married. Four years later, she joined the Saga Food Services as a counter girl and was selected to work at Fairchild in 1971.

"Ute is doing an exemplary job," comments Norm Zalfa, plant protection manager. "I just wish we had more like her in this field. She is so enthusiastic and eager to learn. If Ute is an

example of women's lib, then I'm all for it."

A whole new field in security has opened up for women. Ute has broken the male barrier with flying colors.



## Fairchild Reports United Fund Results

This year Fairchild/Mountain View, R&D, Systems Technology and Corporate responded to the United Fund appeal to the tune of \$62,482. Check below and see how well your division did during the campaign.

Divisions	No. Employees Participating	Total Contribution
Corporate	237	\$6,754
Systems Technology	492	9,443
Analog	907	7,752
Digital	612	4,808
R&D	90	3,605
Discrete	753	7,941
MOD	256	4,633
MOS	301	1,555
Marketing	146	4,427
Central Services	688	8,412
Finance & International	34	312
Industrial Relations	89	2,840
<b>1972 Total</b>	<b>4,605</b>	<b>\$62,482</b>
<b>1971 Total</b>	<b>3,945</b>	<b>\$56,404</b>

## A Taste of Christmas Comes to Fairchild

Setting the mood for the holiday season at Fairchild will be the annual company-sponsored Christmas Lunch on Wednesday, December 20.

Fried chicken, whipped potatoes, cranberry sauce, mixed vegetables, tossed green salad, and rolls will be the special menu served by Fairchild's top management.

Buildings 1, 4, 19 and 20 cafeterias will serve first shift from 11 a.m. to 1 p.m.; buildings 1, 4, and 20 will serve second shift from 7 p.m. to 8:30 p.m.; and building 20 cafeteria will serve the third shift at 3 a.m.

## Production Group Moves Into New Area

The Controlled Production Lines, formerly the Bendix and Martin Captive Lines, have gathered their equipment and moved to a new area in the basement of building 3.

This group, under Bob Bylin, has expanded so rapidly in the past few months with new business and manpower, that they were outgrowing their old area. In order to meet this growth, a larger room was required for more equipment and operators. This spacious (3600 square feet), multi-colored room will house thirty-four assemblers and two supervisors. There is also enough room for additional equipment and operators. Fairchild's plant maintenance staff worked feverishly on Sunday, November 19 to have everything ready for the operators to begin production. On Monday, November 20, a majority of the operators were able to continue their work by 9:00 a.m.



Before



And



After



## Social Security Make Changes

The good news first:

A 20 percent increase in Social Security benefits paid to retired persons, widows and dependent children occurred in October. The increase boosts the maximum retirement benefit at age 65 from \$216.10 monthly to \$259.40 for employees who retire after 1973.

Now the rest of the story:

In order to pay for the increasing costs of Social Security Retirement, Dependent and Hospital Insurance Benefits provided under the law, employee payroll taxes for these programs will be increased from 5.2 percent on annual earnings to \$9,000 in 1972 to 5.5 percent on annual earnings to \$10,800 in 1973. You'll see the impact of this change in taxation on the first paycheck you will receive in 1973.

## PLANT MAINTENANCE SPORTS NEW LOOK

Have you noticed the new sporty look in Plant Maintenance? The 36 member team of plant maintenance employees are wearing new uniforms. Gene Amato, manager of facilities engineering; and Joe Solinski, manager of maintenance and construction; presented the group with their new uniforms in mid-November.

The light gray shirts have the custom look with two red and white patches across each pocket—one saying Central Services and the other their first name.



Standing (left to right) Al Silva, Rich Snodgrass, Bernardo Salom, Pete Rawlinson, John Glivar, Pete Lundberg, Bob Crosby, Jack Walden, Denzil Green and Mick Mikelsen.

Kneeling (left to right) Don King, Neil Geer, Bob Brueck, Eddie Shuba, Jo McCarthy and Blaine Peterson.



# Employee Publishes In Personnel Handbook

Bob LoPresto, manager of corporate staffing, is the author of one chapter in the *Handbook of Modern Personnel Administration* recently published by McGraw-Hill Book Company.

This 1,268-page authoritative Handbook gives precise directions for the most effective handling of just about any personnel situation that might arise in a company.

The 81-chapter handbook was coordinated by 85 leading personnel specialists under the direction of editor Joseph J. Famularo. Bob was responsible for the chapter entitled, "Recruitment Sources & Techniques."

Recently, Bob participated in two personnel management conferences in San Francisco. The Employment Management Association (EMA) held their

Fall 1972 Conference on November 1-3. Bob spoke on the subject "Evaluation of Employment Sources" to 250 employment managers representing major corporations across the United States.

On November 14, The Northern California Industrial Relations Council (N.C.I.R.C.) held an all day conference using as its theme "People Management—The Impact of Change." Bob was invited to sit on a panel with such noted celebrities as Art Linkletter, radio and TV personality; and Dr. Paul Erlich, author of the best seller "The Population Bomb." The main discussion centered around the changing work force and the new demands facing personnel administration in personnel recruitment and selection.



Bob LoPresto (left) presents an autographed copy of the new *Handbook of Modern Personnel Administration* to Warren Bowles, vice president and director of Industrial Relations.

## Dr. Hogan Predicts Record Year For Semi Industry Sales

Meeting with security analysts in late October, Dr. C. Lester Hogan, president and chief executive officer, said semiconductor industry volume will increase approximately 25% over 1971, rising to the \$1.43 billion range. He also mentioned that 1973 looked strong for the industry.

Fairchild representatives at the meeting said semiconductor business consists of 65% to 70% integrated circuit sales, and the balance in discrete products.

The Semiconductor Components Group has operated at a profit for the first three quarters of 1972. Because of the increase in productivity, employment has risen to over 17,000 corporate-wide compared to 14,000 in 1970.

## October Salesman of The Month

Bob Hand, Orlando Sales Office, was selected as the October Salesman of the Month.

Because of Bob's efforts, Fairchild has become a major supplier of digital integrated circuits at his account.

## Holiday Schedule

Dec. 25 (M)—Christmas Day

Dec. 26 (T)—Instead of Christmas Eve

Jan. 1 (M)—New Year's Day





# JOS Promotes

- Michael Flood** from Electronic Tech. to Sr. Calibration Tech.
- Dolores Singles** from R&QA Inspector Specialist to Jr. Test Specialist
- Daren Greig** from Lab Tech. to Sr. Lab Tech.
- Carmen Candelaria** from Assembler A to Assembler B
- Anthony Gil** from Electronic Assembler A to Shipper/Receiver
- Sylvia Streeter** from Secretary to Executive Secretary
- Rita Fobbs** from Assembler A to Assembler B
- Barbara Littlejohn** from Process & Device Specialist to Assembly Work Leader
- Daniel Pacheco** from Electroplater A to Electroplater B
- Goldie Vasileff** from Assembler A to Assembler B
- Blaine Dragony** from Assistant Lab Tech. to Lab Tech.
- Rodney Fraser** from Sr. Draftsman to Designer/Draftsman
- Shirley Moore** from Assembler A to Process & Device Specialist
- Susan Ruiz** from Distribution Clerk to Senior Clerk
- Sharon Pace** from Assembler A to Process & Device Specialist
- Joseph Mora** from Mechanic C to Mechanic Specialist
- Sharon Hubbard** from Assembler B to Engineering Operator
- Amberdean Hill** from Assembler B to Process & Device Specialist
- Karen Price** from Intermediate Clerk to Secretary
- Nikki Sorensen** from Assembler B to Process & Device Specialist

## Odds 'n Ends

### FOR SALE

**1966 Mercury Monterey**—5 good tires, full power and in excellent running condition. Asking \$550. Call 296-6090, Ext. 3389

**1970 Lincoln Mark III**, fully equipped, vinyl top with leather interior, excellent condition, 27,000 miles. Asking \$550. Call 738-3900, Ext. 225.

## Career Paths . . . Employee Opportunity

(Continued from Page 1)

and realized continued improvement in the second quarter, and again in the third quarter. The Semiconductor Components Group was the major contributor to the Corporation's sales and profit increase in the first half of the year. In fact, we now account for more than 70 percent of the corporation's sales volume. Until now, we have experienced the same improvement pace as the total industry. We should be growing significantly faster than the general industry by the end of the year.

**What type of growth do you anticipate for Fairchild and how are we making the most of today's positive economic climate?**

The key to our success is what I call controlled growth. This means that we must watch our expenses at every level but still be sure to do the things we need to do to meet our growth demands.

Going back to what I said earlier about division independence, budget control is best accomplished at the individual operating levels. Within each operating unit we are monitoring and determining individual needs. With these tighter controls we avoid runaway spending.

**Has the pace of new product introduction increased or slowed since the "golden years" of the industry?**

In terms of the radically new products—such as the Planar process and all products that evolved from that—those major technical advances are few in number. If we go back 10 years, the Planar process was first, integrated circuits second, and MOS technology third. Isoplanar and other cell reduction techniques are very significant developments which have been introduced recently.

Of course there are many advanced technologies in the laboratories. One which Fairchild is very diligently working on will be of similar significance to major industry advances of the past. We will be announcing this development in the near future and, as you know, each technological breakthrough usually breeds vast numbers of products.

Actually, the rate of generation of new products is continually increasing but the products themselves are frequently just variations on a basic

theme. To some extent, the industry is maturing so the radical improvements in technology are coming more slowly than they did 10 years ago, but the growth of products and new applications for these products is proceeding very rapidly.

## MOVING UP

**DISCRETE PRODUCTS DIVISION**  
**John Herrera** from Supervisor A to Supervisor B

**ANALOG PRODUCTS DIVISION**  
**Mary Stanley** from Assistant B to Engineering Operator

**John Chu** from Sr. Design Engineer to Sr. Product Development Engineer

**CENTRAL SERVICES**  
**Sal Mendiola** from Chem Lab Tech to Production Supervisor of Chemical Services

**DIGITAL PRODUCTS DIVISION**  
**Karl Mauritz** from Assistant Engineer to Test Equipment Engineer B

**John Morrow** from Sr. Electronic Tech to Test Operators Supervisor B

**Olga Miller** from Expeditor to Production Controller

**Rene Williams** from Production Scheduler to Production Controller

**George Wardwell** from Test Engineer to Sr. Test Engineer

**William Dematteis** from Product Marketing Manager A to Product Marketing Manager B



"Can you identify yourself?"

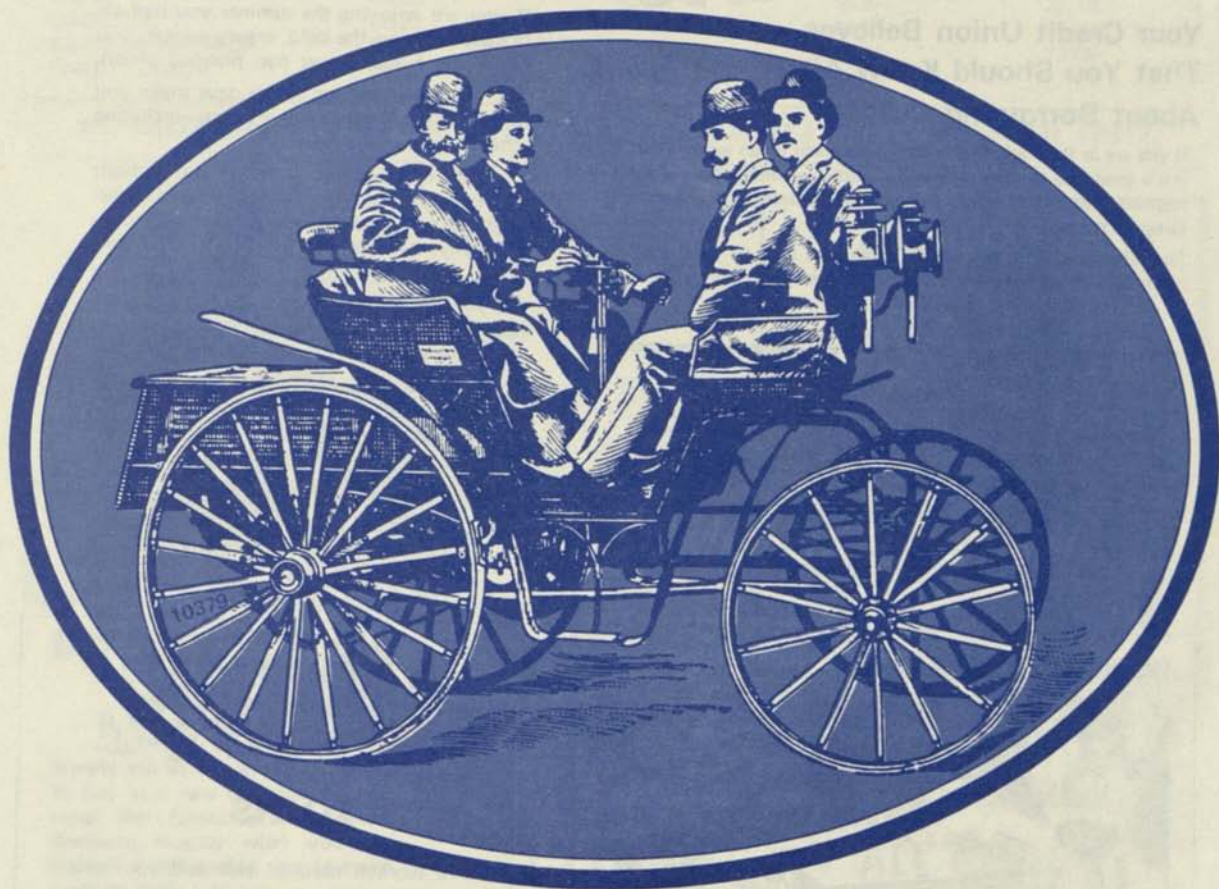
MICROWIRE I—December 1972  
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**FAIRCHILD  
EMPLOYEES**

**FEDERAL CREDIT UNION  
NEWSLETTER**

**NEW CAR FINANCING**



*SEPTEMBER 1972*

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## CERTAINLY YOU SHOULD SHOP FOR CREDIT



### Your Credit Union Believes That You Should Know All About Borrowing Costs...

If you are in the market for a loan, your credit union suggests that it is a good idea to shop for credit . . . satisfy yourself that you are borrowing where you will receive the lowest interest rate and most favorable terms.

And when you do, you'll always come right back to your credit union because our rates are just about the best you'll find anywhere.

TRY IT!

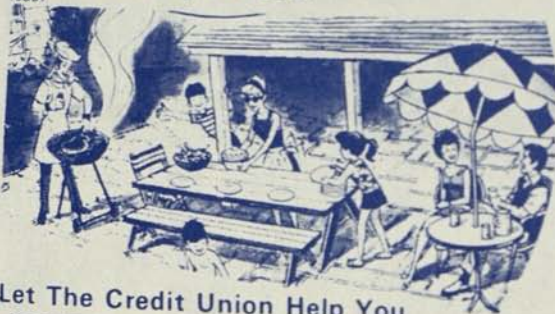
#### DID YOU KNOW?

When your loan is paid in full, what happens to your payroll deduction? It will continue, automatically adding to your savings.

If you wish to reduce or stop the deduction, a *payroll deduction form* has to be signed by you and the credit union representative. Then we forward it to the Payroll Department.

### Want To Fix Up A Patio?

10557



Let The Credit Union Help You  
With A Low Cost Loan



NEED NEW  
BACK-TO-SCHOOL  
CLOTHES?



#### SCHOOL COSTS AHEAD?

If you are enjoying the summer you had anticipated during the cold, dreary winter, you know it's because you had planned ahead. But, don't let the long sunny days make you forget fall and everything it brings—including school.

The cost of education is still rising. Without preparation, money for those costs and necessities school always generates, almost spontaneously, will not be there for your children.

Tuition, clothes, books, transportation and everything you never expected accompany the new school year. If you can't face the costs alone, let your credit union help you.

Whether it's saving for long term educational goals, or fulfilling present ones, we have the plan for your needs. See your credit union for now and later.

IT JUST ISN'T FAIR, A GIRL'S BEST FRIEND  
IS A DIAMOND, A MAN'S BEST FRIEND IS A  
DOG!



### LOANS

You've worked hard all year and you need one. But in case the money isn't handy, don't give up the trip. See your Credit Union about a vacation loan that will get you away for several weeks of fun and pleasure. The cost is low. Talk to us!



## Compare Before You Borrow



### NEW AUTO LOAN RATES \$3,000 for 36 Months

NAME	MONTHLY PAYTS.	FINANCE CHG.	ANNUAL % RATE	INSURANCE CHARGE
WELLS FARGO	\$ 99.44	\$472.44	9.78	\$107.40
U.C.B.	99.11	449.88	9.32	118.34
CROCKER	99.29	445.77	9.24	128.67
BANK OF AMERICA	100.00	495.15	10.26	104.85
CREDIT UNION	95.40	434.36	9.00	FREE

### UNSECURED LOANS \$1,000 for 24 Months

NAME	MONTHLY PAYTS.	FINANCE CHG.	ANNUAL % RATE	INSURANCE CHARGE
WELLS FARGO	\$ 49.74	\$169.88	15.71	\$ 23.88
U.C.B.	49.59	163.98	15.16	26.18
CROCKER	50.37	179.87	16.64	29.01
BANK OF AMERICA	50.15	180.00	16.65	23.60
CREDIT UNION	47.07	129.75	12.00	FREE

P.S. MASTER CHARGE & BANK OF AMERICA CARD LOANS ARE AT A RATE OF 18% ANNUAL %RATE

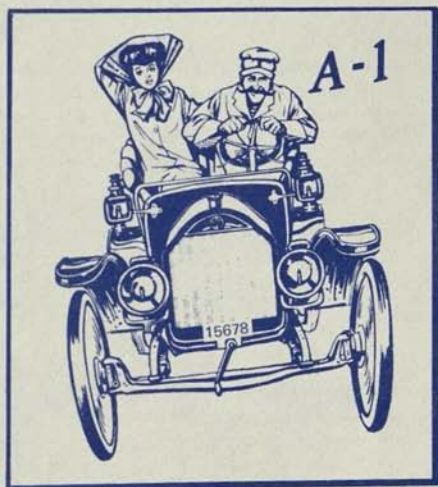


## BUY YOUR NEXT CAR

WITH THE CASH  
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Simply tell us what you would like to buy in a new car so we can arrange the financing in advance. Knowing exactly what you can count on will enable you to make a better deal.

And incidentally, we can usually save you money on the financing. Talk to us.



## AUTO LOANS

ALL Makes

ALL Models

We can save you money on the financing, too. Talk to us!



## CLASSIFIED

FOR SALE

## YOUR CREDIT UNION

1.

**LOW INTEREST RATES**—Your credit union is a mutual non-profit organization—that's one reason you get a favorable loan rate here. And you pay interest only on the unpaid balance.

2.

**CONVENIENT PAYMENTS**—Repayment of the loan is set up in convenient amounts that fit right into your budget. And the moderate interest charges hold down the amount of the monthly payment.

3.

**PROMPT SERVICE**—You don't enjoy red tape and neither do we. We value your time and give you prompt loan service so there's no unnecessary wait or delay.

4.

**FINANCE IN ADVANCE**—See us about your car financing before you choose the car you want. You then shop as a cash buyer—and you'll be in the best possible bargaining position.

5.

**CAR OF YOUR CHOICE**—Small cars . . . large cars . . . two doors . . . four doors . . . station wagons . . . we finance them all! And you'll find our financing flexible—fitted to your needs.

6.

**FREE LOAN INSURANCE**—Your credit union gives all eligible borrowers the extra benefit of loan protection insurance—at no extra cost. In case of death, the insurance pays off the balance of the loan in full, automatically.

7.

**CONFIDENTIAL TREATMENT**—As far as we're concerned, your car financing here is strictly between you and ourselves. It's all in the "credit union family" with people you know and trust.

### MEMBERS PLEASE NOTE

Somewhere in this issue is a number—if it is yours, please call the Credit Union so that a prize of \$5.00 will be deposited to your account.

1971 Chev. Chyene - ¾ ton - Loaded Air - Custom  
By Original Owner - 15,000 Miles.  
\$3,800 - Will take \$1,900 Cash or Offer.  
You Take Over Payments. No Tax.  
Call 734-1247

Chev. '70 Kingswood Wagon, 3 Seats, Air. This showroom fresh color keyed beauty deserves your inspection. Make Offer.  
Credit Union 962-2401

'68 Chev. Chevelle, 6 cyl. 2 door sed. Auto. Trans.  
1 Owner Car. 32,000 Miles. Call before 3:00 P.M.  
998-0592 or 377-8844 after 3:00 P.M.

'64 MGB, Overdrive, Engine and drivetrain recently rebuilt. Top in good condition.  
325-5144 or 962-3562

4-Wheel Drive Jeep - Top Condition.  
\$1,025  
Call 248-8556

### FOR RENT

Mountain Cabin - Rental - Near Twaine Harte, on a stream:  
Golf, Swim, Boat, Sleeps 9, \$150/wk, \$50/weekend.  
371-2685 - Andy Wihtol X4017

Mod. Cabin - Blue Lake Springs - Resort Area - Sleeps 10 -  
\$110/week - 736-5516

### FOR SALE

3 Bedroom, 2 Bath, Fireplace, Family Room. New paint inside. Many extras. Loan Assumable. 5% - San Jose Area  
\$27,000. Call 326-9423 - Vacant!

## SOMETHING NEW!

Stock Loan Program for stock  
already owned or for new purchases.

### Loan Values:

**Stock Owned:** Not to exceed 60%—New York listed  
Not to exceed 40%—Over the counter  
**New Purchase:** Within Federal Margin Requirements  
(45% can be financed)

**Maturity:** 12 Months. Interest payable quarterly

**Interest Rate:**

Below \$2,000	8%
\$2,001 - \$10,000	7 ¾%
Over \$10,000	7 ½%



# FAIRCHILD EMPLOYEES FEDERAL CREDIT UNION NEWSLETTER

## WATCH TV FOR CREDIT UNION ADVERTISEMENTS

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World Series ★ Pro-Football



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### OCTOBER THRU DECEMBER

OCTOBER 1972

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Branch Offices: San Rafael/Sunnyvale/Palo Alto





## Use Caution When Buying Tires

Tires are made in three different constructions. BIAS, BIAS-BELTED and RADIAL (or RADIAL-PLY). They should not be mixed on the car. It is unsafe to have tires on one construction on two wheels and tires of another construction on the other two wheels.

Even worse is mixing tire types on the same axle or mixing Radial-plyes or the new "60 series" tires with other tire sizes or types on the same vehicle.

Tires of different construction have totally different road and driving characteristics. Mixing them has been described as having an effect comparable to "wearing a rubber-soled shoe on one foot, a new leather sole on the other" or "wearing a pair of ice skates, of which only one is sharpened". The result can be loss of control in a tight driving situation, with disastrous consequences.

So before you replace a tire or tires, check to see what design is already on the car. Then specify that your new ones be identical in design - in other words, Bias, Bias-Belted, or Radial. You can vary the plies on the tires, if necessary, and even the materials from which they are made, but the basic construction should be the same.

### USE YOUR CREDIT UNION AUTOLOAN PLAN . . . And Benefit 5 Ways

6490

1. Our low interest rates, based on the unpaid balance, save you money.
2. That means your payments are smaller, easier to handle.
3. There's no penalty if you pay your loan ahead of time.
4. The transaction is confidential, all in the friendly credit union "family".
5. We are here to advise and help you without obligation. Always keep in mind - this is your organization.

## Be Careful with Charcoal

Nothing seems to beat a charcoal-broiled steak in flavor and backyard excitement. And grills are taken along on camping trips for an added zip to those events.

Enjoy yourself to the fullest, but remember that charcoaling can produce carbon monoxide in lethal amounts. Your grill must be well-ventilated at all times. The only safe inside use is in a working fireplace. Outdoors, don't hover over it if your patio is small and enclosed and there is no wind that day.

Note too, that the wind often dies down for the evening which is usually prime charcoaling time. You can smell the smoke all right, but the deadly carbon monoxide is colorless and tasteless. It does not take a lot of it to kill you.

Every year someone dies when charcoaling is done in tents, trailers, campers, automobiles, cabin, boats, apartments and houses.

Use your grill safely, have a good time, and be careful. We'd like to keep you around.

## Watch Out For That Balloon Payment

Have you ever heard of balloon payments? Lots of people have heard about them the hard way. They generally occur whenever you try to buy something that you really can't afford.

In order to make the deal look attractive, a salesman will tailor payments to whatever you say you can afford. The contract will be written or the term specified. Say 36 months, with a nice affordable payment for 35 months and the last payment representing the balloon.

What happens is this . . . The interest charged is very high, the automobile will have depreciated way below what you still owe on the 36th payment, and you will be in a big bind!

This could never happen at the Credit Union because we value you way above just making a profit. *We've got your interests at heart, because it's YOUR Credit Union!*



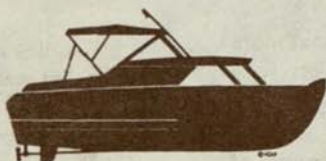
**COMPARE 2nd MORTGAGE FINANCING COSTS**  
65 Month Example

	<u>From the Girl at Pacific Plan</u>	<u>Credit Union</u>
Interest Rate	16.75% True Annual	10.5% True Annual
Amount Borrowed	\$5347.36	\$5347.36
Processing Charge	\$280.00	\$150.00
Brokerage Fee	\$1050.00 (15%)	None
Finance Charge	\$2094.80	\$1706.41
Life Insurance Charge	\$322.64	Free*
Monthly Payments	\$139.92	\$108.52
Total Amount to Repay Including Charges	\$9094.80	\$7053.77
Total Cost of Loan	\$3747.44 (WOW)	\$1856.41



*\*NOTE - Total amount of life insurance provided by Credit Union does not exceed \$10,000.00 all loans inclusive.*

Sorry we had to use 65 months \$5,347.36 as the example but Pacific Plan wouldn't quote on even months and amounts.



## Phony Boat 'License' Scheme is Uncovered

The U.S. Coast Guard has recently warned boat owners of a false registration scheme being operated through the mails out of Washington.

Boat owners throughout the country are receiving a form letter carrying a letterhead of "United States Merchant Marine" with Washington address and signed by a "William E. Blake, Chief of Operations, USMM".

With the letter are forms to fill out called "registration and title application".

The letter states that . . . "that United States Merchant Marine . . . shall accept registration and title applications for privately owned small craft, boats and motors," and asking that the forms be completed within five days.

The fee is \$3.00 to \$5.00.

According to the Coast Guard, "The individual sending the letter and his organization is in no way connected with the federal government and performs no useful function to the boat owner".



## CLASSIFIED

### FOR SALE

66 VW Bug \$600 253-4205 after 5:30  
1956 Morris Minor Woody Wagon 18,000 original miles.  
Excellent Condition \$800/Offer 493-6031

### FOR RENT

Modern Cabin - Blue Lake Springs - Near Ski Bear. Sleeps 10  
Now taking winter reservations. \$50 weekend - \$120 week  
736-5516

### HOT FLASH

Our Ford dealer has just notified us that effective immediately our members can purchase new Fords at dealer's cost plus \$90.00 plus service at \$60.00.

### TOLL FREE NUMBER FOR AUTO COMPLAINTS

Beginning this month, the Bureau of Automotive Repair provides a unique service - a toll-free telephone number that can be called from any point in California. This WATS line (Wide Area Telephone System) should be used by any consumer who has trouble that is not resolved through discussion with the manager of the firm. The dealer is required to have the toll-free number prominently displayed at his station.

Robert Alexander, Bureau Chief, reports that more than 32,000 California auto repair dealers have been registered as of July 1. All dealers were required to be registered by June 30.

Dealers are now required to notify the consumer of additional charges before repairs are made.

For further information contact the Bureau of Automotive Repair, 2815 O Street, Sacramento, 95816.

### ADVANTAGES OF A CREDIT UNION AUTO LOAN

1. Low, Low Interest.
2. No prepayment penalty.
3. Life Insurance provided at no additional cost.
4. No hidden costs of any kind.
5. You can take your auto anywhere.
6. Credit Union pays initial transfer fees on used autos.
7. You are borrowing from your own Company.

14085

## LAUGH

*Teenage girl (to boy friend):* "Of course Dad doesn't mind our being alone together. He thinks you're a girl."

As the ship was sinking and the lifeboats were being lowered, the Captain shouted: "Women and Children and those tourists on the *Go-Now-Pay-Later Plan*, first!"

Gray hair isn't so bad. Ask any baldheaded man.

### QUARTERLY STATEMENTS

Will be mailed by the 6th of October and will show 3rd quarter dividends.

### MEMBERS PLEASE NOTE

Somewhere in this issue is a number—if it is yours, please call the Credit Union so that a prize of \$5.00 will be deposited to your account.

### ● OFFICERS

President of the Board . . . . . LLOYD KOHN  
Treasurer/General Manager. . . . . ROBERT MAYDECK  
Directors . . . . . TOM DYER, HENBY JOHNSON,  
RALPH LEE, PAUL DAUDET, RAY PHILLIPS

### ● SUPERVISORY COMMITTEE

Chairman . . . . . BRIAN DUNCAN

### ● CREDIT COMMITTEE

Chairman . . . . . LARRY ANDERSON  
Member . . . . . AL SPROLL  
Secretary . . . . . RICHARD HAMMILL

### ● CREDIT UNION HOURS

Monday through Friday 10 a.m. to 4 p.m.



# INTERNATIONAL INSIGHTS

(A REVIEW OF WHAT'S HAPPENING ON THE INTERNATIONAL SCENE)



. . . . meet LYLE RONALDS

Lyle Ronalds joined Fairchild in 1964 in his native Australia, working in Melbourne Field Sales for two years, then serving as Regional Sales Manager for the Sydney area.

He subsequently joined the Fairchild staff in Tokyo, Japan for two years, where he was responsible for Computer Marketing through Fairchild's representative, Tokyo Electron Laboratories, and concurrently was responsible for sales to the Korean radio market.

Lyle Ronalds was later involved in Industrial and Calculator Marketing and closed a (\$) four million dollar order with Casio Desk Calculator.

In 1970, Lyle relocated to the United States and became Manager of the International Marketing Support Group at the company headquarters in Mountain View, California. The International Marketing Support Group has primary responsibility for sales liaison between customers world wide and Fairchild plants in Hong Kong, Taiwan, Europe, Mexico, Latin America, Australia and Japan.

Mr. Ronalds special interests are skiing and photography; the latter being his favorite.

Lyle Ronalds resides in Los Gatos with his wife, Jeannie, and two small (made in Japan) daughters.

\* \* \* \*

## FAIRCHILD

### FINALIZES TDK JOINT VENTURE

Last month, Fairchild successfully concluded negotiations for the establishment of a joint venture, manufacturing company with Tokyo Denki Kagaku Corporation (TDK) of Japan. Headquarters for the new company, TDK-Fairchild, Inc., will be located in Tokyo. Initial manufacturing will be conducted at the existing Fairchild facility in Okinawa. The new venture will bring Fairchild advanced technology products to Japanese industry.

Cont'd on page 3



\* . . . . NAMES IN THE NEWS



Jim Hazel, Manager of Central Services and Far East Operations is shown above presenting a speech during the 10th, Anniversary celebration in Hong Kong.



Chuck Smith, Group Director of the Far East Operations, shown above presenting a 10 year service award to S.M. Lee, who is now Manager of the new Chiwan Plant.



Dave Marriott, General Manager of the European Operations is shown above relaxing, when Fairchild/Wiesbaden went up the Rhine River, during their holiday.



Some of the visiting dignitaries (left to right) Stig Murquist, Scandinavia, Tom Lane, U.K., and Carlo Longoni, of France, also accompanied the Fairchild Wiesbaden people on the Rhine Ride.



## TDK Fairchild (Cont'd)

TDK was incorporated in 1934, and has annual sales of approximately \$100 million dollars. The Company employs more than 5,000 people. TDK has eight plants in Japan and one in Taiwan. They ranked third among the top five hundred Japanese companies in terms of profit growth over the past five years. The company achieved a spectacular 56 percent average annual profit growth during this period.

An international company, TDK operates sales offices in Frankfurt Germany, New York, Chicago and Los Angeles, and produces almost 30 percent of all ceramic dielectric devices made in Japan.

The relationship with Fairchild, will be TDK's first entry into the semiconductor industry. It is anticipated that an expansion of manufacturing capacity in Japan will be underway in the near future, to satisfy the increasing demands for Fairchild semiconductor products.

### Congratulatory Message from Dr. Hogan to Semikor

My congratulations and thanks to all employees of Fairchild Semikor, as we commemorate the sixth anniversary since Fairchild Camera and Instrument Corp., established semiconductor manufacturing operations in Korea.

Your plant has helped to prove that off-shore facilities with the right people can be optimal investments for any semiconductor company today. I also am very confident that the value of Fairchild's Korean operations will continue to grow with our company and industry.

The outlook for the semiconductor business is an extremely good one. It now appears that industry sales volumes will achieve an all-time record this year, with many forecasters expecting the increase to be 20 percent or more, above 1971.

The company also recognizes that the key ingredient to progress is people, and this is especially true in Korea. Without the dedication and performance of those of you who work on the production lines every day, as well as those in management, Fairchild Semikor would not have achieved its present levels of success.

Looking to the future, it is the company's intent to see that our employees, at all levels of operation, are amply recognized for the fine jobs they are doing. Basically we want Fairchild to continue to be a superior place in which to work.

Thank you again for a job well done, and I personally look forward to many years of continued success in Fairchild's Korean Operations.

C. Lester Hogan  
President and Chief Executive Officer

International Insights - Oct/Nov. 1972

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\* Many, many thanks to the excellent response of many reporters.



\* . . . PEOPLE . . . PLACES . . . THINGS



The Big Walk . . .

Fairchild Singapore held it's big Walk on Sunday, August 27th. Approx. 600 employees, (90 percent of them females) competed in the event. Ladies break into a sprint at finish. Jason How . . .

Shown Below:

The employees of Fairchild Singapore celebrated the Feast of the Hungry Spirits (the seventh Lunar Month of the Chinese Calendar on August 20, 1972. They erected an altar and offered food and prayers to sooth the spirits.

According to Chinese beliefs, this pacifies the spirits from stirring up mischief during the thirty days they remain on earth. After prayers they had an auction on the food items, and whoever outbids the other, buys themselves a year round good luck charm.



Shown above, a group of worshippers gather before the alter table to offer prayers by placing lighted joss-sticks in urn.

Rhine Ride (Cont'd) By Mickey Siemsen



Cards are fun - even on a ship . . .

(left to right) Mary Lynn Armstrong, Sue Rauch, Kathie Siemsen, Sonja Froehlich, Arlene Kilian and Len Hermanns.



A Castle on the Rhine River



Boppard - mid point destination



All ashore going ashore - Bill DeMatteis and his wife.



Journeys end - Lunch - Wiener Schnitzel, Pommes Frites, wing and bread were enjoyed by all. Left to right, Rolf Hess, Roberto Stefanelli, & Karen Engelberg.