

# 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.

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## 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  
Marce Andrade  
Shelby Martensen  
Donnie Robinson

Sheila Bernhard  
Margarita Daguio  
Constancia Daguio  
Ofelia Aguinaldo

### D.I. MATERIALS

Angie Garcia  
Donna Cooper  
Dolores Morgan  
Katie Martinez  
Soon McKay

### DIE FAB

Geneva Addison  
Joan Bottero  
Alma Gusman  
Sarah Johnson

### 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  
SEC AND LIAB \$0.35  
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, 4 1/2 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

### CORPORATE

### TEN YEAR

Lois Garrett

### FIVE YEAR

Barbara Butler

### 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 Mognuillan-  
sky  
Charles Hurley  
Bertha Bass  
Betty Anderson

## 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

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# the reflector

## ON THE LINE

With Jim Early



R&D's job is creation of important new technologies and moving them to the marketplace as fast as possible. To do this, we have organized several compact project teams. Each project group will have the people and the resources to do its job. To shorten schedules and smooth transitions, project teams will become Operations groups as their product development and its marketing advances. There will be no

"awkward" transfer of technology from one group to another. Rather, each group will make its technology and its product line grow from initial idea and feasibility to pilot line level and then full operating level. This pattern of project growth will effect the structure and manning of R&D. At any given time R&D will consist primarily of three or four project teams. Of the projects, one or two will be in their final stages approaching operating status—the others will be starting or well on their way.

We anticipate, as project groups move from R&D, new project teams will be formed. Such teams will be set up with the most appropriate staffing and will almost certainly include ex-R&D people currently with Operations. In total, we expect a flow of projects from concept through to Operations and accompanying the flow of people in the same direction and some counter flow of people—whether ex-R&D personnel or others—from Operations to man new projects.

Of current R&D projects, the largest and most advanced is CCD (Charge-Coupled Devices) led by Gil Amelio. Other project teams are led by Rudy Dyck for SDS Support, Albert Yu for Device Research, and Bruce Deal and Mike Barry for Semiconductor Technology.

R&D is smaller than it has been in many years, but at the same time the most versatile, experienced, knowledgeable, and generally capable group in silicon technology in the world. With our new pattern of operation, which we expect to be more effective than our previous pattern, we do not anticipate growing again to our former size, but some expansion may occur as technical opportunity and financial resources warrant. Of one thing we can be certain, with the work we are currently doing and the people who are doing it, ELECTRONIC NEWS could not have been more wrong when it said last week, "The glory days of Fairchild R&D are over."

## Job Well Done!

We have recently seen an extensive realignment of the R&D organization which reduced Dr. Early's Research staff approximately 75%.

The combined efforts of our supervisors, managers and industrial relations personnel have resulted in the rapid transfer of over 125 people to our Mountain View facility, and the other two divisions, filling existing requisitions.



Beryl Ramirez discusses with Vi Hughes, R&D Process and Device Specialist, her new job at the Mountain View facility.

Beryl Ramirez, Mt. View personnel, and Joan Borges, R&D personnel, interviewed and placed approximately 50 employees within Semiconductor functional groups. Nancy Saunders, Supervisor of Records and Benefits, was on hand to coordinate all transfers, working closely with payroll by keeping them informed of the up-to-date changes.



Joan Borges checks off the number of R&D people placed at Mountain View.



Nancy Saunders and her girls put a lot of effort into the behind-the-scenes paperwork for all R&D transfers.

Advance notice, to R&D employees of the impending lack of work situation, brought forth complete cooperation and assistance from virtually everyone. Layoffs were held to a minimum of 13 employees. Three were part-time.

Interviews are continuing on behalf of the terminated employees which should result in their recall soon.

The entire Fairchild team has handled this "tough" job extremely well!



# YOUR FAIRCHILD BADGE IS WORTH \$800

Did you know that your Fairchild badge is worth \$800? That is the approximate cost of the employee benefit package pro-

vided by Fairchild for each employee. Why do we spend approximately \$800 per year on each employee for benefits? The

answer is simple—Fairchild needs good employees and a good benefit program is one way we can attract and keep them.

We would like to show you what you get when you wear a Fairchild badge. We would like you to know where we spend your \$800. The chart below should help you understand your benefits.

Benefits	Employee Share	Fairchild Share
<b>Life Insurance</b> You are guaranteed an amount of life insurance equal to your basic annual earnings. For example, if you earn \$6000 per year you have \$6000 free life insurance. As your length of service increases, the minimum amount of life insurance increases to twice your basic annual earnings.	None	100%
<b>Medical/Dental Insurance</b> Fairchild has a comprehensive medical/dental plan for you and your dependents. Examples of some benefits are 100% of hospital room and board charges; 80% of most other medical charges; 80% of most routine dentistry and 50% of dental gold work. Your coverage is fully paid by Fairchild.  Fairchild shares in the cost of this plan for your dependents.	None  Approximately 20%	100%  Approximately 80%
<b>Long Term Disability Insurance</b> This Fairchild plan guarantees you a minimum of \$240/month should you become totally disabled for more than 6 months after you have been with the company one year.	None	100%
<b>Business Travel Accident Insurance</b> This plan provides a minimum benefit of \$50,000 and maximum benefit of \$150,000 payable to your beneficiary should you be killed while traveling on company business. This is in addition to all other insurance coverages.	None	100%
<b>Pensions</b> Fairchild has a pension plan for you that provides a monthly pension at age 65 in addition to Social Security benefits.	None	100%
<b>Holidays</b> Each year you get 9 holidays from work without loss of pay.	None	100%
<b>Vacations</b> In addition to the paid holidays offered by Fairchild, you have at least two weeks of paid vacation each year. As your service with Fairchild increases, your vacation entitlement will increase to four weeks.	None	100%
<b>Recreation</b> You are represented on a Recreation Council whose activities are sponsored by the company. In addition to an entirely free annual company picnic, there are many individual interest groups sponsored by the company.	Optional	Shared
<b>Cafeteria</b> You are provided by Fairchild with a cafeteria and/or other food facilities so that you may enjoy your lunch in a congenial and pleasant atmosphere.	Price of food purchased	Cost of Facility, Equipment and its operation
<b>Paid Time Off Work</b> You enjoy no loss of pay for limited times away from work for: • Compelling personal needs • Bereavement • Jury Duty • Sickness	None	100%
<b>Other Benefits</b>		
<b>Shift Premium</b> Fairchild pays shift premium to employees on second and third shifts.		
<b>Additional Insurance</b> Fairchild provides you with the opportunity to purchase the following additional coverages at rates much lower than you could buy them as an individual. • Supplemental Life Insurance • Supplemental Long Term Disability • 12 Choices of AD&D Plans		
<b>Auto Insurance</b> Also available is optional mass-merchandised auto insurance payable through payroll deductions.		



## PEOPLE: Gary Adams

By Dale Henderson

"A sailor's life is for me" could certainly fit one of the top engineers in our Multi-chip Memory section. A Naval architect on the sly, Gary Adams has done what most men can only dream about doing—designing and building his own boat.

A 30' sloop stands ready in Redwood City Harbor awaiting launch in early spring. After drawing designs and making the final corrections, Gary made his dream boat a reality. He started the boat in 1968, and watched it grow from an unsightly mass of fiberglass and wood into a classic racing sloop. With accommodations for six, Gary has made the boat his home.

Racing sailboats is a pretty exciting hobby in itself, but that's only the beginning for this former Youngstown, Ohio man. Gary designs boats, and has also taught basic sailing and ocean racing techniques. He is responsible for the scuba diving instruction for the Sunnyvale Parks and Recreation department. He earned a Master's degree in Electronic Engineering from San Jose State just prior to his boat project. According to Gary, "60 to 70% of my time is spent on or around the water." We were wondering where the puddles of water were coming from, Gary!

Gary's two children, Carolyn and David, are also water buffs. They are as fond of scuba diving and sailing as our Commodore Adams. One may wonder what a man of this nature wants out of life. When asked this, Gary simply replied, "Be happy!"

## THANKSGIVING DINNER

### SALAD

Try this for variety — it's fun to make your own tossed salad right at the table. Serve a large bowl of shredded lettuce (two or three kinds). Pass a tray or lazy susan of marinated garbanzo and kidney beans, marinated mushrooms, artichoke hearts, diced tomatoes, sliced radishes, filet anchovy, stuffed celery (small pieces), sliced cucumbers and onions in sour cream and a bowl of fresh shrimp. Serve two of your favorite salad dressings and toss right in your own plate.

Next the bird — Turkey, of course!

### DRESSING

To your standard bread stuffing try these variations:

*mix in some chopped mushroom  
or  
spinach and grated cheese  
or  
ground pork sausage*

### VEGETABLES

Mashed Potatoes — gravy (giblet, of course).

Sweet Potatoes — candied and topped with pineapple cubes and marsh-

mallows, slide under the broiler for a few minutes till golden brown and bubbly.

Cauliflower (with cheese sauce for slim people).

String Beans — tossed with butter (melted) and a dash of curry or dill seasoning.

Cranberry Sauce (try mashing a can of cranberry sauce with 3 or 4 tablespoons of HOT liquid mustard).

### DESSERT

Pies (Pumpkin, Mince, etc.)  
Fruit Cake  
Flaming Pudding

For your whipped cream topping try:

*a beaten egg yolk and 2 or 3  
tablespoons of brandy mixed in  
or  
finely chopped candied ginger and  
a dash of nutmeg mixed in.*

### WINE

A bottle of Chablis or Very Cold Duck.

Family, friends and love are the final ingredients added to make a very happy Thanksgiving!

## R&D Open House

On Saturday, October 16th, R&D opened their doors to employees and their families for a tour of the facility and refreshments.

Several of the visitors had toured R&D before but seemed to enjoy it even more. The children were extremely excited about seeing where their mothers or fathers spent eight hours a day. According to the committee members, "The kids asked so many questions about the equipment and processes that their futures just might be part of the electronics world."



The camera caught Dick Parker and family walking out the front door. Dick was responsible for the coordination of the Open House with the assistance of Joan Borges. Teri Mead was R&D's gracious hostess, greeting each guest as he entered the door. Over 400 people attended a most successful open house.

## Baby Contest Winner

During the month of October, R&D employees became baby judges!

The winner is Carol Helm (as the baby picture most recognized). With seven ties picking Carol's picture out, there was a drawing to determine who would be the lucky winner of a \$25 prize.

After much concentration, Betty Vanzin's name was chosen from the basket. Congratulations to both Betty and Carol.

Picture #1 — Nelson Perry  
Picture #2 — Betty Vanzin  
Picture #3 — Helen Ennor  
Picture #4 — Robert Erkson  
Picture #5 — Dale Henderson  
Picture #6 — Joan Borges  
Picture #7 — Carol Helm



# South on Parade

By Teri Mead



In case you think you are seeing double—you are! These two young ladies are representing Palo Alto in the Miss Twins California Pageant held at the Cabana Hyatt House on September 24th, 25th, and 26th. They are the adopted daughters of Bryant Brown.

Sharon and Sheila are identical twins. 1971 graduates of Palo Alto High School, they both excel as equestriennes and bowlers, not to mention scholastics. One twin received two scholarships—one being from the State of California.

The twins have been quite busy since the beginning of the contest. They are not only competitors, but the official hostesses during the pageant. To promote the contest, they have traveled throughout the State of California and appeared on local television, and in San Diego.

The contest consists of 35 sets of twins competing for the title of Miss Twins Cali-

fornia. The girls are judged on poise, personality, and beauty. The winners will go on to the Miss Twins U.S.A./1972 Contest. Each set of twins is sponsored by various representatives from around the State. Sharon and Sheila are sponsored by the Palo Alto Junior Chamber of Commerce.

"We would like to win the contest very much because it would give us a chance to travel and meet the young people of America," comment the twins. "Also, it would enable us to exchange ideas with our peers. I guess you could say we have a thirst for knowledge and this would give us the opportunity to fulfill that thirst."

The twins will return to college after the contest to continue their education to become teachers.

*Footnote: Sharon and Sheila took first place in the Bikini contest. They were second runners-up for the title of Miss Twins.*

## ANOTHER FISH STORY?

R&D's mailman, Nelson Perry, has, for the past two years, formed a salmon fishing trip for some of our avid fishermen. 1971 was no exception. Twelve men and two ladies (both experienced and non-experienced) opened their eyes at the bewitching hour of 5:30 a.m. on Saturday, October 23.

The "Ginny C." left from Sausalito with fourteen enthusiastic fishermen and lots of refreshments to catch their limit. But, the salmon had other ideas—only two of the crew caught fish! Manny Alvarez hooked the largest fish, weighing 27 lbs. and 40 to 43 inches. It was also the largest one caught in the bay that entire day. Wolfgang Beu (a first-timer at fishing) made the other catch. Actually, he caught three fish. Two weighed 12 lbs. each and the other just made 7 lbs.



Even though the fish were not biting that day, everyone had a terrific time just being out in the salt air and sun. Other members of the R&D crew were Bob Fairman, Bryant Brown, John Wasolowski, and Dorothy Unruh.

## Happy Turkey Day!



## flash

Due to the reduction of employees at R&D, Joan Borges, Personnel, and Dana Goodridge, R.N., will only be available approximately 20 hours a week. Dana will be at R&D every afternoon from 1-5 p.m.

### FOR SALE

Austin Healey Sprite - 1969 - Low mileage - Radials and Tonneau cover - Very clean and a steal at \$1100. Richard Gardner 321-4368

### THE REFLECTOR - November, 1971

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NEW YORK  
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SECURITY  
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SEPTEMBER 9, 1969

SPEAKER:  
DR. C. LESTER HOGAN,  
PRESIDENT AND  
CHIEF EXECUTIVE  
OFFICER  
FAIRCHILD CAMERA  
AND INSTRUMENT  
CORPORATION

**FAIRCHILD**  
CAMERA AND INSTRUMENT  
CORPORATION





CHAIRMAN: We would like to welcome you to the New York Society of Security Analysts meeting of the Fairchild Camera and Instrument Corporation.

Our speaker joined Fairchild Camera and Instrument Corporation in August of 1968 as president, chief executive officer and a member of the board of directors. He is generally acknowledged to be one of the outstanding executives in the electronics field, combining business acumen and decisiveness with an outstanding scientific background based on his experience as an educator at Harvard University and as a member of the technical staff of Bell Telephone Laboratories.

At Harvard our speaker was awarded the Gordon McKay Professorship of Applied Physics. His research there and at Bell Labs included pioneering work on the microwave properties and applications of ferrites. As general manager of Motorola Semiconductor Products Division from 1958 to 1966, he restructured the division from what was essentially a laboratory operation producing a single line of transistors to one of the major semiconductor companies in the world.

Our speaker was born in 1920 in Great Falls, Montana. He was graduated from Montana State University in 1942 with a bachelor's degree in Chemical Engineering. After serving three years as a naval officer in World War II, he did his graduate work at Lehigh University, earning the master's and doctorate degrees in physics with emphasis on solid state physics and electro-magnetic theory. He was awarded an honorary A.M. degree from Harvard in 1954 and an honorary doctorate of engineering from Montana State in 1967.

Our speaker has held posts in most major scientific organizations. He is a Fellow of the IEEE and is listed in Who's Who in America and American Men of Science. It is with great pleasure that I present to you the president and chief executive officer of Fairchild Camera and Instrument Corporation, Dr. C. Lester Hogan.

DR. HOGAN: Thank you, Ben. It is a pleasure to be speaking to you about our corporation today, on the exact date that represents my 13-month anniversary with Fairchild Camera and Instrument Corporation.

I came to Fairchild 13 months ago because the corporation needed new management. I don't believe this comes as a surprise to anyone in the room.

But the management of a large corporation is never



the result of one man's decisions. It comes as a result of at least 100 top and middle management people. In fact, if the middle management of a large corporation consisted of a very competent, dedicated group of people, the top people could be bungling idiots and the corporation would do extremely well.

So when it becomes obvious to everyone—including the board of directors, the stockholders, the analysts, the competitors and the customers—that a management problem exists, it is to be expected that the problem goes rather deep in the organization and that any new chief executive will have a large rebuilding job to do.

This came as no surprise to me. It should have come as no surprise to any of you. This kind of rebuilding cannot be done overnight. People must be evaluated. Others must be recruited. Finally, a team must be molded from a group of individuals.

I have always been open and frank with the press and with all of you as to what I found when I joined Fairchild. I found the most competent technical group that had ever been assembled in this industry. It is true that many good technical people had left Fairchild before I joined the company. Many good technical people have left Fairchild since. But the depth of technical talent at Fairchild was and still is so deep that all of these losses, although regrettable, were trivial to the corporation.

The technical reputation of Fairchild was and still is so high in the engineering and scientific community of the world that recruitment of additional top caliber technical talent has been the easiest job I have had. As of August 9, 1968, I knew of no technical team in the entire semiconductor world that was even in the same league with Fairchild. Today, I think that technical team has been strengthened and oriented more competently with respect to the activities that are most pertinent to our mission. If anything, the technological gap that exists between Fairchild and every other group that exists in the industry was widened, not diminished.

You must remember that this is the same team that has led in every important advance in silicon technology in the past decade. This is the team that developed and patented the Planar\* process and the technique of placing metallic interconnects over the top of silicon dioxide. Royalties from these two important developments will amount to approximately \$6 million for 1969.

\*Planar is a patented Fairchild process.

This is the technical group that introduced the first commercially available integrated circuits to the world. This is the group that took the dominant leadership position in medium scale integration technology by introducing the largest, the best and the only complete line of MSI products in the last year.

This is the group that pioneered the Stripline technique for the manufacture of semiconductor devices and introduced the very first plastic package devices to the world approximately eight years ago. Interestingly enough, both of these techniques—first developed by Fairchild and now used by all large manufacturers in the world—are today claimed as trade secrets by a competitor.

This is the same technical team that introduced the first linear integrated circuits to the industry when all other manufacturers were saying that the milestone was at least five years away. And this is essentially the same team that introduced to the world, just within the last six months, an entirely new line of linear integrated circuits—at least a year ahead of the small manufacturers that concentrate in this area, and two years ahead of all major semiconductor manufacturers. This line of linear integrated circuits is stocked in depth today on the shelves of all of our distributors throughout the world and on our shelves in Mountain View.

I cannot say enough of the performance of the entire linear integrated circuit team, led by Len Ornik in Operations and Mike Markkula in Product Marketing. Nearly every man on that team, including the two I have just mentioned, was at Fairchild when I arrived a year ago. Nearly every man on that team was on the team that produced the first linear integrated circuits several years back. They have demonstrated that the performance they were capable of turning in many years ago is one they can still achieve when given the opportunity by their management.

Last August I was quoted as saying that I was astounded at the technical competence of Fairchild. I found the organization doing things I had previously believed were five years away. In the intervening time, I have found nothing about this technical team to disillusion me. On the contrary, I am still constantly amazed at their collective ability to perform.

In a specific example, about nine months ago Raytheon and the Department of the Navy selected Fairchild to build radiation-hardened integrated



circuits for the Poseidon missile. Fairchild was selected because the samples that had been submitted to Raytheon and the Department of the Navy were the best performing circuits they had seen. We accepted the order knowing full well that in spite of all the publicity to the contrary, no other manufacturer in the world had been able to produce such circuits in large volume at reasonable cost.

We, ourselves, had only produced these samples in pilot line quantities. We knew that the conversion to large scale production would be costly and time consuming. We hoped that we would not be delinquent in our deliveries, but frankly we were all very concerned. Today, this program ranks as one of our most successful programs.

In addition, about nine months ago, Fairchild was selected by the University of Illinois to build the first large scale semiconductor memory for the ILLIAC IV computer. That program is the biggest single program that exists today for the construction of large scale semiconductor memories. As a result of this single effort, it will become obvious to all about the middle of next year that Fairchild is leading the world in this new and exciting field.

I could give many more examples, because I am still as amazed with the technical competence of Fairchild as I was 13 months ago.

But I was also quite frank with the press and with you with respect to the management problem at Fairchild. The technology was not adequately supported by management decisions that are necessary to lead any large and complex organization.

What have we done in the past year to solve this problem?

First, we have completely rebuilt our management organization. As most of you know, there are ten major divisions at Fairchild: Semiconductor, Space and Defense Systems, Defense Products, Industrial Products, Controls, Graphics Equipment, Microwave and Optoelectronics, DuMont Electron Tubes, Electro-Metrics and the old Instrumentation Division which has now been renamed Systems Technology.

Of the nine general managers leading these divisions one year ago, only four remain in their jobs today. And their jobs are secure as long as they perform as magnificently in the future as they have in the past.

None of the new general managers came from Motorola. All came from within Fairchild or from other corporations.

As of today, I have nine people reporting directly to me. Only one was at Fairchild when I came a year ago. Only two of the nine worked for Motorola. I would like to tell you about these particular people, because I believe that people make a corporation. And I feel that during the past year we have put together one of the finest corporate management teams in existence.

To begin with, we have Nelson Stone—Vice President, Secretary and our Corporate Attorney—who was at Fairchild when I came. He is one of the finest legal minds I have had the opportunity of working with at any time in my career. I am sure you know that our Planar\* technology is now being used by 18 companies in the industry, all under licensing agreements reached while Nelson has been our Counsel.

Next, we have Warren Bowles, Vice President and Director of Industrial Relations and formerly head of Industrial Relations at Texas Instruments Semiconductor division. I consider him to be one of the finest industrial relations managers in the country, and his reputation bears me out. He is one of the nationally recognized experts in the industrial applications of the behavioral sciences.

Next, we have George Pfifer—sitting up here at the head table with us—who is Vice President of Finance. George came to Fairchild from American Express and is one of the brightest, most imaginative and best financial vice presidents I have ever known. While he arrived not knowing much about the semiconductor industry, he is basically so bright that it took him just a few months—not only to catch on about the industry but to tell us a few things we ought to be doing. He is a tremendous individual.

Next, also at the head table on my right, is Fred Hoar, who is Vice President and Director of Communications. Fred was formerly Vice President of Public Affairs and Advertising for the RCA Information Systems Group. We had a couple of tough weeks getting him out of RCA, but we made it, and we are very proud and happy to have him representing Fairchild now. He is the man you people want to contact in the future when you have any questions about Fairchild, particularly at this critical stage of our company's development when the need for effective communications is so important.

\*Planar is a patented Fairchild process.



Next, on my left is Al Grant, who is Group Vice President in charge of all the systems and equipment divisions of Fairchild and a director of the corporation. He was formerly President of Lockheed Electronics Company and built that organization from a small operation to one of world-wide significance. I have known Al for many years, having met him first when he was Vice President and General Manager of the Computer and Data Systems Division of Autonetics. He has an outstanding track record.

Next, I have reporting to me Joe Van Poppelen, who is Vice President and General Manager of the Semiconductor Division. Formerly Joe held positions of major responsibility as President of ITT Semiconductors and Executive Vice President and General Manager of Signetics. In the latter capacity he built the foundation of the entire structure that is now Signetics Corporation.

Next, we have Dr. John Atalla who is Vice President and General Manager of the Microwave and Optoelectronics Division. John Atalla is one of the most brilliant engineers to turn into a competent businessman that I have ever known. He came out of the Bell System and went to Hewlett-Packard, where he was almost single-handedly responsible for the Semiconductor operation. Not so well known is the fact that John was responsible also for the basic patent on the MOS transistor, now held by the Bell System. At Bell Laboratories, he also did the early work leading to the Planar technology that was carried through by Fairchild.

Finally, I do have two former Motorolans reporting to me. One is Leo Dwork, presently Vice President and Chief Technology Officer of the Corporation—a brilliant man and a real technical generalist, with a wide range of knowledge in many scientific disciplines. He is an outstanding businessman besides. Leo's main job is to help to infuse the advanced technology of our research laboratory throughout all the divisions of the corporation.

Next, is the man who was introduced to you a little while ago, Tom Hinkelman, Vice President and Director of Planning for the Corporation. Tom has a long and distinguished record in this industry—he was an engineer on UNIVAC I, a product planner for G.E. when semiconductors were just beginning to make their mark, and the creator of the product marketing organization at Motorola Semiconductor.

[Since our meeting, Dr. James M. Early has joined us as Vice President and Director of Research, with

responsibility for the corporation's total R & D efforts. He came to us from Bell Telephone Laboratories, where he was director of the Semiconductor Device Laboratories, and an internationally recognized expert in semiconductor technology.]

All of these men represent the very best professionals in their respective fields today. They are young, modern managers, completely familiar with contemporary management technology. The team, therefore, has been reconstructed and rebuilt. The next level has also been drastically restructured. We are now in a position to forge ahead.

What have we done other than hire people? We have done many things—but in order to discuss them in detail, it is necessary now to refer to the specific divisions.

First, John Atalla has put together in the Microwave and Optoelectronic Division some of the finest people in the United States and he has formulated a solid plan of action. Joining him recently was Dr. John Moll, formerly a tenured professor of Electrical Engineering at Stanford University who resigned that position just a few months ago to lead the engineering effort in this new division.

John Atalla has also added new manufacturing people, new marketing managers and a depth of talent below these. They are going to concentrate in many areas—including an entirely new product line of microwave discrete devices: transistors, microwave sources, Gunn diodes. They will also build a product line of microwave circuits—amplifiers, IF amplifiers, detector sources, and optoelectronic displays and detectors. There is no doubt in any of our minds now that gallium arsenide mixed crystals, used as displays in the next few years, will completely replace Nixie tube displays. They can be built reliably and cheaply, with all decoding right on the same substrate as the display.

John Atalla is going to build individual detectors and emitters and also make matrix detectors that are capable of forming the substance of a new class of vidicon tubes. In addition, after having established a business with all of these parts, he has the charter to move cautiously into the microwave systems area, using the component parts of his own advanced technology.

Second, our Graphic Equipment Division has a new General Manager, Dick Robinson. We have recently been able to sell the press portion of the Graphics Division because we felt that it did not fit with the



new Fairchild that we are attempting to create. We have kept the phototypesetting and teletypesetting part, and we intend to greatly expand that entire product line in the very near future to advanced electronic computer controlled composition systems.

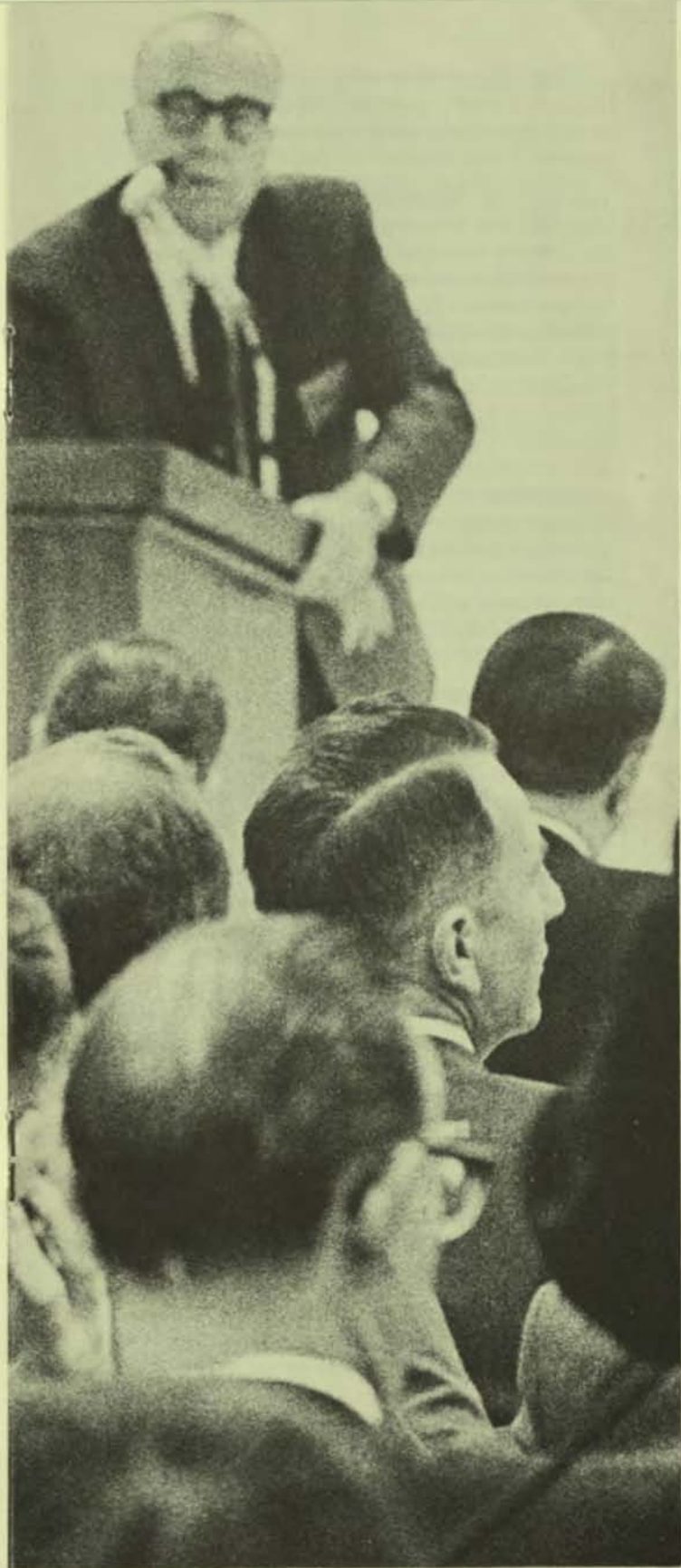
The DuMont Electron Tube Division is under the same General Manager as when I joined—Fred Walzer. He has done a magnificent job in an area of tough competition and has been able to maintain satisfactory profit levels. He will continue to exploit the markets he is now in—power tubes, display tubes, direct view storage tubes and so on—but will also attempt to expand into more advanced techniques such as those required by computer terminals.

We have split off from the old Space and Defense Systems Division a new group which we call Defense Products. Under Bob Draghi, as General Manager, this division is concentrating in one particular field—that of fusing and arming devices.

Space and Defense Systems Division has a brand new General Manager, Lou Pighi. As you know, their area of greatest concentration has been aerial reconnaissance systems, in which they are indeed one of the world's leaders. This division has been the mainstay of the Corporation over the 50 years since its founding. It still produces the finest line of precision aerial cameras in the world. An exciting new project is now under way which may eventually replace all film cameras with a solid state "eye" made up of our own specially designed photo-transistor chips. There is a great future for this division.

The Industrial Products Division, under Ray Hennessey, has many products, among them an eight millimeter sound projector, both rear screen and front screen. Recently we signed a licensing agreement with Eumig in Austria, wherein we will represent their line of precision cameras in the United States. This Division also has a dominant position in the building of the flight data recorders which are now standard equipment in all commercial aircraft. We are also a major supplier of cockpit voice recorders.

The Controls Division, under Erwin Hale, again builds a broad range of related products—operational amplifiers: hybrid amplifiers in which external components have been added to integrated circuit devices, trimmer potentiometers, delay lines, STANS weight and balance systems for aircraft, sensors,





switches and what have you. It is a well-run division, has maintained a good profit margin, and is now formulating a plan for growth to complete control systems in the future.

The Systems Technology Division has as General Manager Bob Schreiner, who comes originally from the General Electric Computer department in Phoenix, where he served many years. He was at Fairchild when I joined the company, and is primarily responsible for our advanced position in the computer-aided design field. In the few short months that Bob has been General Manager of that division he has put together an entirely new team, including Dr. Kay Magleby, who has an excellent background and reputation in the computer and data systems field. The charter of Systems Technology is to continue and expand the construction and sale of test systems, and to enter the computer, peripherals and terminal business where it does not compete with our major customers. Actually, the new 8000B LSI tester has in it, as a control unit, the Fairchild designed F24 mini computer.

Our Electro-Metrics Division is producing a fine line of radio frequency interference analyzers and spectrum surveillance equipment for the government. Their business has slowed down somewhat in the wake of recent cutbacks in military spending.

Finally, we come to the division which is probably the greatest concern to all of you in this room—the Semiconductor Division. It is certainly the division that has received the most attention in the press and in your own writings, and is the largest single division of the Corporation, representing approximately 60% of the total Corporate sales for this year.

It is important for another reason also—because it will be the keystone upon which we intend to build the future of Fairchild Camera and Instrument Corporation.

The solid state displays, vidicons and microwave circuits that I referred to previously will come to pass only if we have an advanced semiconductor technology permitting us to bring to the marketplace these particular products in an advanced state.

Our entry into computer terminals and peripherals will come to pass only if we can economically build such systems using both MSI technology and semiconductor memories. Our ability to hold and increase our share of the military fuse market depends on our ability now and in the future to convert electro-mechanical devices to solid state devices.

I think that it is proper, therefore, that the Semiconductor Division should get your closest attention. Here, however, is where I believe my original evaluation of the Corporation was most valid—a division leading in technology but lagging in decisive management.

In August of 1968, when the Wall Street Journal asked me when the Division would be profitable, I frankly was so shocked at the irrelevance of the question at that time that I was properly quoted as saying: to hell with profits, we have a job of rebuilding to do first.

And for the past 13 months, we have been about the job of rebuilding.

Many of you have suggested that as the cabbage was peeled, we found the job to be tougher and larger than we first estimated. Frankly, I consider this to be of little importance. The only important question is whether we are succeeding in attaining our goals. And the answer to that is a resounding yes.

It is true that Fairchild was a high-cost producer in August of 1968. The Division was, in fact, losing money in August and had lost money for the two previous months. So costs must have been higher than the selling price.

But not primarily due to the lack of mechanization, as many of you assumed. First of all, no one is really mechanized in the production of integrated circuits, which is rapidly becoming a larger and larger fraction of everyone's business. Fairchild was, and still is today, as mechanized in integrated circuit production as anyone in the business—with the possible exception of Philips in Holland. And having a much larger fraction of our discrete assembly in off-shore locations actually balanced our lack of mechanization in the discrete area.

But it is true that I have sorely wished during the past year that someone at Fairchild had invested a little more in mechanization techniques that are quite common to the large producers of the world. Had this been done, our costs would have been much lower and our profit much higher this year. The lack of mechanization hurt us. But that was not the only problem, nor was it even the primary problem.

The primary problem at Fairchild in August, 1968, was the lack of a total management control system for a complex world-wide operation. We lacked a system that allowed the various factories to be



properly scheduled, permitted us to build the right product at the right time for the customer, and to maintain an inventory with the proper distribution at the proper level.

The problem began to rear its ugly head at Fairchild when the Division went from about \$60 million of sales to about a \$100 million in 1965. Even though the Division was handsomely profitable in 1965, our analysis of productivity figures, inventory figures and other such information showed that the management control system at Fairchild that was adequate in 1964 was not adequate in 1965. The average selling price then, and the tremendous technology lead which Fairchild enjoyed, actually buried the particular problem even from the consciousness of the operating management.

However, in 1966, the Division grew again, and what was simply an irritant the year before became utter chaos. As a result, there was no further growth in dollar sales in Fairchild's Semiconductor Division. The total dollar sales of Fairchild's Semiconductor Division were flat for three years—1966, 1967 and 1968.

In this period, orders became delinquent. Inventories were either too high or too low, never right. Productivity decreased from 1965 until 1968, because production lines were started and stopped around the world on a moment's notice by an erratic manager, greatly increasing the cost of doing business. Finally, in 1967, as a result of these misdirections, the profit margin of the Division dropped to about 5%, if one neglects the handsome royalties that were even then being received.

Thus, many times last fall, I stressed that Fairchild's biggest problem had been the complete lack of its management growth to keep pace with its sales growth.

The second major problem in Fairchild's Semiconductor Division last fall was management's decision not to invest heavily in the improvement of production lines. This includes but is not limited to mechanization. Actually, the wafer fabrication areas, consisting mostly of diffusion furnaces and evaporators, were deplorable. They were dirty; precision control could not be achieved in production; and wafer yields last fall were one-fifth what they should have been.

The material processing area was the only bright spot in the whole operation. This involves growing single crystals, sawing, lapping, polishing and

epitaxial growth. At Fairchild, it is absolutely unique; and it is my belief that Fairchild then could and still can produce an epitaxial wafer at approximately one half the cost of anyone else in the world.

Actually, this helped to support the organization because we were pumping five times as many wafers in the front end of the machine as we should have for the product coming out the back. The only thing that saved us was that these wafers cost us about half as much as they did anyone else in the world. So in terms of a total expense, our yield was roughly one-half to one-third of what it should have been.

Finally, to add to the woes of last August, Fairchild was successful in selling its interest in SGS back to one of the original partners. But this put Fairchild in the unenviable position of being the only major manufacturer in the United States with no activity in Europe.

Thus, I inherited a Division with the above problems and already losing money last August. Some very rapid decisions had to be made and, collectively, we decided to take a very high risk approach.

We decided to initiate a massive capital improvement program in order to up-date the production facilities, and to greatly increase the inventories so that we would use them as a fly-wheel for sensibly scheduled production lines around the world, as well as to meet our customer commitments more regularly.

At the same time, we decided to greatly increase the overhead of the operation, so that we could do all the jobs necessary to exploit our advanced technology. We decided to take our lumps this year and wait for sales to catch up to our new overhead situation, knowing full well that we would initially increase the losses of an already losing operation.

In addition to deciding to do all of these things, we decided to immediately staff up in Europe. We now have a complete staff in Europe, consisting of about 50 people, including salesmen, product marketers, application engineers and customer service people. We have sales offices rented and occupied in London, Wiesbaden, Milan and Paris, and from a standing start of about a zero order backlog in June last year, the order backlog in Europe now stands at something in excess of \$5 million. This additional expense will be self-supporting in terms of new orders and new business by the end of this year.



Finally, we decided that the mechanization route would take so long that we couldn't wait, and we went to additional expense to greatly expand our total operation in the Far East. We built a brand new factory in Singapore, which is now occupied by about 250 employees. It will soon grow to 1500, involved in the assembly of integrated circuits.

We expanded the Hong Kong plant from 3000 employees to nearly 6000 employees. And this year we doubled the floor space and the employees in Korea.

Now when one chooses this particular course of action, it is very difficult to pinpoint accurately when you are going to get the payoff. Indeed, there is always the chance that it won't pay off at all. Total economic conditions in the world can kill you when you start a tremendous expansion program with a company that is already losing money. The average selling price of devices that we ship can greatly affect the particular date on which we can become profitable. The ability of our marketing organization to get orders and increase our backlog, and to get our shipments up so that our sales can overtake our new overhead, can greatly affect the day on which we get our pay-off.

And finally, the ability of our technical team to honestly put into production the leadership items that they so beautifully demonstrate in the laboratories is a real gamble when you forge ahead in this kind of situation.

Now with all of these uncertainties, I think that it is proper that you ask why we chose the course of "to hell with the profits for the time being" when a more cautious and less ambitious program would have led to profitability sooner.

I personally think that the stakes were very high and that the reward possible at the end of the trip made the gamble worthwhile. For had we considered profits first, it is probable that Fairchild would have always remained in the semiconductor business but would have probably competed for fourth or fifth place with someone else in the future.

If we could succeed on the program that I have outlined to you, and if we could solve our management problems, our yield problems, our productivity and cost problems—while at the same time we exploited our advanced technology—then I think that it was not just a matter of survival. It was a question of building the foundation that would ensure that we would have an honest chance at first

place in this industry—together with profits, and opportunity of exploiting the technology in other areas that would naturally accrue to the number one company.

Was the risk worth the gamble? I guess the answer to that is: if we succeed we are heroes; if we don't we're bums.

How do we stand now?

First, we have already brought order out of chaos. The factories are operating smoothly and intelligently. The individual factory managers are superb and all were part of the talent that I found at Fairchild 13 months ago.

We have increased the semiconductor inventory by about \$6 million, reckoned at the inventory value, which is considerably less than the market value. All the pipe lines have been filled and product is coming out.

A year ago, Fairchild Semiconductor Division was shipping approximately 80 million discrete devices per quarter, and there was only slight growth. Now we are shipping at the rate of 110 million discrete devices per quarter, and the growth rate is fantastic.

Again, 13 months ago, we were shipping integrated circuits at the rate of 7 million devices per quarter, and there had been absolutely no growth for one full year. Today, we are shipping integrated circuits at the rate of 16 million units per quarter, and we are expecting the rate of growth to increase for the fourth quarter of this year. Already, the 16 million units represents an increase in unit volume of 130% in the past 13 months.

In dollar volume, there was absolutely no increase in integrated circuit sales at Fairchild from January, 1967, up to January, 1969. Since that time, our integrated circuit dollar sales rate has increased by 60% and the rate of growth is increasing.

When I talked to many of you in Mountain View last December, I said that in 18 months, the total sales rate of the Semiconductor division would be running at least double, in dollar volume, what it was at the time I took the job. I simply remind you of that statement so that you might measure us by it when the 18 months have gone past.

So we have greatly improved the logistical control of our factories. We are shipping more than two-thirds of our products on the customer required dates, and nearly 90% on Fairchild committed days.



We are growing at an enormous rate. We set a record in the month of August and the month of September will be another all-time record for the Division. We will shortly introduce a complete line of series 74, TTL circuits, whose effect on our sales in the future will be substantial.

We have almost completed a new multi-million dollar wafer fabrication area that will at least double the integrated circuit yields during 1970. We will also have operating by the end of the first quarter of next year fully mechanized lines in the transistor area and later in the year for integrated circuits. These lines are unique and, in my opinion, have no equal anywhere in the world.

We started from scratch. We designed new equipment and a new philosophy of manufacture that is superior to anything else we know. All of the machines have been built, they have been tested as individual units, and we are now putting them together as a line.

This action will greatly reduce our costs and, in addition, improve our yield and the reliability of our product.

I said it was a high risk approach we chose some 13 months ago. Yet, every important goal that we set for ourselves at that time has either already been achieved or is so close to being realized that we can give you accurate timing for its accomplishment.

Obviously, the thing that makes the approach we chose so risky is that there are so many variables in the prediction of profitability that one can easily run out of money before you quite make it. Even with an almost impossible chance of knowing when you can achieve profitability, I felt when we started on this course that we would achieve every goal and still obtain profitability sometime during this past summer.

Personally, I was prepared to endure an unprofitable operation for all of 1969. I felt that the reward was worth the risk. If we couldn't become profitable during 1969, I admit we could have run into some great financial problems.

It became obvious to us in May that we were not going to achieve profitability during the summer so we took stock again. We looked at the backlog, we looked at the economy, we looked at our costs, and we came up with the prediction that we would be profitable in September.

As soon as we believed that we had a real honest

feel again for our operation, in the first part of June, I went before the San Francisco Security Analysts and predicted that the Semiconductor Division would achieve its first profitable month in 16 operating months by September, 1969. Today, I will stake my job on that prediction.

Thank you.







**Fairchild  
Camera and  
Instrument  
Corporation**

**1970 POST MEETING REPORT**



## 1970 SHAREHOLDERS' MEETING REPORT

*Sherman M. Fairchild, Chairman of the Board, called the meeting to order at 10 a.m., May 1, at Rickey's Hyatt House in Palo Alto, California. This also was the location of the 1969 shareholders' meeting.*

*Represented in person or by proxy were holders of 3,279,095 shares, or 74.81 percent of the outstanding common stock.*

*After the usual legal formalities, Mr. Fairchild introduced Dr. C. Lester Hogan, President and Chief Executive Officer, who reported on the company's progress during 1969 and its prospects for 1970.*

### HIGHLIGHTS OF THE PRESIDENT'S REMARKS

Dr. Hogan:

At our meeting last year many of you will recall that I touched on a number of things that were wrong at Fairchild and the corrective action planned by the new management. This year, I am able to devote most of my time to discussing what is right about the company and our plans for progress. . . .

As you know, the company's financial results for 1969 showed a substantial improvement over the previous year, with record sales and a return to profitable operations. In the first quarter of 1970, the company remained in the black, with operating profit of \$1,092,000 or 25 cents per common share, compared with \$125,000, or 3 cents per share, in the same period a year earlier. Our sales for the quarter climbed to \$64,654,000, an increase of 6 percent over the \$60,091,000 sales in 1969.

This improved performance was due to the Semiconductor division which, as you know, is our largest operating unit. The Semiconductor division has shown gains in sales volume and profitability since mid-1968. In terms of new orders, billings, and backlog, Fairchild Semiconductor substantially outperformed the industry last year. It continued this growth rate through the first quarter of 1970. . . .



One of the measures of performance in any competitive field is change of market share. In the semiconductor industry, this change in market share from year to year is usually measured by tenths of a percentage point. Fairchild's share of the semiconductor market increased last year by several full percentage points. In the most significant growth area of the United States market—integrated circuits—our rise was even greater, returning the corporation to the number two position, just slightly behind the leader in the industry. . . .

. . . It should be noted, however, that the sales and profits of the semiconductor industry are closely related to the economic health of the nation. The current business slowdown has been reflected recently in a definite softening of semiconductor orders and sales, particularly in the aerospace and defense markets.

Management is closely watching these trends, recognizing that they may have an unfavorable impact on the company's second quarter operating results. We are attempting to offset this influence through more closely controlled expenditures, increased penetration of foreign markets, and a very aggressive domestic sales program. Our outlook for the full year still remains optimistic. . . .

. . . The gains achieved by the Semiconductor division last year bore witness to our correction of the problems which afflicted us when I spoke to you last year, particularly poor product availability, lack of emphasis on discrete devices, customer dissatisfaction, and insufficient sales force deployment. In addition, we were hampered by an outdated and high-cost factory, requiring us to mount a major capital expenditure program to modernize our plants.

These problems have been dealt with. Our sales force was reorganized for maximum worldwide coverage and a successful customer satisfaction program was implemented. Our product line was broadened to provide opportunities in expanding new markets: medium-scale integrated circuits, large-scale integrated circuits, linear integrated circuits, hybrid integrated circuits, and memory products.

We enlarged facilities both in the Far East and this country, including a new plant on the Navajo Indian Reservation at Shiprock, New Mexico. New mechanized facilities in Mountain View will provide the high yield and productivity which we have long required. . . .



**Dr. C. Lester Hogan,**  
*President and  
Chief Executive Officer*

**Sherman M. Fairchild,**  
*Chairman of the Board*

. . . At our last meeting, I indicated that we were developing LSI memory devices which, within a year, would find their way into the bulk memories of computers. Today I am happy to announce that three weeks ago we shipped the industry's first large commercially available LSI memory system, which will be used by the Burroughs Corporation in one of the world's largest computers, the Illiac IV. . . .

. . . Many of our MSI and LSI products today are being routinely designed for production in our multi-million-dollar Computer Aided Design facility. In a procedure that we believe is well ahead of our competitors, our engineers can now design a new product completely, test it for electrical soundness and make masks in a fraction of the time this process required just a couple of years ago. . . .

. . . Our increased penetration of foreign markets, particularly Europe and Japan, has contributed vitally to the growth of our semiconductor operations. While the



United States market for semiconductors is still the world's largest, both Europe and Japan are currently growing at rates that are two or three times faster than this country's. This fact has not been overlooked in our marketing strategy.

One year ago Fairchild had no operations remaining in Europe, following the sale of the corporation's equity in SGS in Italy. . . . By the end of 1969 we had built a team in Europe which includes salesmen, applications engineers, and customer service representatives, among others. This group now exceeds 100 persons, including outstanding foreign nationals. By the year's end we had a very strong order position.

Our 1970 goal for Europe is to triple last year's sales volume. Completion of our new plant in Wiesbaden, West Germany, in August will further strengthen our ability to capitalize on the potential of this very rapidly growing European market.

Of even greater long-range importance is the upsurge in the Japanese electronics industry, which has a current annual growth rate of 30 percent per year. Fairchild is the leading United States semiconductor supplier to this market, with promising prospects, we think, for the 1970s. We are also the largest supplier of semiconductor products to the important Hong Kong consumer market. . . .

All these events underscore the emergence of Fairchild as a major international corporation with factories and sales outlets throughout the world. Our Semiconductor division, acknowledging this fact, recently reorganized its top level management to put greater emphasis on worldwide operations. These steps were aimed at reducing costs on high volume, mature products and increasing our leadership in the area of new products and advanced technology. . . .

. . . When I arrived at Fairchild, it was evident that a big job of rebuilding had to be done. I have long been convinced that no company can dominate the semiconductor industry unless it commands two ingredients: undisputed leadership in technology and the most

efficient production plant in the industry. Fairchild has held the first key for many years. But it lacked the second, and it was imperative, no matter what the cost, to provide that key if this company were to capitalize on its opportunities for growth.

So I made the decision to go ahead with a major capital improvement program, even though it might stretch the drum tight, in order to give us the ability to overtake our competitors as rapidly as possible. . . . The effort took somewhat longer than I had hoped, but I am happy to report to you today that, by July, our modernization program will essentially be finished. With this phase behind us, Fairchild can successfully lock horns at any level of competition with the very best in the industry. . . .

. . . I have spent this major portion of my remarks on the Semiconductor division, since it represents the largest sales and earnings component of the company. I would like now to mention some of our other divisions.

The Microwave and Optoelectronics division, for example, is developing a broad line of light emitters, detectors, low-cost microwave sources, solid-state displays, and other products using new solid-state materials. The Systems Technology division is applying its proven competence in the systems field, not only to a line of advanced semiconductor test equipment, but to computer peripherals and electronic data systems.

Our Space and Defense division, in conjunction with Research and Development, is developing a solid-state camera lens which will enable photographs to be transmitted instantly to remote locations. Last month our Graphic Equipment division introduced an advanced electronic keyboard for computer input and typesetting applications, which utilizes Fairchild MSI devices.

This is a sampling of the new product activity at Fairchild. It all revolves around the innovative core of our Semiconductor activity, the keystone of the company's future. We are making heavy investments in this development program because such expenditures are essential to the long-term health and growth of our corporation. . . .



... Finally, I would like to comment on a subject of growing public concern, generally termed the social conscience of business. All of us have been made aware of the problems which burden this country and this world—problems of the ghetto, of the environment, of the quality of human life.

Our company considers this a first priority for management, not out of any spirit of do-goodism, but basic corporate citizenship. As has been said before, whenever human problems are solved, everyone benefits. If ever business in the past had some difficulty reconciling its social responsibilities with the profit motive, I think that time has long since passed.

I will not detail the programs under way at Fairchild beyond a few highlights. We are committed to increasing our domestic minority employment—which in some plants, such as San Rafael, runs over 30 percent—through Affirmative Action Plans in all divisions and major facilities. Fairchild is also engaged in a program on a contractual basis to train the hard-core unemployed.

In Shiprock, New Mexico, we have carried forward a four-year program with the Navajo Tribe, last year completing a new assembly plant that now employs nearly 1200 Navajo Indians. This is a very profitable venture, both to the Indians and to Fairchild. It also makes our company the largest industrial employer of American Indians.

We have long ago taken steps to eliminate pollution of the environment by any of our plants. This includes the investment of several million dollars in equipment to scrub and clean all of our exhaust gases and to neutralize all of our industrial effluent.

We consider all of these programs to be as necessary to us as to the general society. By investing in better employees, in people, in a livable environment, we are simply answering some of the minimum demands of the world around us.

To sum up, I think we are building a dynamic and responsible organization at Fairchild—and we are motivated by a single impulse: to make the company number one in the industry in the decade ahead.

## QUESTIONS FROM SHAREHOLDERS (Abridged for brevity)

**Q:** Is royalty income reported on a quarterly basis? Do you expect royalties this year to be less than in 1969?

**A:** (George T. Pfifer, Vice President—Finance): We estimate royalties for the year and accrue them monthly. Our estimates are conservative, so we are usually a little underaccrued. Royalties for 1969 totaled about \$6.5 million, and estimates for 1970 call for a slight increase.

**Q:** Did the recent metal-over-oxide patent decision in Appellate Court require Texas Instruments to pay Fairchild royalties?

**A:** (Nelson Stone, Vice President, General Counsel and Secretary): No. Sometime prior to the decision we entered into a non-exclusive cross-licensing agreement with Texas Instruments covering this and other patents. However, the court found that this basic invention was Fairchild's, thus strengthening our overall patent position.

**Q:** Will Dr. Hogan comment on the company's loss of top technical personnel last year?

**A:** (Dr. Hogan): Fairchild has classically lost people. Fairchild is the father or grandfather of virtually every semiconductor company in the United States. However, we are achieving a degree of stability that did not exist at Fairchild in the past, and we are accomplishing this in a variety of ways. The most important means of retaining highly motivated professional people is to create the optimum working environment. They must be happy, motivated, and feel they are contributing. They must feel that large company regulations do not stifle their ability to create. We are making a major effort to create this environment at Fairchild, and it is paying off. We also must be competitive in the financial rewards achievable by talented management. The rate of loss has greatly decreased, and I think you will find that this year it will greatly decrease over 1969.

(Sherman Fairchild, Chairman of the Board): We spent most of yesterday's directors' meeting on the subject of top level compensation. Our legal department is studying the situation, which has been complicated by



**FAIRCHILD**  
CAMERA AND INSTRUMENT  
CORPORATION



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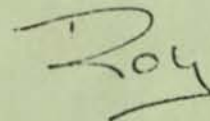
TO Distribution DATE September 10, 1971  
FROM Roy H. Pollack CC:  
SUBJECT MOS ADVANCED PROCESS/ DEVICE /CIRCUIT PROGRAMS

Dr. Robert Seeds has agreed to undertake the special assignment of outlining the recommended MOS Advanced Development Program for the next 15 months, prior to his departure for a business trip to Europe in mid-October.

This study will dimension the several technology and device option possibilities and relate their absolute investment numbers, absolute calendar time, elapsed calendar time, and probability of success with the auxillary cell design, circuit design, software design aids, etc and the same dimensions for these areas. At the same time, Dr. Seeds will articulate the application opportunities that impact the above, and estimate commercial timing. In this way we will be taking a systems viewpoint of the MOS future.

We will have extremely limited investment capability for the next 15 months, and for this reason, we must make every penny count in the MOS program. I am concerned that if we diffuse our efforts - a little bit on an advanced fix-up of existing process; a little bit on linear load resistor ion implant; a little bit on ion implant depletion devices; a little bit in the complementary area; a little bit on Planox; etc, and we do not carefully crank into the equation the auxillary investments that must be made vis-a-vis -- CAD, Applications Engineering, Test, etc, and we will end up with partially completed jobs with the wrong timing and be out of money.

All of the operating people are preoccupied with today's problems to such a degree that they cannot objectively interact and dimension the above parameters. Dr. Seeds will clearly articulate and solidify our program for the 4th quarter of 1971 and 1972 by October 15, 1971. Dr. Seeds will be in touch with you for both discussions on the above subjects and perhaps trade off analyses, etc, over the next several weeks. I will be most appreciative of your immediate and total cooperation with Dr. Seeds so that he can complete this extremely important task on time. Many thanks.



Roy H. Pollack

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**FAIRCHILD**

CAMERA AND INSTRUMENT  
CORPORATION

December 23, 1970

To all employees:

I wish I could shake hands with each of you during this holiday season. But since this is impossible, I must try to express my feelings in a letter.

For two reasons it seems particularly appropriate to send a personal greeting during the holidays this year: it is the 50th anniversary of our company, and the past several months have been a period of serious, but not unprecedented, problems. These problems are testing the mettle of us all.

This is the time of year to review the past and look ahead to the future. During the last 50 years we have prevailed as a company through the 1929 depression (infinitely more punishing than the present recession), three wars, and many other ups and downs. But decade after decade the company has grown, and has been able to do progressively more for its people, its customers and its stockholders. Our growth was interrupted during 1970, but it will be resumed.

I am proud of the way all of you, under Les Hogan, have responded to our problems. You have acted to meet today's difficulties without losing sight of the future. In 1970, you made tremendous progress in building improved efficiency, new facilities and a technical competence which I consider second to none in the world. Because of the foundation which has been laid, I see an expanding future for Fairchild in the electronics technology of tomorrow.

Looking to the future, I wish I could name the quarter when the economy will turn back upward. I can't--but turn upward it will, and when this happens, we will be prepared to take full advantage of it with the finest people, technology and facilities anywhere.



Regardless of what the rumor mill says, Fairchild Camera is not for sale, and the company has the financial muscle necessary for future growth. We have weathered much tougher periods than this. There is not the slightest doubt that with the best efforts of all of you, and the leadership of Les Hogan, we will weather this one, and emerge from it a stronger company.

Please accept my heartfelt thanks for your exceptional efforts during these difficult times, and share my optimism for the future. May 1971 be pleasant and prosperous for you and your families.

Sincerely,

*Sherman M. Fairchild*

Sherman M. Fairchild  
Chairman of the Board



## Heard on the Street

By DAN DORFMAN

"The market zoomed and Fairchild Camera laid an egg."

It was a comment from a disappointed analyst, who is bullish on Fairchild's stock.

And he wasn't the only unhappy one. With the industrial average soaring more than 13 points Friday and considering Fairchild's strong support on Wall Street, a number of analysts had expected the stock of the semiconductor maker to post a sharp gain. However, investors didn't follow the script and the high-flying issue closed the session with a decline of 3% to 85.

Some analysts attributed the poor showing to the lack of a better profit performance for 1969. The company, viewed by many in Wall Street as a "turnaround situation," reported late last week that it had a 1969 operating profit of \$985,000 or 23 cents a share, against a \$4.3 million loss a year earlier. To some analysts, the improvement was there, but it wasn't sufficient to justify Fairchild's high price-earnings multiple.

Still other analysts ascribed Friday's decline to a switch by a number of investors from some of the high-multiple glamor issues into industrial stocks. This group believes many industrials, in view of the sharp declines over the past months, have the potential to outstrip some of the glamor issues in any sustained market rally.

But in the case of Fairchild, a number of analysts see problems ahead for the company this year. They fear a slowdown in the growth rate of the semiconductor industry, increased competition, and some stepped-up price cutting. Although it's generally expected that Fairchild will achieve a sharp gain in earnings this year, some analysts, nevertheless, view the stock as "unattractive" at current levels.

One is Gerald Supple, vice president and electronics analyst at Argus Research Corp. Bearish on the stock over the near-to-intermediate term, Mr. Supple thinks the issue is "vulnerable to about a 10% decline" over the next six months. This is based, in large measure, on the belief that the stock is "already adequately discounting its earnings prospects for 1971."

Mr. Supple observes that the demand for discrete semiconductors, such as individual transistors and diodes, which account for roughly two-thirds of the semiconductor business, is growing only moderately. And he adds that they're "continuing to be hurt somewhat by price erosion." The analyst also believes that the growth in integrated circuits, the fastest growing segment of the semiconductor field, won't be as great this year as many expect.

He contends that price cutting, a tradition in the industry, is likely to be "unusually severe" in some segments of the integrated circuit business. He bases this on a slowdown in military and space spending by the Government, the generally expected slowing of the economy and the increasing success of some smaller companies in the field, such as Na-

tional Semiconductors (over the counter), the Signetics division of Corning Glass and American Micro-Systems (over the counter).

But Benjamin Rosen, director of research at Coleman & Co. and a long-time bull on Fairchild, doesn't share this negative attitude. "I'm totally convinced the company has turned the corner," says Mr. Rosen, who predicts sharply higher earnings over the next several years (\$1.75 a share in 1970 and \$3.50 a share in 1971). Observing that Fairchild posted a 26% sales gain last year (\$250.7 million from \$198.5 million in 1968) after sales of around \$200 million in the preceding three years, Mr. Rosen looks for a minimum growth of about 20% annually over the next two years.

Much of Mr. Rosen's enthusiasm stems from his belief that the addition of strong production capabilities to the already established technological abilities should "add up to the best growth rate in the semiconductor industry over the next three years." Although Mr. Rosen sees an industry slowdown in the growth rate of U.S. semiconductor sales this year—about a 3% rise against a 16% jump in 1969—he looks for Fairchild's growth this year to be about 22%. He expects Fairchild to achieve more than 50% of its semiconductor volume this year from integrated circuits and he anticipates the company's European semiconductor volume this year will rise to about \$25 million from 1969's estimated \$3 million.

Mr. Rosen, who currently is recommending the stock, says, "We can see it selling at a higher level a year out." He envisions a potential 40 price-earnings multiple at that time based on his anticipated \$3.50 a share in earnings for 1971.

In a telephone interview, C. Lester Hogan, Fairchild's president and chief executive officer, says he's confident "we have built a base for achieving higher sales and profitability." Characterizing 1969's performance as a "significant turnaround" accomplished in the face of heavy operating expenses, the official says: "I think things are going to keep going up." He adds: "I know we'll do better in 1970, and 1971 will be a heck of a lot better than 1970." While he wouldn't make any specific forecasts, he describes as "reasonable and achievable" Wall Street estimates of \$1.50 to \$1.75 a share in earnings this year. He adds that "we would expect a sales gain (in 1970) of 20% or better."

The executive says Fairchild will introduce an array of "outstanding new products," in 1970. He adds that the company late this year will unveil a line of small computers and computer terminal equipment. But the concern doesn't expect to generate profits from this area until 1972.

Asked if he wasn't concerned about some of the negative factors cited by analysts, Mr. Hogan takes note of the rebuilding of the company last year and the sharp reduction in costs. The expected economic slowdown already has been taken into account, he asserts. "If there weren't any negatives present, we could set the world on fire."



3/30/71

## Fairchild Camera Stock Of Late Founder Left To Personal Foundation

Shares Amount to a 16% Interest;  
Company Spokesman Declines  
To Discuss Filling Chairmanship

*By a WALL STREET JOURNAL Staff Reporter*

MOUNTAIN VIEW, Calif.—The will of Sherman M. Fairchild provides that his 16% holding in Fairchild Camera & Instrument Corp. will go to the existing Sherman Fairchild Foundation, a company spokesman said.

The foundation has five voting trustees, including three directors of Fairchild Camera: C. Lester Hogan, president and chief executive; Walter Burke, financial adviser to the late Mr. Fairchild, and Rosewell L. Gilpatric, an attorney and member of the firm of Cravath, Swaine & Moore.

Mr. Fairchild died last weekend at the age of 74 in a New York hospital after a lengthy illness. He owned or controlled 725,000 shares of Fairchild Camera, a major producer of semiconductor components, that he founded. Mr. Fairchild was chairman.

The company spokesman said it's too early to say how the chairmanship will be filled; he declined further comment. However, some observers said Mr. Fairchild's illness had removed him from any substantial role in the company for many months, and Mr. Hogan reported to Mr. Burke during that period. The two men are described as "close friends," and

Mr. Burke was instrumental in bringing Mr. Hogan to Fairchild in 1968.

Fairchild Camera last year ran into serious financial difficulties that apparently aren't over. It had a loss of \$19.3 million in 1970 on sales of \$219.1 million. The company blamed sagging demand for semiconductors and severe price-cutting in the industry. Mr. Hogan said in February that "I think the worst is behind us," although he declined to predict when profitable operations would resume.

Mr. Fairchild also was chairman of Fairchild Hiller Corp., an aerospace producer in which he owned 197,219 shares. Company officials in Germantown, Md., said yesterday they didn't know what provisions Mr. Fairchild had made for disposing of that 4% block.



## Heard on the Street

By DAN DORFMAN

Semiconductor stocks continue to percolate.

Spurred by improving orders and a better-than-expected first period showing by Texas Instruments, four leading issues in the field hit 1971 highs yesterday.

They were Fairchild Camera, Motorola, Texas Instruments and National Semiconductor (American). However, several were clipped by profit taking later in the session.

Despite sharp recoveries from their 1971 lows—more than 100% in the cases of Fairchild Camera and National Semiconductor—some analysts think that the group could move even higher.

This is essentially based on their belief that the industry recovery is still in its early stages—that the expected rebound in such vital industry areas as computers, the general industrial markets and the government sector, chiefly in 1972, is likely to produce sharp earnings gains.

As one analyst puts it: "Even if the economy doesn't bounce back as strongly as some expect next year, the industry's sharp cost reductions should enable it to cushion any profit decline that might accrue from sluggish business. And I'm not looking for any sluggish business."

In yesterday's market action, Motorola led the way with a rise of 3% to 85½ after touching a 1971 high of 86. Texas Instruments, which touched a high of 122¼, finished with a loss of 1% to 119¼. Fairchild Camera, whose 1971 low is 21½, hit a high of 45½ yesterday, but closed with a loss of ¾ to 44½. National Semiconductor traded at a 1971 high of 40¼ yesterday, but it, too, fell prey to late profit taking. It closed at 39½, off ½.

The development that swung over some skeptics was the recent first quarter report by Texas Instruments. The earnings, which many thought would be down, were up. Although net rose only a penny a share from year-earlier levels to 76 cents, the gain was achieved despite a drop of roughly \$22 million in volume in the period.

"It gave credibility to what some of the semiconductor company officials have been saying, that the cost-cutting programs (notably in the work force and capital spending) are really working," one analyst said.

The first trading day following the announcement, Texas Instruments' stock jumped 12%.

While the first quarter report by Texas Instruments turned some fence-sitters into bulls, one that is resisting is Gerald Supple, a vice president and electronics specialist at Argus Research Corp.

Talking about Texas Instruments and Fairchild Camera, the analyst is telling clients that both stocks are "overpriced" and should be sold. Characterizing the industry as a "commodity-type" business, Mr. Supple asserts that price-cutting and excess capacity are still prevalent.

The analyst further contends that Wall Street is giving the two companies' stocks high price-earnings multiples despite "dreadful and erratic earnings performances" in recent years.

He notes, for example, that Fairchild Camera earned \$3 a share in 1966, had losses in 1967, 1968 and 1970 and currently sports a

multiple of nearly 60 times his 1971 earnings estimate of 75 cents a share. As for Texas Instruments, which earned \$3.30 a share in 1966 and \$2.71 a share last year, Mr. Supple says he doubts the company will earn the \$4 a share that some analysts are projecting for 1972. But even if the company does, he adds, that's a 30 multiple, "which I think is excessive."

Albert Gaynor, an analyst in the West Coast office of L. F. Rothschild & Co., doesn't share this pessimism. Believing that the industry is just beginning its recovery, Mr. Gaynor says semiconductor makers will benefit from customer rebuilding of inventories and also from customers who will put into production new-product designs, utilizing integrated circuits, that had been shelved during last year's economic slump.

Of the group, Mr. Gaynor's favorites are Fairchild Camera and National Semiconductor.

He favors Fairchild for what he notes is the inception in recent years of a mechanization-automation program that is bearing fruit in terms of increased shipments. He cites also expectations of earnings of \$2 a share, or more, in 1972. And he mentions the potential of new markets, such as integrated-circuit memories and automobile semiconductors.

In the case of National Semiconductor, he thinks the company is turning in a creditable showing in the current May 31 fiscal year in the face of extremely poor industry conditions last year. While he's estimating 65 cents a share for fiscal 1971, down from fiscal 1970's 96 cents, he envisions a recovery to at least \$1.25 a share in fiscal 1972.

Mr. Gaynor shares the view of several analysts who think Texas Instruments "is running ahead of itself." For one thing, he thinks the company will lose some of its European market share to Fairchild and Motorola, among others. Of the opinion that the government's fiscal 1972 defense spending bill "may have run into trouble," he voices reservations about Texas Instruments' military hardware business, an important volume-producer at the company. And he expects declines in the concern's very profitable discrete semiconductor business.

However, he does see as a possible offset a growing geophysical exploration business in 1972.

A few analysts mention American Microsystems (over-the-counter). One, a close follower of the company, sees the maker of large-scale semiconductor devices, earning between \$1.90 and \$2 a share this year, up from 1970's \$1.26 a share. He sees another rise to the \$2.30-to-\$2.50 level in 1972. However, at its current price (one market maker quoted the stock late yesterday at 59½ bid), this analyst views the stock as on the "expensive" side.

Motorola is the favorite of Harold Warshaw, head of Institutional research at Gruntal & Co., who thinks the company could earn about \$4 a share in 1972. He cites, among other things, strong marketing and distribution, the benefits to be derived from a pickup in the color television business, its important representation in the communications industry and its diversification, enabling it to possibly offset any further price weakness in the semiconductor field.



## *IBM Block Is Big Board's Second Biggest in Dollars*

*By a WALL STREET JOURNAL Staff Reporter*

NEW YORK—A 206,000-share block of International Business Machines Corp. that traded on the New York Stock Exchange Friday was the second largest block in dollar volume ever on the Big Board.

It traded soon after the market opened at \$352, down \$4.25, and was valued at \$72,512,000, topped only by a trade of 730,312 shares of American Standard Inc. preferred at \$104.25 on June 13, 1968. That block was valued at \$76,135,026.

Lehman Brothers reported handling 185,500 shares on the buy side of the trade for mainly institutional customers and 204,500 shares on the sell side. On the sell side, 200,000 shares was sold by the estate of Sherman Fairchild, who had been chairman of Fairchild Camera & Instrument Corp. Mr. Fairchild's father was a co-founder of IBM.

Walter Burke, executor for the Fairchild estate, said the sale didn't dispose of all the IBM stock in the estate, but added, "We don't contemplate selling more to settle the estate."

IBM was third most active on the Big Board, closing at \$352, down \$4.25 on volume of 239,200 shares.

APRIL 1971



## The Little Guy

### Small Investors Fear Institutions Put Them At Growing Handicap

Big Traders Get Early Tips,  
Many Breaks, as Service  
To Others Slips, Some Say  
Seeking a 60-Day Head Start

By DAVID MCCLINTICK  
Staff Reporter of THE WALL STREET JOURNAL

#### Tightening the Rules

Of course, the small trader can still make money in the market, and in some ways he is better protected today than even a few months ago. Late last December, Congress created the Securities Investor Protection Corp. to insure individual accounts in case of a brokerage house failure. And the Securities and Exchange Commission is moving to tighten rules governing the financial structure of investment firms.

But a look at the movement in Fairchild Camera & Instrument Corp. stock shows why some small investors still believe they are being taken advantage of. As one of the Big Board's most volatile glamor stocks in recent years, Fairchild shares ranged in price between \$96 and \$18 last year. Yesterday the stock closed at \$33.

Last Jan. 25, C. Lester Hogan, president of the Mountain View, Calif., electronics concern, spoke at a private meeting in New York. Mabon, Nugent & Co., a securities firm, arranged the session for several of its institutional clients. Among other items, Mr. Hogan told the institutions that Fairchild finished 1970 in a strong financial position without any bank debt and that incoming orders the previous month were the best since March. (Monthly orders in semiconductors, one of Fairchild's specialties, are a closely watched indicator in the industry. Semiconductors are devices used in certain types of electrical transmission.)

Apparently the institutions liked what they heard. On the three trading days following the meeting, Fairchild common stock faded in price. But on Jan. 29 and the first three days of

Please Turn to Page 8, Column 1

February it climbed sharply on the Big Board to \$32.625 a share from \$24.50.

The first report on the Jan. 25 meeting to reach the general public was apparently in The Wall Street Journal of Feb. 4—too late for small investors to enjoy the stock's earlier price surge. (Inquiring about possible reasons for the stock's price rise, the Journal learned of the meeting.)

To be sure, an article in Business Week giving a fairly favorable impression of Fairchild's general prospects reached some readers Jan. 29, the day the stock began its sharp advance. That article reported that Sherman Fairchild, the company's founder and chairman, had in recent months bought additional Fairchild stock on the open market. Wall Street observers say the Business Week article and a generally buoyant market at the time influenced some investors but the Jan. 25 meeting was the key reason the stock rose so sharply.

But that session wasn't Mr. Hogan's first private meeting with institutions. On Wednesday evening, Oct. 29, 1969, the executive reportedly told institutional clients of William D. Witter Inc., a New York securities concern, of a slowdown in sales that month.

Though Mr. Hogan said he didn't know whether the slowdown was part of a longer trend, or merely a one-month problem, the stock dropped \$2.125 a share the day after the meeting. The heavy volume that day of 326,500 shares included four blocks totaling 88,500 shares. The next day the price fell another \$2.625 on volume of 97,200 shares. Neither the statement about the October sales nor any explanation for the stock's decline reached the national financial media until Nov. 4—six days after the private meeting had reportedly warned institutions about the unfavorable news.

The Securities and Exchange Commission is looking into trading in Fairchild stock and Mr. Hogan's disclosure record to determine whether any federal securities laws might have been violated.

But Mr. Hogan denies there is anything improper about Fairchild's disclosure policy. To questions on whether he feels he has disclosed any material inside information privately to analysts or institutions, the official says: "I don't think so. We're very careful about that. We've tried to be pretty direct with anyone who calls, but we have a strict policy against giving out material information."

#### "Mass Confusion" From Press Releases

Asked whether the company had considered issuing press releases after the private meetings with institutions, Mr. Hogan replies: "If we issued a press release after each meeting or phone talk with an analyst, it would mean mass confusion." Fairchild is no isolated example: other major companies also meet privately with groups of analysts.



# 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 to 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.

## 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



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





## JOS Promotes

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

MARGARET HARMESON — Inventory  
Control Clerk/Production Control

VERNA REIMER — Process & Device  
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

ISABEL APOLINAR — Assembler B/  
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

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## Who's News

# Fairchild Camera Says Its Top Management Is Being Reorganized

## Semiconductor Division Gets Four Operating Heads; Van Poppelen, Atalla Group Vice Presidents

By a WALL STREET JOURNAL Staff Reporter

MOUNTAIN VIEW, Calif.—Fairchild Camera & Instrument Corp., which sustained a \$5 million operating loss in the second quarter, announced a "corporate-wide" reorganization of its executive staff, including a reshuffling of the management of its semiconductor division. The division accounts for about half of Fairchild Camera's sales.

The actions were the latest steps the large maker of electronic components has taken to "strengthen and better coordinate operations in a period of intensified competition," C. Lester Hogan, president and chief executive officer, said in a statement announcing the reorganization. Earlier this month Fairchild Camera had announced it was reducing its capital expenditures 30% and its work force 9% and cutting salaries of key executives.

Under the changes, the semiconductor division was placed under four operating heads, who will report directly to Mr. Hogan. F. Joseph Van Poppelen Jr., formerly vice president and general manager of the division, was named one of two new group vice presidents.

In his new position, Mr. Van Poppelen won't be over the semi-conductor division. He will be responsible for the concern's system technology, space and military systems, military products, industrial products, graphic equipment, Du Mont electron tubes and controls divisions as well as Electro-Metrics Corp., a subsidiary.

M. M. Atalla, formerly vice president and general manager of the microwave and optoelectronics division, also was named a group vice president. He will head the corporation's research and development programs and retain his present divisional responsibility, Fairchild Camera said.

Named to manage the semiconductor division were Wilfred J. Corrigan, vice president and general manager of domestic operations; Leo E. Dwork, vice president and general manager of memory systems; George M. Scalse, vice president and general manager of international operations (Far East), and Douglas J. O'Connor, general manager of European operations.

The \$5 million loss in the second quarter came on sales of \$57.4 million and contrasted with a \$1 million operating loss in the year-earlier period on sales of \$65 million. In the second quarter of 1969, there was a special credit of \$473,000 that cut the net loss to \$551,000.

The second quarter deficit gave Fairchild Camera a \$3.9 million loss for the first half, compared to an operating loss of \$899,000 a year before. In the 1969 period, a special credit of \$621,000 reduced the loss to \$278,000. Sales fell to \$122.1 million from \$126 million.



## Fairchild Camera Acts To Cut Costs; 2nd Period Deficit Was \$5 Million

Loss in the 1st Half Widened  
Sharply; Work Force, Outlays,  
Top Salaries Are Slashed

*By a WALL STREET JOURNAL Staff Reporter*  
MOUNTAIN VIEW, Calif.—Fairchild Camera & Instrument Corp., beset by red ink woes, said it is reducing its capital expenditure 30%, its work force 9% and is cutting salaries among key executives.

The electronics concern declined to specify the expected savings but said the salary cuts, based on a sliding scale proportional to annual compensation, will be less than 10% in all cases.

In the second quarter Fairchild Camera had a loss of \$5 million on sales of \$57.4 million. This contrasted with an operating loss of \$1 million, before a special credit of \$473,000, in the comparable 1969 quarter on sales of \$65 million.

### Six-Month Loss Widened

For the first six months, the net loss widened to \$3.9 million from \$899,000 in 1969 before a special credit of \$621,000.

The company also said it plans to revise its employe stock-option program so that holders of unexercised options could exchange them for new ones at prevailing market prices. The exchange ratio calls for the issuance of new options on the basis of three shares for each four shares currently held under options.

Meanwhile C. Lester Hogan, president, said he has surrendered for cancellation his options on 90,000 shares but plans to acquire about 50,000 shares through open-market purchases to be made from time to time this year. Mr. Hogan's purchases will be financed through an interest-free limited recourse loan from Sherman M. Fairchild, chairman.

### Hogan-Fairchild Accord

The options surrendered by Mr. Hogan were granted when he joined the company in August 1968. The financing for his planned open-market purchases, the company said, is an amendment to an agreement negotiated between him and Mr. Fairchild when Mr. Hogan joined the company.

The new employe stock-option program won't apply to Mr. Hogan. It is subject to approval by stockholders at the annual meeting next May. The price for the new options will be the means of the high and low prices of the company's shares on the New York Stock Exchange on the date the stock option committee approves the grant of the reissued option. Committee approval is expected in the next few weeks.



## Fairchild fights back

With a poor 1970 behind it, semiconductor firm hopes group reorganizations, stronger MOS position, new plants, and faster turnaround will pay off this year

by Stephen Wm. Fields, San Francisco bureau manager

Favorite gossip topic along "silicon gulch"—the nickname given the San Francisco Peninsula because of the concentration of semiconductor makers—traditionally has been Fairchild Semiconductor, partly because it spawned the local industry and partly because of its business ups and downs. But seldom has the buzzing been so loud as it has since its parent company, Fairchild Camera & Instrument Corp., confirmed a 30% drop in work force and a \$15 million loss in the first nine months.

Despite its problems—and some of them are formidable—Fairchild Semiconductor is moving into the new year on a brighter note with a huge investment program in facilities and technology nearly completed. The big question now is not so much whether the company is in trouble, but what president C. Lester Hogan and his team are doing to straighten it out.

Most industry watchers automatically assume that the company's big loss came primarily from its semiconductor division. However, this division, along with the much smaller microwave and optoelectronics division, accounted for only a third of the company's nine-month pretax loss. Offsetting part of the division's losses were royalty payments. If these monies are disregarded, the losses from semiconductor operations become a larger portion of the overall total, just how much Fairchild officials won't say, but maintain it is "nowhere near most of the total."

Like nearly all semiconductor houses, Fairchild was hit hard in last year's recession atmosphere. The price wars, the weakness of

the discrete device market, and the sharply reduced buying of some of the big computer makers have hurt Fairchild particularly. And in one of the few 1970 growth markets, MOS, Fairchild found itself struggling to catch up.

But bad timing hurt most. Under Fairchild's rebuilding program, 1970 was the peak year for spending huge sums of money—just when the bottom was falling out of the market.

Looking back now, Hogan maintains, "I could have been profitable in 1970 if I hadn't finished what I had started. But it wouldn't have been best in the long run." Since 1968 he has spent about \$50 mil-

lion in capital investments, the total for 1970 alone was about \$24 million. But this money bought a new MOS wafer fabrication facility; a TO-92 automated plastic transistor assembly line [*Electronics*, Sept. 28, 1970, p. 37]; Unibond, an automated plastic packaging system for dual in-line ICs [see p. 21]; and the Wiesbaden, Germany, plant, which is now coming on stream [*Electronics*, Dec. 7, 1970, p. 111].

Hogan also has continued to make changes as problems cropped up in last year's down market. Recently, he set up task forces to move technology out of the central R&D labs and into production: the division expects to introduce 70

### Hogan's watchword: production

When Les Hogan arrived at Fairchild from Motorola Semiconductor in 1968, he took over a company that had what he called "an antiquated non-competitive facility" [*Electronics*, Aug. 19, 1968, p. 45]. The problems he faced were immense: a complete lack of inventory control, poor production, little or no MOS capability, and no coordination between production and research and development.

"When they [previous management] moved R&D away from the main plant, they might as well have moved it to Hawaii," one ex-Fairchild manager says. At the time, central R&D was spending an estimated \$1 million a month, even though "all of the short-range R&D—the work leading to new products—was being carried out in the factory," another ex-Fairchild manager notes. The R&D lab, five miles distant, was "becoming a university and hobby shop," he recalls grimly.

Before Hogan took over, Fairchild's R&D lab was known as one of the finest in the industry—even Hogan admitted it when he came aboard. But Fairchild had the poorest production reputation: most customers' orders were late in delivery. So an important part of Hogan's rescue operation was to invest money in improving and expanding the division's production lines.

Unfortunately, he points out, the rebuilding process is like putting together a machine—you can't use it until the last bolt is in place. "Toward the middle of 1969, I was beginning to get frustrated," he admits. "We were making progress but the progress wasn't obvious. Now our facility is second to none in the world and we have people that are second to none in the world."



## Probing the news

new digital and 30 new linear ICs in the first quarter alone. Fairchild also is putting more engineering efforts into standard digital bipolar circuits and is changing the emphasis here from custom to standard circuits. And it has combined the 30 product groups into eight profit centers in an attempt to respond more quickly to customers' needs.

One of Hogan's major efforts has been to establish Fairchild as a power in MOS. The four wafer fabrication areas on stream when he came to the company were designed for bipolar work, where cleanliness requirements are less stringent than for MOS. So last year Fairchild built two new fabrication plants, which are now on line. One is for silicon gate MOS. The other is for standard p-channel devices and contains about 60 diffusion tubes. "This is extremely large," notes one competitor. "They should be capable of shipping about \$40 million a year worth of products."

However, delays in shipments may continue for a while, mainly because the division's testing capacity still isn't up to its wafer fabrication capability. By March, however, four more high-speed test stations will have been added.

"The mainstream of our MOS business for 1971 and into 1972 will be custom circuits," reports Gene Blanchette, vice president and director of the company's MOS and memory operation. About 80% of Fairchild's MOS effort is in custom circuits. The division has introduced some standard MOS products, such as shift registers and read-only and random access memories, but Blanchette says that "production volume orders for the RAMs won't develop until 1972. Shift registers are just starting to pick up now and we are delivering to selected customers."

Fairchild shipped about \$150,000 worth of MOS circuits in January 1970, says Hogan. "In December 1970, we shipped \$1 million," he adds. Blanchette expects Fairchild to sell \$15 to \$20 million of MOS devices in 1971, a figure which he says would make the company first in MOS among the "big three" semi-

conductor manufacturers (over Texas Instruments and Motorola) and possibly fourth in overall MOS production.

Fairchild says it also has a back-up of new MOS technology that it can bring on stream when needed. To help get new MOS—as well as bipolar—devices into production, the advanced product development groups have been rearranged so that they're directed by operations or marketing officers. For example, a new nitride silicon gate process is now under the control of production and is being installed in the new MOS fabrication laboratory. The C/MOS process is under the wing of a task force that is getting it into production.

To get around the lack of coordination between the research and development effort and the production side, product-related R&D has been moved back to Mountain View. "We have set up task forces," explains James Early, director of R&D, "for getting technology out of R&D and into production. They carry the ideas over and work on the R&D production interface. Central R&D at Palo Alto now is concerned with the broadly applicable technology that it is hard to find a home for in a single product group."

As for its bipolar digital IC work, Fairchild is waiting for its custom contracts to run out. "We haven't had as many new products as we should have had," says Wilfred Corrigan, division vice president and general manager. This is partly because custom work has represented 70% of Fairchild's digital efforts. "We were heavy in custom digital—in designing the 25 or so circuit types that were required for each big machine," says Corrigan. "The problems are that we can't get any standard products out of this and much of our engineering effort has been tied up."

Fairchild is winding up most of these contracts now, and in the first quarter, he says, "the ratio will switch—to 75% standard and 25% custom. We're changing the ratio because we've overemphasized the custom area and the EDP business [the main source of Fairchild's custom business] is down."

The lack of new linear ICs repre-

sented a different problem. "We've had a lot of new circuits in the works, but our problem has been coordination," says Corrigan. But now one location serves the entire linear operation. "We've re-formed the group and concentrated it," he notes. "We've cut a lot of people, but it's a more efficient operation."

The profit-center idea is another managerial change that Fairchild hopes will produce strong results in 1971. Under that reorganization, 30 products groups were combined into eight separate operations—MOS, MSI/LSI, digital, transistors, diodes, linear ICs, high-volume digital (TTL), and hybrids.

The overall goal is to make it easier for a customer to get what he wants. For example, in the linear group the engineering was scattered over several buildings. Michael Scott, linear IC product marketing manager, says that "when a product moved from one building to another, it was always logged into inventory after each step." Thus, it could take upwards of 10 to 15 weeks to get a product out the door. But now that linear is all together and functioning as a small, separate "company," Scott says, "we've turned around on a new product in nine days from concept to shipping. The frustration is being eliminated."

The linear group is now making money, he adds, "and we're looking to increase profits by turning our assets over faster." By the end of January, Scott expects to be able to turn around on unexpected orders in three weeks. This swifter turnaround time is not just for the customer's benefit—Scott points out that with a 10-week cycle even a tiny process accident like a mislabeled etching solution bottle would go unnoticed until most of the lot was ruined.

So for Fairchild Semiconductor, 1970 was a frenetic year of adding plant and equipment, reorganizing operations, and cutting back to get in line with declining business. The company has done a lot, but more remains to be done. As Corrigan puts it, "We've still got a lot of changes to make. We have the products and we have the capacity. We have to stabilize the people," he adds. □



## Heard on the Street

By DAN DORFMAN

It has been like old times for Fairchild Camera, a frequently volatile Big Board issue, which has risen roughly 33% in the past four sessions on heavy volume.

However, several analysts view the sharp gain in the shares of the semiconductor maker as unwarranted in light of the continuing industry problems.

Some, in fact, argue that the stock should be sold, contending that profitability at the company could be at least six to nine months away.

The stock, which closed last Thursday at 24½, traded yesterday as high as 33½, before finishing the session at 32½, up 2%. Its turnover of 229,300 shares placed it fifth on the Big Board's most active roster.

Wall Street sources credit part of the rise, aside from the emergence of an apparently more buoyant and speculative market, to a private meeting held early last week by a small group of institutional investors and C. Lester Hogan, Fairchild's president and chief executive. Several days later a business publication reported that Sherman Fairchild, founder and chairman of the company, has been buying additional Fairchild stock on the open market for the past five months.

A spokesman for the brokerage firm of Mabon, Nugent & Co., which sponsored the private meeting, declined to discuss it, saying, "we don't talk to the press."

However, it was learned that Mr. Hogan made several important disclosures at the meeting, which apparently excited some of the institutional investors.

According to one source, Mr. Hogan said that Fairchild's incoming orders in December ran at the best level since March.

In addition, Mr. Hogan asserted that Fairchild wound up 1970 without any domestic bank debt and in a strong financial position, the source says. This, the source adds, "lays to rest some Wall Street concern about the company's financial strength."

But one of Wall Street's leading specialists on the semi-conductor industry and a close follower of Fairchild contends the stock is "fully priced" at current levels, based on the 1971 outlook. He estimated the company will report about a \$20 million deficit for 1970 after showing nearly a \$14 million net loss in the first nine months.

The specialist predicts a loss of about \$2 million to \$4 million in this year's first quarter, followed by what he believes will be reduced losses in the second and third quarters. Some analysts have been projecting a full 1971 profit of about 75 cents a share, but this specialist disagrees. Forecasting about a 7% decline in industry shipments of semiconductors from year-earlier levels, he says, "I think the best Fairchild can do is break even this year. But I believe they'll probably end up losing money."

"The market is in a euphoric stage right now, but recognition of the possibility of three

straight loss quarters may well dampen its enthusiasm for Fairchild," he adds. He estimates a 20% decline in industry shipments in the first quarter, which, he believes, "could put pressure on the stocks of the semiconductor companies."

A continuing bear is Gerald Supple, Argus Research Corp. vice president and electronics analyst. Fairchild, he says, "seems to be a perennial turnaround that has yet to make the turn." Although he looks for earnings of about 75 cents a share this year, the analyst, nonetheless, rates the stock as "overpriced." This view is based on what he regards as an "excessive" price-earnings multiple and the continuing difficulties being experienced by the semiconductor industry. He mentions, in particular, stiff price competition and increasing overcapacity.

In a phone interview, Fairchild's Mr. Hogan confirmed the report that December's incoming orders were the best since last March. Although he stated they were "nothing to write home about," he said it could be an indication that "we've stopped the slide . . . after nine months of not knowing where the bottom is." He added that January orders were up "just a little bit" from December's. And he further said that he "seems to sense" in the past 45 days a firming in prices in many sectors.

Mr. Hogan wouldn't make any forecasts, other than to say he expected the company to report a loss in the first quarter. He thought it would about match the loss the company sustained in 1970's fourth and yet unreported quarter. In terms of shipments, Mr. Hogan said he expects a "flat" first quarter, as billings are about the same as they were in the fourth quarter.

Asked whether he thought the company would show a profit this year, Mr. Hogan replied: "I just don't know. There are too many imponderables."

In an interview last March, the official characterized as "reasonable and achievable" Wall Street earnings estimates of \$1.50 to \$1.75 a share in 1970.

Mr. Hogan today describes the company as in a "strong financial position." And he thinks it will show further improvement some time this year.

Citing some pluses, Mr. Hogan observes that yield factor (the amount of saleable products that come off a production line) has shown "remarkable improvement" over the last two years. He also sees a stronger output from Fairchild's research and development laboratory, noting that over 150 new products will be introduced in the first quarter.

He says he doesn't know of any reason for the recent rise in the stock, although he thinks "we're probably underpriced for the long pull."

Yesterday, the Big Board reinstated its ban on stop orders in Fairchild stock. A stop order is an order placed with a broker to buy or sell a security when its price reaches a specified level.



# Sherman Mills Fairchild

April 7, 1896 - March 28, 1971

All who were associated with him, in business or in person, must be deeply saddened by the death of Sherman Fairchild. He will be missed not only in the companies he headed, but in the world of science and industry. For over 50 years, he was a major force in American technology, matched by few pioneers in our busy business history. He founded and nurtured Fairchild Camera through its early years to a position of industrial and technological significance. The company is an embodiment of his ideals and he was profoundly committed to its continuity and success. We keenly feel his loss but must be grateful for the good fortune of his leadership over so many years.

C. Lester Hogan  
President and Chief Executive Officer  
Fairchild Camera & Instrument Corporation





## Sherman Mills Fairchild - The Man

Sherman Mills Fairchild was once described as a cross between "a rich Edison" and "a modern Leonardo da Vinci" — rich Edison because of his inventiveness and inherited wealth — da Vinci because of his rare combination of artistic and engineering talents. But perhaps the most accurate label applied to him was stated by another pioneer in aviation: "Fairchild was something of an enigma, a good deal of a genius, and very much a teacher!"

Many major magazines provided other apt descriptions. One referred to him as "somebody from another time. He was an incurable tinkerer, a tireless dabbler in the mechanical arts, a lone wolf in these days of research teams and group efforts, a man fascinated with everything from space platforms to cellophane tape." A news magazine referred to him as "the epitome of the new scientist-businessman-inventor who is the driving force behind the success of the growth and glamor stocks."

Fairchild would not accept the word "impossible." Why not invent matches that won't blow out in the wind, or car locks that won't rip your coat, or pill bottles that won't spill open in your pocket? His early experiments resemble something out of Tom Swift. For example, he designed and built a small dam that worked so well that it flooded out a section of state highway. Fortunately, he didn't give up the ship with that one failure.

He had a method — to drive himself and others to newer and more useful answers, to stimulate by doubt, and to use the question mark as a springboard to progress. He challenged almost every idea — whether it involved an aerial survey or production of a stereo cartridge. And he went at it with the typical "Fairchild style" — extreme enthusiasm and efficiency.

One of Fairchild's secretaries once remarked to a magazine writer that he sent out 200 requests a week for product information. She told of how he became a connoisseur of dictaphones, typewriters, colored pencils, fruit-picking machines and potato sorters. He had become a self-taught expert on office procedure, who not only designed his own filing systems but worked on ideas for office partitions. She also recalled when he telephoned all over New York to find a particular kind of sticky cellophane label because he had heard it came off the roll easier; and how he had once spent two months looking for a typewriter with a type face small enough to type the pages of his pocket calendar.

He was also a "gadgeteer." His basement was filled with the products of his hours of tinkering. He would proudly display a phonograph arm that slides in a slot instead of being fixed to a pivot; a scheme for putting all the mailing addresses in the U.S. in code so that mail can be handled by data processing machines; an automated process for color film developing; a movie projector that serves as its own screen, like a television set, the film would be in a clip and would never have to be rewound.

Fairchild's gadgets even covered his townhouse in New York City. For instance, his living room was actually a sound studio with auxiliary controls hidden in the coffee tables, an acoustically balanced teakwood floor and a fully equipped control room that came into view when shutters were folded back. Another innovation was a \$17 motor, salvaged from a junkshop, and rigged up to raise



"Fairchild was something of an enigma, a good deal of a genius and very much a teacher."



Fairchild goes on the NY Stock Exchange.



and lower the louvered windows which fronted the house. Instead of stairs he installed ramps in his townhouse modeled after those found in Grand Central Station.

When Fairchild got restless, he retreated to his country estate. An avid tennis player, he designed and built his own recreation hall complete with an indoor tennis court. This unique windowless hurricane-proof building enabled him to play all year round. Among his frequent weekend guests were tennis stars from all over the world.

Despite his wealth and history of personal illness, he worked long hours — nights and weekends — he refused to take vacations. A characteristic weekly schedule would include such items as

- A trip to L.A. to explain to MGM executives how his Front Projector system could be applied to commercial moviemaking.
- A talk with Edward G. Uhl, president of Fairchild-Hiller, about a new product line.
- A discussion with IBM Chairman Thomas Watson, Jr. regarding recent business activity.
- A taping session in his N.Y. townhouse featuring Hubie Blake, the 85-year-old jazz pianist. He often held taping sessions at his house with well-known musicians.
- A movie test of a new color film, in his living room, which had photographic lights and electronic strobes in the wall fixtures.

Fairchild was one of the most important businessmen in America, yet unlike any ordinary executive — his dress and manner were informal — almost casual. He had no platoon of secretaries, no plush offices or a let's-get-down-to-business attitude. He didn't need these executive tools to run his businesses.

Even Fairchild's closest friends found him a difficult person to sum up. To many he had given the impression of being aloof, yet those who knew him would admit that he gave unendingly of himself and his knowledge.

An old friend once described Fairchild: "I think he's half child, half genius. He's forever up in the clouds, but maybe that's where the big things are done. He's often unrealistic, but that could be his real talent. He just doesn't think like other people. He even looks at death as just another problem to take down to his workshop. Do you know what he said to me one day? He was talking about the future. 'If I die,' he said. Have you ever heard of anything like it? 'If I die . . .'"



It all started with a camera.



His dress and manner were informal—almost casual.





The Early Genius

## The Early Genius

Sherman Fairchild was born with a silver question mark in his mouth. April 7, 1896 marked the beginning of a life hinged on the question "Why?" By his continuing struggle to provide an answer for every "why," he set a life style for himself which was to leave an indelible mark on science, industry, technology and people.

It didn't take long for Fairchild's curiosity to get the best of him. In 1912, this inquisitive teenager completely dismantled a \$10,000 Locomobile (a gift from his father) to see "what made it tick." He emerged from the garage several hours later, covered with oil and grease, to inform his father that "this overgrown flivver only has four bearings on the crankshaft!"

The same passion for exact detail led Fairchild to study a camera which challenged him with its limitations. Working on the theory that there is nothing that can't be improved, he synchronized the shutter with a blast of flash powder and took the first night action shot of a boxing match—which came to a dead halt until the boxers got the "spots" out of their eyes.

The camera caused Fairchild's career. After he left Harvard in 1916 due to illness, the young man of 20 perfected the design of the revolutionary shutter for aerial cameras. Two years later, the military became interested in the aerial camera but refused to build it. So, he rented a loft in the garment district of New York and began to manufacture the shutter and camera himself. He delivered the two aerial cameras covered by the order in 1919 at a loss of \$30,000. Not easily discouraged, he immediately began to design a better aerial camera which, one year later, won substantial orders from the Navy and Signal Corps. The loft factory was abandoned and Fairchild Aerial Camera Corporation was established on February 11, 1920 in New York.

When World War I ended, Fairchild had to find a commercial use for his camera and Fairchild Aerial Surveys was incorporated as a sheer necessity. Through experimentation, he developed the aerial camera into an exact tool of engineering—a means of recording and measuring quickly the ground data which surveyors on foot required weeks or months to gather. He stood alone in this concept of the aerial camera as an engineering tool, and thus had to "sell" it at his own expense by mapping a number of large cities. In 1922, the New York Times carried a headline which aroused public interest—"New York City Mapped in 69 Minutes by New Type of Camera Perfected by Sherman Fairchild." Eventually, a worldwide aerial surveying business developed.

Fairchild was not satisfied with the existing aircraft, here or abroad, because they were not suited to the needs of aerial surveying. He founded the Fairchild Aviation Corporation in 1924 to build a plane exactly right for aerial surveying. On June 14, 1926, the Fairchild FC-1 made its public debut—it also made history. The FC-1 scored three firsts—an enclosed cabin; folding wings to reduce hangar storage space; and both wing slots and flaps for greater stability and landing/takeoff safety. This was just the beginning of Fairchild's aviation firsts—many more followed.

A year later, the Fairchild FC-2 made history with two more innovations—hydraulic brakes and hydraulic landing gear. In 1933, he scored again with the Fairchild C-31—the first airplane in the world to be designed expressly for carrying cargo. This design can still be found in practically all cargo aircraft today. Fairchild's own C-119, the "flying boxcar," was the backbone of Air Force cargo and paratroop operations during the 1950's.



Fairchild at 17 with a Graflex camera.

Aerial photo of Manhattan in 1921.



Fairchild Camera product line in the late 1940's.

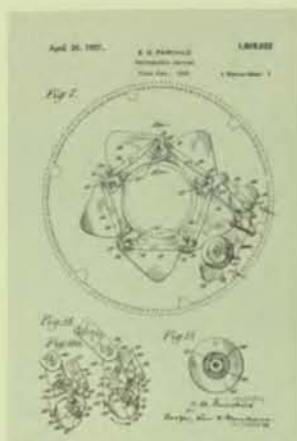


Fairchild's first cabin plane, the FA-1A (Fair-Cabin) built in 1926.



Commander Byrd began his Antarctic Expedition with a FC 2 W 2 in 1928.





First of over 30 patents.



Sherman Fairchild (standing right) loads his aerial camera aboard one of the early biplanes.



Fairchild had a "keen sense of humor."



"Get the right man and let him do it." Sherman Fairchild with Dr. C. Lester Hogan, president and chief executive of Fairchild Camera and Instrument Corporation.



Fairchild was constantly motivating others.



Fairchild demonstrating aerial camera in 1923.

All of these Fairchild breakthroughs have been stamped with the seal of a "U.S. Patent" (he had over 30 patents to his credit). These early achievements fortified his faith in his concepts and justified the career which he had embarked on as a teenager. "My whole life," he said, "has been spent in finding new and better ways to do things." His interest in technology was unceasing—his friends described him as "Prometheus chained to his rock."

This particular "Prometheus" organized and filed his life, career and finances alphabetically for the sake of order and clarity. He would readily give you an example such as "P" for photography; "T" for tennis; or "E" for eats. "Sherman," an associate once said, "is like a chest of drawers. He's got a drawer for everything and no one has looked in them all." Using Fairchild's "alphabet system," we will attempt to share with you his hobbies, ventures, philosophies and idiosyncrasies.

Aim in Life—"finding new and better ways to do things."

Bachelor—"I've never really had time to marry."

Conrac Corporation—he helped launch this industrial and aircraft equipment maker.

Darkroom—constructed in his country estate and "more advanced than any professional photographer's in New York."

Entrepreneur—newspapers, magazines, friends and competitors always portrayed him as such.

Fairchild-Hiller Corporation—airplane and engine manufacturing subsidiary which he formed during the depression.

George W. Fairchild—Congressman, founder of IBM and Sherman's father—he fostered his son's interest in mechanics.

Howard Hughes—close friend, tough competitor, and member of the same club of industrial genius.

International Business Machines (IBM)—he was a director, major stockholder and member of the executive committee.

Journals, technical and trade—he read 250 each month.

Keen Sense of Humor—when asked by an interviewer how much money he had, Sherman replied "I really don't know—a magazine said I had \$80 million."

Lifeblood of his activity—people who might stimulate an idea.

Mail—an eight-inch stack of ideas daily, each of which merited Sherman Fairchild's personal attention and reply.

Novel Ideas—the Fairchild Forum, "the one system that allows you to talk simultaneously for the sake of argument", the first professional tape deck and the first recording of sound on aluminum disks.

Organizer—he packaged Fairchild Recording and three other photo-audio companies into what he jokingly called a "mini-mini conglomerate."

Pan American World Airways—he was a director and stockholder.

Quoted on his basic philosophy of management—"get the right man and let him run it."

Research—a word he couldn't resist.

Stereo Cartridge—he produced the first commercially successful one.

Tablecloth—his favorite place to draw diagrams while entertaining experts in a lavish restaurant.

Unrelenting—his method was to drive himself and others to newer and more useful answers.

Vacation—he didn't know the meaning of the word.

Workshop—his basement was a "gadeteer's paradise" where he designed a bobsled which "ditched" him in the snow (he sported a plaster cast for several weeks).

Mister "X"—to his associates he was a man of mystery.

Yachts, polo ponies, private planes and chauffeurs were taboo—"I believe in living simply."

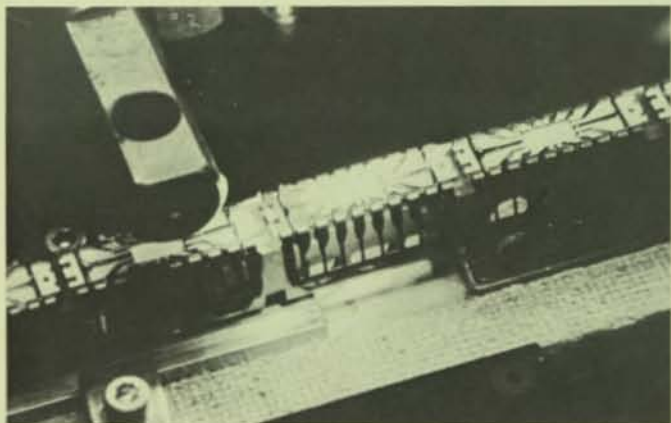
Zealous—one way to describe a man who would work 14-16 hours a day, often including weekends.



# Fairchild Camera and Instrument Corporation

1919 to 1971 reflects more than half a century of industrial genius and scientific exploration — from the first manufacturing venture in a New York loft to the Fairchild Camera & Instrument Corporation as it is today.

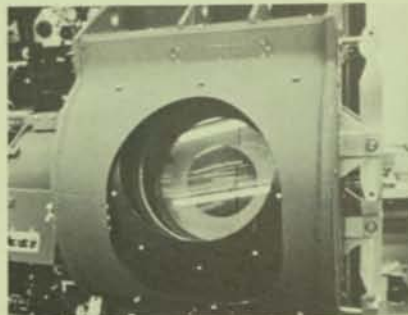
Sherman Fairchild dealt in new ideas and created companies to develop product lines to satisfy the world's demand for new and better technology. Fairchild's cameras served the world in 1919 — today the divisions of the present Corporation shape the future of our universal society.



◀ Fairchild Semiconductor, headquartered in Mountain View, California, manufactures a wide variety of silicon Planar transistors, diodes, integrated circuits and complex arrays, including power transistors, small signal devices, LSI, MSI, CDSL, MOS, TTL, hybrids and memories.

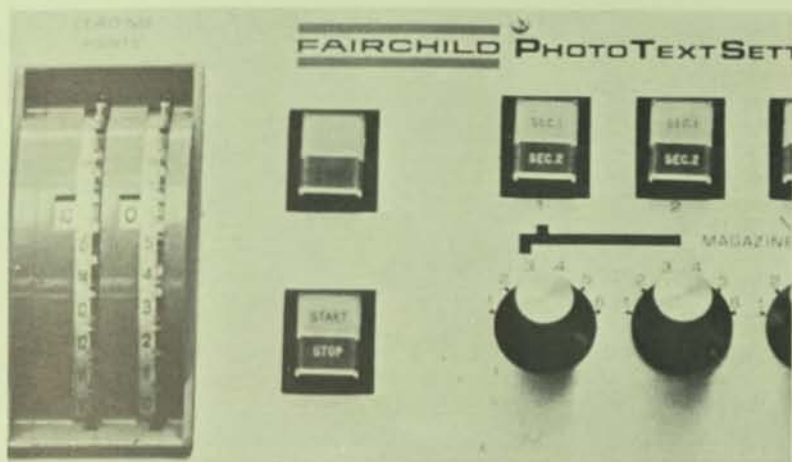


▶ Systems Technology is involved in the development, manufacture and marketing of semiconductor test systems. The division is headquartered in Sunnyvale, California.



▲ Space and Defense Systems manufactures precision aerial reconnaissance cameras and systems as well as electronic data conversion systems, precision lenses, advanced film processing equipment, and ordnance devices. This Fairchild division is headquartered in Syosset, New York.





Graphic Equipment, Plainview, New York, manufactures typesetting systems for automatic linecasting. These include electronic keyboards, typesetting computers, and phototextsetters.



Microwave and Optoelectronics, located in Palo Alto, California, is expanding Fairchild's efforts in solid-state microwave devices, components and subsystems, complex optical arrays, optoelectronic photo sensors, emitters and devices; and solid-state displays and detectors.



The Company's Research and Development laboratory, located in Palo Alto, California, is responsible for innovation — making possible the improvement of existing products and creation of new ones. R&D is playing a major part in the company's interchange of technologies among all divisions.

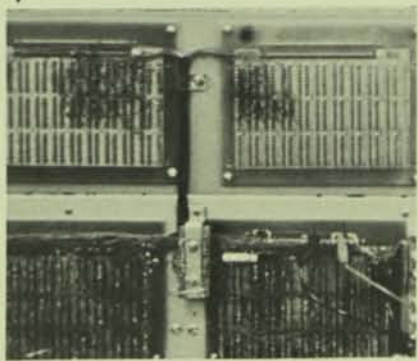


DuMont Electron Tubes, Clifton, New Jersey, is an industry leader in the design and production of display devices which include cathode ray tubes, direct-view storage tubes, photo-multiplier tubes and power tubes.



Electro-Metrics, located in Amsterdam, New York, manufactures a line of radio frequency interference analyzers and spectrum surveillance equipment, tunable rejection filters, RF and Microwave components, and other devices.

The Industrial Products division, Commack, New York, has a range of products including cockpit voice recorders, flight data recorders, music and announcement systems for aircraft, and front and rear-screen projectors.





**FAIRCHILD**  
CAMERA AND INSTRUMENT  
CORPORATION