

LEADWIRE

## FROM THE EDITOR

This issue honors Semiconductor "old-timers", i.e., those employees who joined our division prior to December 31, 1959. Special thanks to Personnel at the various facilities and to Accounting (MV) for their invaluable assistance. We hope that no one has been overlooked.

Pat Campagna, manager, is rounding up his AAA softball team — the Fairchild Falcons — for 1966 action. Last year was the company-sponsored team's first try at amateur competition. And the Falcons claimed many championships for Fairchild, both in AAA league and non-league play.

Pat is holding final try-outs for the team at 1 p.m. on February 27, McKelvey Park. For those on the peninsula who might be interested, Pat says: "There won't be any slow ball or intramural competition for my players. We'll stick strictly to amateur ball."

At Diode, some gals on the line held an appropriate Farewell party for Barry Banducci who was promoted to Production Manager of the new Shiprock plant. Our Navajo ladies are gaining a well respected co-worker.

In researching out Calibration for a departmental feature this month, I found it impossible to "generalize" on set functions at any one facility. For instance, Ed Seeley's Calibration Lab is responsible for repair and correct operation of *all* instruments used at R&D. In contrast to MV's Electronic Services (from which my text was drawn), R&D's group also handles line maintenance, but no fabrication. Undoubtedly, the corresponding departments at Diode, South Portland and Shiprock plants have their own idiosyncrasies, too.

Fairchild Semiconductor will introduce a minimum of fourteen new products at the IEEE Show and Convention in New York next month. The *Leadwire* cover is a representative sample of our rapidly advancing technology.

Speaking of the cover, here's a challenge for some of you amateur photographers in our midst. I am having a contest for a good *Leadwire* cover shot. Simply submit your entry to me in Marketing Services, Mountain View. The winners will be announced in a forthcoming issue. For printing purposes, an 8½" x 11" photo is preferable.

## FIVE YEARS SERVICE

May Reich, R&D  
Maurice Dumesnil, R&D  
Maurice O'Shea, Mountain View



TONS OF TROPHIES — The awards surrounding Pat Campagna (manager of the company-sponsored AAA softball team) represent only a few of the many taken by the Fairchild Falcons in 1965. In order (l. to r.), the trophies represent AA Winner — Hayward Open League, Santa Clara Metropolitan Champs, Santa Cruz Softball Tournament — 1965 Champions, Sunnyvale Parks & Recreation Dept. — AA Open League winner and 1965 Hayward Invitational — 2nd place.

## FAIRCHILD FALCONS PREPARE FOR 1966 SOFTBALL FLIGHT

MOUNTAIN VIEW — According to Pat Campagna, manager, prospects for this year's company-sponsored AAA softball team — the Falcons — appear even brighter than 1965's sterling record (in the team's first year of play). Three promising players have been added.

Dennis Murphy, production foreman in Headers, is a new shortstop. His past experience includes action with the Southern California all-star team four years, voted most valuable player one year and on the World Amateur Champion team (the Pomona Bombers) in 1965.

Al Johnson, a new pitcher, saw former competitive play with the Gardena Merchants. He was voted most valuable player in the 1965 Pan American Tournament.

Mike Haruff, who will be joining the Falcons this year, has played amateur ball with Redwood City and San Francisco teams.

Back for their second season with the Falcons are: Ray Phillips, Al Talboy, Paul Melvin, Ed Lovelace, Rich Balswick, Larry Phillips, Frank Aquino, Vince Fulginiti, Ben Gonzales, John Noce and a newcomer — Ed deMartini.

Practice is slated through this month, with final try-outs on February 27 (1 p.m.) at the Falcons' home field, McKelvey Park. Campagna says that the team faces a rough schedule of games, averaging four per week. Anyone interested in good amateur softball is encouraged to attend.

## PLEASE HELP!

### MTN. VIEW EMPLOYEE SENDS OUT PLEA FOR VOLUNTEERS

MOUNTAIN VIEW — Marie Johnson who works the third shift in Parts Prep is desperately in need of 400 to 500 local volunteers. She and her family live only two blocks from the Transistor plant: 103 Murlagan Avenue.

On February 24, Marie and her husband will take their 16-year-old daughter, Linda Marie, to the Institute for the Achievement of Human Potential in San Diego for examination. Because of brain damage, Linda Marie has only the mentality of a 3 to 8-year-old child.

There is help for these children, but it will require YOUR help. The Institute has developed a revolutionary form of treatment called Pattern Therapy that, if rigidly followed, can bring an afflicted child back to normalcy.

This therapy takes a child back to babyhood by simulating the motions of the arms, legs and head of a creeping infant. However, the arms, legs and head must be moved at the same time in a well-coordinated "pattern", so each treatment requires 3 to 5 persons. For maximum benefit, the "pattern" therapy must be administered eight times daily in sessions of 15 minutes each.

As Marie's co-workers at Fairchild, surely you can spare just 15 minutes once or twice a week to help bring her daughter out of a dormant existence. Names and addresses are being collected now, to be contacted later. Give Marie Johnson a call any day after 3 p.m. at 967-0589.

## FOURTEEN NEW PRODUCTS TO MAKE DEBUT AT 1966 IEEE, NEW YORK

**MOUNTAIN VIEW** — Fairchild Semiconductor will introduce at least fourteen new products (including transistors, diodes, and integrated microcircuits) at the 1966 IEEE Show and Convention in New York City, March 21 through 25. The division's exhibit booths will be 2G07-9-11-13 in the New York Coliseum.

Scheduled for exhibit are the  $\mu$ M400 — a monolithic MOS-FET five-channel switch;  $\mu$ M3700 — a monolithic multi-channel commutator; FT57 — an MOS-FET low noise amplifier transistor; 2N3644 and 2N3645 — two PNP high current switches; FRR-300 — a radiation resistant diode, and a series of eight diode arrays. All devices offer the technological advantages of Fairchild's patented Planar epitaxial process.

Of the above, the FRR-300 is the industry's first Planar passivated high voltage radiation tolerant rectifier diode. The unit has a unique design which provides that the forward conductance will not fall below the specified guaranteed value, even after exposure to radiation environments.

## ROGERS, WIDLAR REPRESENT DIVISION IN JANUARY MAGAZINES

**MOUNTAIN VIEW** — Articles by two FS employees appeared in two January trade magazines. Buck Rogers of Marketing authored "IC's Industrial Impact Immense", a survey for 1966 in Electronic Design.

Part I of "Core Memory Sense Amplifier Designs Using an Integrated Dual Comparator" by Bob Widlar, Applications was highlighted in EDN. Part II of this article is currently carried in the February edition.



"POW WOW" — An appropriate farewell celebration greeted Barry Banducci at the Diode Plant. (He recently was promoted from general foreman to Production Manager of the new Shiprock, New Mexico facility.) Befitting the occasion, all the girls who worked for him in Special Products at San Rafael, donned Indian feathers for the day.

## NEW R&D RECREATION COUNCIL ELECTS 1966 OFFICER SLATE

**PALO ALTO** — The Prime Rib Inn (Palo Alto) was the site of the first meeting of 1965-66 R&D Recreation Council members on January 27. Newly elected Council members include Donna Parris, Jack Noll and Sam Uyeda who replace Ken Moyle, Dick Parker, and Al Herbolsheimer. Continuing members are Don Ramsay, Lynn Clark and Harriett West. A guest at the first session was Peggy Vorse.

Following the treasurer's report was election of officers. Jack Noll replaces Ken Moyle as president and Sam Uyeda was elected vice president, Donna Parris—secretary, and Lynn Clark—Sgt. at Arms. Don Ramsay was re-elected treasurer, while the *Leadwire* editor will continue as publicity.



R&D RECREATION — Reviewing 1966 prospects for the Palo Alto facility are Recreation Council members (l. to r.) Lynn Clark, Don Ramsay, Donna Parris, Jack Noll, Sam Uyeda and Harriett West. Donna, Jack and Sam are new additions to the group.



DIODE DRIBBLERS — San Rafael's basketball team placed third in eleven-team competition at the annual San Rafael Christmas Tournament. Here, they are shown in more recent action.

## TENTH FRAMERS COME UP TO WIN FIRST HALF IN MV BOWLING

**MOUNTAIN VIEW** — The Tenth Framers became a "dark horse" in the Mountain View Winter League by winning the tightly contested first half of the season by 2.5 games won (41-19). Close behind in second place was The In Crowd with a 38.5-21.5 record. The Lucky Strikes and Klunkers had identical wins versus losses of 36-24, while the Growlers of Fairchild Controls fell from top position to fifth place.

Helping The Tenth Framers' cause were Ann Lima, with a 156 average, followed by Nina Barrow's 145. Other team members are Jim Vinzant (142), Dale Cook (136), Roy McCreight (126) and Ann Antonio (122).

The In Crowd, which has been vying for top honors in the League for months, was led in averages by George Reh (178) and Jack Sheets (162). The team includes John Sentous (156), Corny Reese (151), Ginger Tygret (138), Louise Sheets (124) and Polly Reh (114).

Of outstanding individual performances during the first half, George Reh took both the men's high series and the men's high game. His respective scores were a 611 and 253. In the women's competition, Agnes Myreholt and Alice Stidham held their top spots. Agnes took high series honors with a 545 and Alice was first in high game with her 234.

	Won	Lost	Average
The Tenth Framers	41	19	701
The In Crowd	38.5	21.5	731
Lucky Strikes	36	24	742
Klunkers	36	24	729
Growlers	34.5	25.5	752
The Lively Ones	31	29	705
Bad Charges	30	30	700
Snids	30	30	690
Sandbaggers	29.5	30.5	628
Black Hats	29	31	695
Timber Smashers	28	31	723
Power Rejects	28	32	673
No. 2	27.5	32.5	653
The Rinky Dinques	24	36	668
The Flingers	21	39	648
Swing-ahs	16	44	604

“Old T



R&D, 1957-58 — Standing, left to right: Jo Ann Kolbo, Bernie Yurash, Jean Parry, Chet Gunter, Gene Held, George Cooper, Dick Parker, Lois Paddock, Charlie Plough and Dr. Gordon Moore.

Then, in 1959, the following R&D personnel came aboard:

- Edna Baker
- Harold Beam
- Helen Bonfadini
- Ershen Cabaniro
- Lynn Clark
- Michael Dragmire
- Mary Forrest
- Kenneth Fudge
- John Ganzer
- Doris Hall
- Betty Hee
- Dave Hilbiber
- Ed Hudson
- Albert Ingram
- Ron Ivancich

- Jessie Kafka
- Wendell Lafky
- Myra Landolfi
- Frances McDonough
- William Merklinger
- Irving Michelson
- Sally Mizote
- Milford (Ed) Oliver, Jr.
- Clair Ossig
- Don Palmer
- Joe Ruiz
- Harry Sello
- Erma Stites
- Flora Stone
- Doug Tremere
- Betty Tyson
- Betty Van deErve
- A. (Jeff) Wilson

SAN RAFAEL



DIODE, 1957-58 — Left to right are Al Desmond, Jack Larson, George Compton, Fred Bialek (since promoted to Intl. Operations Manager, MV), Bob Champagne, Dorothy Holland, Dolly Rule and Carla Clements.

MOUNTAIN VIEW

1959 Mountain View personnel who are still with the division include:

- Patricia Alfred
- Alberta Allen
- Helmut Altman
- Rose Andrade
- Bob Arnolde
- Macaria Banayat
- Bernie Barranger
- Joy Barrett
- Helen Basford
- Bob Bauer
- Fred Behringer
- Annabelle Bernardo
- Florence Boucher
- Mary Bruce
- Shirley Burlingame
- Dick Burzycki
- June Chadim
- Marguerite Chappell
- Chuck Clark
- Elizabeth Cordner
- Nellie Covington
- Wes Cox
- Barbara Crellin
- Roger Crosby
- Pauline Curiel
- Bea Custer
- Marie Daughtrey
- Bev De Los Santos
- Inez De Los Santos
- Ursula DeVries
- Bernice Dixon
- Evalena (Eve) Duemier
- Judy Dunkelberger
- Frank Durand
- Esther Durden
- Bev Dutra
- Lois Eageleston
- Elizabeth Elstad
- Lowell Erickson
- Jay Farley
- Minnie Figueroa
- Helen Fisher
- Marge Fisher
- Phyllis Flot
- Vergie Franklin
- Charles Friend
- Dorothy Gallagher
- Ida Galvan
- George Gray
- Ray Gregory
- Clifton Haines
- Caroline Hall
- Virginia Hall
- William Hamrol
- Cecil Harris
- Betty Hawkins
- Loretta Hayes
- Audrey Heddy
- Uli Hegel
- Mary Hendrix
- Gail Herbach
- Dolores Hightower
- Audrey Hoach
- Robert Holmes
- Mitsuye Hoshino
- Julia Howard
- Edlina (Eddy) Howell
- Helen Iverson
- Myrtle Jackson
- Bob Jennings
- Margot Johnson
- Ran Johnston
- Grace Joselyn
- Linda Julian
- Ruth Kameda
- Margaret Keith
- Betty Kemper
- Karl Kent
- James Kilduff
- Brent Knudson

# Timers"

The end result was several hundred people! But people make Fairchild and these pages are dedicated to those who have remained with the division since its formative years.



Phil Perry



Bill Simonsen



Bill Stansbury

- Don Kobrin
- Irene Kolacia
- George Korpontinos
- Ed Krueger
- Sumeko Kusaba
- Lucille Laidlaw
- Dorothea Leonard
- Beatrice Lonergan
- Edna Loucks
- Rose Marie Lovelace
- Samuel Lupp
- Miriam Lykins
- Virginia Margetts
- Ann Martin
- Helen Martinez
- Emory McGehee
- Norma Jean McNeal
- Virginia Michael
- Gary Mickelson
- Lillian Mickey
- Rosemary Moore
- Gordon Morrison
- Ed Mundwiller
- Agnes Myreholt
- Norm Nelson
- Gladys Newman
- Euela Oltrogge
- Refugia Ortiz
- Bob Pack
- Eleanor Palermo
- Marcella Park
- Bob Peck
- Lloyd Perrier
- Kathy Phillips
- Lorraine Piasecki
- Darrell Potter
- Ida Price
- Frank Ramos
- John Ready
- John Ronald
- Marcia Root
- Theima Roseborough
- Dorothy Rowan
- Irene Schuler
- John Sentous
- Joyce Shanda
- Don Shank
- Jack Sheets
- Tom Shillingburg
- Maria Simon
- Bob Skurko
- Roger Smullen
- Wilma Spellman
- Bill Sprinkle
- Mike Starr
- Ken Stephens
- Donia Stidham
- Carmen Sullivan
- Aniko Szasz
- Dave Talbert
- Karl Tampier
- Sadako Tanaka
- Nancy Tao
- Gertrude Tennant
- Larry Thomas
- Don Thorn
- Kay Tokutomi
- Ethel Trautwein
- Mary Valmoja
- Nelson Walker
- Lloyd Walsh
- Alyce Washburn
- Esther White
- Hazel White
- Mildred Wilkinson
- Inez Williams
- Rich Willis
- Pat Wilson
- Henry Woo
- Ruth Zavala
- Del Zimmer
- Gladys Zwemke



TRANSISTOR, 1957-58 — Front row (l. to r.) are Bette Cameron, Lorene Wyant, Lena Jobe, Lupe Navarro, Joan Sopko, Catherine Musser and Mary Lou Weis; second row — Bert Person, Jack Ehlers, Don Rogers, Paul Hinchcliffe and Don Thorn; back row — Dr. Vic Grinich, Murray Siegel, George Reh, Jim Monigold, Tom Regul and Don Visger. Not pictured are Dr. Robert Noyce, Tom Bay (since transferred to General Manager of Instrumentation), Julius Blank, Gerry Groux and Juanita Warrick.

## SHIPROCK



Jack Callahan (l.) and Greg Harrison

## HONG KONG



Ed Pausa

## CALIBRATION — THE HEART OF PRODUCT RELIABILITY

**DEPARTMENTAL FEATURE** — By definition, calibration is "to fix, check or correct the graduations of a measuring instrument, as a thermometer". In the case of FS, this category includes "policing" a broad range of measuring devices and varies per each plant's needs.

Electronic Services (MV) typifies the scope and importance of calibration to Fairchild. This section of some 43 employees is headed by Helmut Altman who reports to Eric Bergtraun in Plant Engineering. It is their task to periodically "standardize" every piece of equipment used to test FS products. Without this function, customers could not rely upon our guarantee that each device we manufacture has been thoroughly checked in-plant to insure its reliability.

In turn, Electronic Services is divided into four sub-groups, each supervised by assistant engineers. The Electrical Standards Lab is the hub of calibration operations. It is here that all of the equipment used as "standard" measures, have received certification from the National Bureau of Standards at regular intervals, and are then used to "standardize" other test instruments.

Both this Lab and the Commercial Instrument sub-section are supervised by Karl Tampier. Their duties entail calibration and repair of all commercial electronic instruments (numbering approximately 3,200) for both MV and Instrumentation. The scheduling of test equipment due for calibration is handled by a monthly tab run sent to each test section, notifying them of the instruments due for check-out and repair.

Only the smaller testers are brought into Electronic Services; the large units are calibrated right on operating location. After final check-out, each instrument receives a sticker giving the calibration date, the next due date and initials of the senior technician performing the various required tests.

Felix Sandry's Systems sub-group works all three shifts to keep the transistor and integrated circuit testers (all, specially designed for FS needs) operating according to the parameters set by Fairchild. In addition, instruments manufactured by Instrumentation undergo rigid acceptance testing plus modification and design checks in this area.

Another sub-group (Controls), under Ed Capasso, specializes in industrial repair and maintenance of industrial control systems, such as: Furnaces, RF generators, horizontal reactors, crystal growers and ultrasonic generators (used in bonding and welding).

An important function of the Controls group is fabrication and calibration of electronic accessories needed in various production areas. For instance, thermocouples (to test the uniformity of heat distribution in diffusion furnaces) are manufactured and tested in Controls' unique laboratory.

Finally, the Programming & Set Up group, headed by Rudy Bartneck is involved with programming the 19 integrated circuit testers used in-plant. Each machine must be programmed on tape according to specifications by the section's own programmer, Marcia Root.

Electronic Services represents only Mountain View in our division's calibration efforts to ensure product reliability. Yet, it is an outstanding example of other Semiconductor facilities, some of which are pictured here.



R&D



DIODE





## NEW FACES

**HOWARD CHAMBERLAIN** recently came aboard at Diode as senior QA engineer from employ with General Electric. He received his BSME degree from Stanford University, then served 4 years in the Army. Member: American Society for Quality Control.

**RALPH PIERLEONI** has joined Diode as a senior engineer. Born in Geneva, New York, he attended the State University in Buffalo. Following service in the Navy, he was employed by General Electric.

**GIRARD P. RUSSELL** is a new foreman in Final Test at South Portland. A Maine native, he attended Bliss College in Lewiston. Formerly plant manager for Jay Corporation.

**GEORGE GRIER** was a recent addition to Cost Accounting (MV). George, who holds a BA in accounting from Michigan State, comes to FS from Dow Chemical Company where he held a similar position.

**HENRY BREEN** came aboard as supervisor, Capital & Work Order Accounting (MV) from Aerial Surveys, Inc. (formerly a division of FCI). He has eleven years of diversified accounting experience, acquired from this company and also Fairchild Controls.

**FLOYD K. EIDE** is a new senior product engineer at Diode. Born in Brooklyn, New York, he holds both BS and MS degrees in physics from Fairleigh Dickenson University in Jeareck, New Jersey. Formerly associated with General Instrument.

**STEVEN L. KORN** joined South Portland as product marketing engineer. He holds a BS degree from Northeastern University (Boston) and is currently completing graduate studies at the University of Maine.

**ROBIN H. HODGE** came aboard at San Rafael as industrial engineer from Massey Ferguson, Ltd. A native of England, he received degrees from Bromsgrove College of F.E. and London University.

**ROBERT S. VAN DOREN** joined Diode as supervisor, Module line. Born in Baltimore, Maryland, he is a graduate of the University of Southern California. Member: AIIE.

**HAROLD E. KNOPP, JR.** is a recent addition as QA engineer, San Rafael. A Chicago native, he was awarded his BS degree from Purdue University in 1964. Member: Am. Society for Quality Control.

**MYRON COHEN** is a new industrial engineer at Diode. Formerly associated with Transitron, he attended Massachusetts Trade School in his native state. Served in the Army during the Korean conflict.

**CHARLES J. STAUSS** recently joined San Rafael as a section head in Marketing. He received his BSEE degree from the University of Wisconsin. Prior to Fairchild, he was employed by Corning Glass Works.



MOUNTAIN VIEW



## MOVING UP

**ROBERT J. WIDLAR** to section manager from group head, Linear Microcircuit Applications (MV). Bob received his BSEE degree from the University of Colorado, following 4 years' service in the Air Force. He came to Fairchild in 1963 from Ball Bros. Research Corporation.

**JOHN WELLS** from Profit Planning (MV) to Accounting Manager, Shiprock. John joined FS in 1963. He holds a BS degree from Stanford and an MBA from Columbia University.

**MAURICE C. O'SHEA** from supervising engineer to section head, Applications (MV). A native of New York, he holds a BSEE degree from Manhattan College, plus completed graduate work in math at Columbia and New York Universities. With Fairchild since 1961.

**B. T. (TOM) DYER** from NPN general foreman (MV) to marketing engineer (S. Portland). Tom came to FS in 1962, following service as captain in the Marine Corps. A graduate of Stanford (BSEE), he has completed further studies at the University of Santa Clara.



**CRYSTAL CHANDELIER?**—Actually, this lighting fixture (that adorns the foyer of Fairchild's English affiliate) is made of assorted diodes and transistors, embedded in clear plastic blocks. Mickey O'Donnell from Diode and her daughter recently toured the Fairchild SGS plant in Ruislip, London, while vacationing in Mickey's native England. Her daughter's most prized souvenir of the trip: Autographs of Ringo Starr and John Lennon, encountered at the London airport.

### FAIRCHILD SKI CLUB SCHEDULES THREE WEEKEND PACKAGE TRIPS

**MOUNTAIN VIEW**—Arrangements have been made by the Fairchild Ski Club for the following ski weekends:

- February 25-26 Alpine Meadows
- March 18-19 Squaw Valley
- March 25-26 Yosemite—Camp Curry

All of these trips include two nights' lodging, lift and lesson reductions, some meals and transportation. In addition, all will be partially financed by the MV Recreation Council, so the package price is quite nominal for each.

The February 25 and the March 18 jaunts will be via Greyhound bus, with car pools arranged for the Yosemite weekend.

Reservation blanks, available in the lobbies and cafeterias, should be mailed to the Fairchild Ski Club, Mountain View. Any questions may be directed to Pat Baringer, Ext. 2265 (MV).

### BI-MONTHLY BRIDGE MEETINGS CONTINUE TO ADD FANS

**MOUNTAIN VIEW**—The winning results of bridge sessions on the peninsula indicate that the group is picking up more enthusiasts. Meetings are held the first and third Tuesday of each month at 7:30 p.m. in the Headquarters building cafeteria. All Fairchild employees and their partners are cordially invited to participate.

Of each evening's rounds below, December 7 was full master point night, followed by a master point night on December 21.

#### NOVEMBER 2

1. Joy Barrett — Mary Ann Staples
2. Lloyd & Mary Hackley
3. Paul Hinchcliffe — Alex Weller

#### NOVEMBER 16

1. Dave Hilbiber — Felix Rosengarten
2. Carol Thomas — Art Kitkowski
3. Paul Hinchcliffe — Alex Weller
4. Liz Frisz — Nancy Weiss

#### DECEMBER 7

1. Ernie Yim — Don Dewey
- 2 & 3. (Tie) Paul Hinchcliffe — Tom Regul  
Howard & Kittie Murphy
4. Howard & Sharon McBeth

#### DECEMBER 21

1. George Santos — Ernie Yim
- \* Howard & Kittie Murphy
- \* Mr. & Mrs. Felix Rosengarten
- \* Liz Frisz — Dana Goodrich
- \* Tied for 2nd, 3rd and 4th.



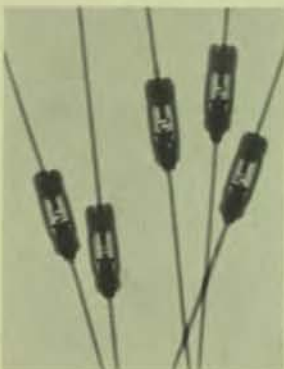
**TOP-NOTCH TRAINERS**—Three lovely ladies at Diode were recently transferred to the Training Department because of their broad experience in all major production areas. The gals (who have undergone further intensive training in teaching techniques, etc. themselves) are (l. to r.) Inge Filthuth, Hilda Kaliczak and Clara Schiavo. They will augment foreman Jack Brewer's training program.

### TRAINING DEPARTMENT GROWS TO MEET DIODE'S PRODUCTION

**SAN RAFAEL**—With new items being added to the production line at a rapid pace, three utility operators from various areas of Diode have been transferred to the Training Department, headed by Jack Brewer. They are: Clara Schiavo from Masking and Diffusion, Inge Filthuth from the Engineering Lab and Hilda Kaliczak from Classification and Pre-ship Test.

As trainers, these girls must be familiar with methods and techniques used in all major plant operations. Thus, Jack Brewer has set up 20 "Areas of Proficiency" for his new staff. These include such additional skills as teaching techniques and 35mm photography for training program preparation. According to Brewer, the department is now qualified to offer instruction courses in all major production areas.

#### ON THE COVER



The FRR-300 is the industry's first Planar passivated high voltage radiation tolerant rectifier diode. It is one out of several new products to be introduced by the Division at the IEEE Show next month.

## LEADWIRE

PUBLISHED BY AND FOR EMPLOYEES OF  
FAIRCHILD SEMICONDUCTOR

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FEBRUARY, 1966

EDITOR: HARRIETT L. WEST

ART DIRECTION: JOE BARRITE

**MOUNTAIN VIEW**—Marion Cornwell, Wes Cox, Lois Eagleston, Nellie Covington, Vince Fulginiti, Ginger Tygret, Val Gale, Keith Thomson, Judy Dunkelberger, Paul Basseur, John Walsh, Phil Lenihan, Claudia Storfold.

**DIODE PLANT**—Cleatus Dunkley, Audrie Graxiola, Ethel Heredia, Dorothy Jones, Janet Marz, Clarence Medeiros, Mickey O'Donnell, Margaret Queen, Barbara Visceto, Eleanor Wallin, Charles Etta Griffin.

**RESEARCH DEVELOPMENT**—George Daughters, Peggy Vorse, Donna Parris.

**SOUTH PORTLAND**—Don Loring, John Carter.

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## From the Editor...

Expansion throughout the Semiconductor and Instrumentation divisions is making its mark felt in many ways. Additional facilities are going up at a record pace, the number of new faces around Fairchild is snowballing, and—correspondingly—the amount of news generated for *Leadwire* is reaching unwieldy proportions.

Thus, my editorial this month deals with items that could not be fitted in elsewhere. For instance, March was a phenomenal month in terms of sales for the Instrumentation division. In particular, the Illinois area swept the board with sales honors: Carter Electronics was named Sales Representative of the Month; Dick Barr—(Central) Area Sales Manager of the Month; and Bert Saunders—Regional Sales Manager of the Month.

Turning to Semiconductor, Bob Simko from the Toronto, Canada office, and Bob Pettit from Jenkintown, Pa. office, each received an award for Salesman of the Month—Simko, in February and Pettit, in March.

Fairchild in Mtn. View can be mighty proud of a member of its Junior Achievement firm, FAIRCO. Robert H. Fradenburg won the youth organization's "best salesman" contest for the region. This 16-year-old will compete in the western finals in Portland, Oregon on April 15. If he wins, Bob will travel to Boston to try for the national title and a \$1,000 scholarship.

Bridge enthusiasts on the peninsula are still meeting the first and third Tuesday evenings of each month. The place is the Fairchild Drive cafeteria and the time, 7:45 p.m. At this writing, the upcoming schedule includes:

- April 19—Master Point (Club)
- May 3 —fractional Master Point
- May 17 —Charity Game

Everyone is welcome (if you bring a partner).

Some gals at South Portland have taken to the roller skating rink for group recreation. Around 50 members of a company-sponsored Roller Skating Club gather every week at the local Rollerdrome. A story and pictures will appear in the May *Leadwire*.

## Wear Your Badges Properly;

### All Plants Tighten Security

MOUNTAIN VIEW—Effective this month, all Fairchild Semiconductor/Instrumentation employees are required to have their badges plainly visible, face out (name, employee number and picture showing), at all times while on Fairchild property. This ruling includes wearing badges on the outside of smocks.

A clamp down on security, initiated at the General Managers' level of both the Semiconductor and Instrumentation divisions, has been predicated by the increasing number of visitors per facility. It is designed to keep unauthorized and unescorted persons from gaining entrance into any plant area.

Currently, proper display of badges by Fairchild personnel is being strictly enforced by the Guard Service and receptionists at facilities located in Mountain View. It will eventually spread to all plants throughout both divisions.

According to Lt. Linsenmayer (MV Guard Service supervisor), spot checks are being conducted in-plant by the guards to ensure proper wearing of badges on the premises. An employee who fails to comply with security, will be reported to her (his) supervisor.



LUCKY NUMBER—Doris Burns (right) of Instrumentation Manufacturing, discovered last month that she was to receive a share account for each of her four boys—just for joining the Credit Union! The membership card issued to Doris bore the magic number, 5000, which the Credit Union had voted to commemorate with a prize. Doris intends to continue saving for her sons with payroll deductions.



## INSTRUMENTATION SCORES WITH "NEW LOOK" AT I.E.E.E.

NEW YORK, N.Y.—The "new look" of Fairchild Instrumentation got its first major exposure at the I.E.E.E. convention and exhibition in the New York Coliseum. For the first time, all products of the division's east and west coast facilities presented the same image: Black cases with brushed aluminum faces and red trim.

The 50-foot exhibit featured the following products: 4000M series I/C and Module Test System, DVMs, Curve Tracers, Oscilloscopes, and the small-packaged Amplifiers. In the capacity booth traffic were some fourteen major customers who made special trips to the I.E.E.E. to inspect the 4000M in operation. Another beneficiary of the Show was the Curve Tracer which was the topic of an opening day advertisement on page 3 of *Electronic News*.

Chris Coburn, Director of Marketing, delivered a rousing send-off speech at a meeting, attended by the division's entire sales force (including representatives and distributors). The day's program was highlighted with presentations by the Product Marketing Managers: Bob Hart, Frank Burge, George Rakonitz and Frank Kelliher. John Hall, Administration Manager, and Guy Day of Faust/Day advertising agency (Los Angeles) introduced Instrumentation's new advertising program, due to break in the May issues of major trade publications.

## Charity Committee Reports Record United Fund Drive; Fairchild's 1965 Gifts Awarded

MOUNTAIN VIEW, PALO ALTO—According to Bill O'Keefe, chairman, the 1966 United Fund Drive held last winter was by far the most successful to date. Peninsula employees of Fairchild Semiconductor/Instrumentation joined forces to pledge \$35,016 in 1966 payroll deductions, compared to \$14,841 collected last year.

Recently, the Charity Committee voted to give \$10,000 of the matched corporate amount of \$14,841 to the United Fund. The balance was awarded to American Christmas Trains and Trucks (for South Vietnam)—\$400, and the Mountain View Child Care Center (a nursery, located in the Whisman School District)—\$4,414.

The Charity Committee for peninsula plants was formed to administer allocation of the matched Fairchild gift to meet preferred needs of a community or organization. Currently, the group is meeting twice a month to consider several worth-

while charities which might receive support from company funds (approximating the \$35,000 in employee pledges for 1966).

Committee members include: Bill O'Keefe (chairman), Lorraine Buffington, Lilly Stein, Carolyn Thomas, Sue Cox, Evelyn Wright, Mae Hendriks, Adele Atoigue, Mildred Wilkinson, Alpha (Missy) Streb, Valerie Knowles, Midge Bowen, Jonnie Tedrick, Harriett West, Hank Scherling, Bill Smith, Ky Nyborg, Ken O'Connor and Paul Kent.

# Items of Interest . . .

## FAIRCHILD SUPPLIES COMPONENTS FOR NEW BURROUGHS COMPUTER

**MOUNTAIN VIEW**—The Semiconductor division is supplying monolithic integrated circuits for the new B2500 and B3500 computer series, introduced last month by Burroughs Corporation of Detroit, Michigan.

The CT $\mu$ L microcircuits, jointly designed by engineers of Burroughs and Fairchild, utilize a complementary transistor logic circuit to achieve new levels of speed, accuracy, reliability and economy. Approximately 9,000 CT $\mu$ L microcircuits are used in each new Burroughs computer.

According to Charles E. Sporck, General Manager of the division: "The Burroughs '500' system family development seems highly significant to us at Fairchild Semiconductor; Burroughs views it as a general purpose electronic computer with a widespread sales potential for business and scientific applications, and we view it as a very good example of the best application of the world's most advanced electronic components".

The B8500 electronic data processing system, which Burroughs recently put on the market, also employs FS integrated circuits. More than 150,000 Fairchild CT $\mu$ L devices are used in each of these giant systems.



**NEWLY ELECTED**—Initiates of Diode's Recreation Council look over employee activities slated in coming months. They are (l. to r.) Chuck Self, Maxine Hamilton and Jim Williams. The threesome replaces Jack Brewer, Wayne Snodgrass and Jerry Callaway whose two-year terms recently expired.



**A SMALL FRY** accepts a \$4,414 check on behalf of the Mountain View Child Care Center, Whisman School District, from Charles E. Sporck — General Manager, FS (left). Representing the peninsula's Charity Committee are Bill O'Keefe — chairman (center) and Bill Smith (right).

## SIGN OF THE TIMES — Expansion of Facilities DIODE

**SAN RAFAEL**—Construction of a 12,000-square-foot addition to the Diode Plant commenced in mid-February. (The present facility, which contains 60,000 square feet, was completed the latter part of 1960.) This expansion has been predicated by a broadening product line, with new devices moving out of developmental stages and into full-scale production at Diode within the next several months.

The new addition will house the Machine Shop and various Plant Maintenance departments, thus opening the space they currently occupy for main production.

To date, the need for increasing the actual production area has been felt by the addition of such new products as the Dual-Diode, Photo Devices, Power Zeners, and several other types of special flat pack epoxy applications.

## INSTRUMENTATION

**MOUNTAIN VIEW**—Scheduled to open this month is the modern 67,000-square-foot Instrumentation facility, located at 475 Ellis Street, Mountain View. The plant incorporates under one roof all of the division's West Coast operations which have been housed in several temporary quarters.

Manufacturing personnel have been on Ellis Street since the first of the year. Currently settling down in their new abode are Instrumentation's Administration, Accounting, Personnel, Marketing, Sales, and Assembly employees.

## R&D

**PALO ALTO**—Progress! Graced by balmy weather on the peninsula, R&D's huge addition is taking shape. In two short months, the foundations and supporting walls have been completed.



**UNITED FUND**—A check for \$10,000 from Fairchild was presented to representatives of the MV United Fund recently. Left to right, Richard J. Border — 1965 UF Campaign Chairman and Charles Gordon — Mayor (both of Mtn. View) accept the money from Mildred Wilkinson — Charity Committee and Don Yost — Director of Operations.

## Mickelson Gains Post of Marketing Services Mgr., Fairchild Instrumentation

PALO ALTO, CALIFORNIA—The appointment of Gary R. Mickelson as Marketing Services Manager of Fairchild Instrumentation was announced this month by John Hall, Administration Manager of the division.

According to Hall, Mickelson will be headquartered in the new plant at 475 Ellis Street, Mountain View. His position has been newly created to consolidate total marketing service responsibilities in one location. (Previously, these requirements were handled by separate groups in both the Palo Alto, California and Clifton, New Jersey facilities.)

Mickelson joined the Semiconductor division in July, 1959, in Technical Illustration. He subsequently became head of that group, then moved up to account manager, Marketing Services, where he was in charge of FS Industrial Marketing's requirements.

His new assignment will encompass all of Instrumentation's sales promotional functions, including advertising, collateral product literature and direct mail programs.



"MEMORIES"—Ingrid Stogniew (formerly Boltzenhagen) was given a surprise bridal shower by her co-workers in Memory Products. Ingrid, a core stringer in the Systems Manufacturing area, has been with FS since January. Both she and her husband, Norbett, are natives of Germany.



OLD-TIMER—At R&D, George Langevin (who has been with Fairchild since December, 1957) cuts into a cake which marked his 65th birthday. Looking on are (l. to r.) Irene Rollins, department secretary in Plant Engineering, and Clem Jodocy, George's supervisor.

## Zero Defects Awards Made at Transducer



INDIVIDUAL AWARD—Valerie E. Tielens-Kruythoff, a training technician in Transducer Manufacturing of Fairchild Controls, is the first employee of that division to receive 18 Zero Defect stamps and a special ZD award for her suggestions to eliminate defects. Zero Defect stamps are given for employee recognition of potential problem areas in his(her) job, with suggestions for suitable corrective measures.



DEPT. HONORS—Fairchild Controls' Plant Engineering and Marketing departments received Zero Defect awards from Don Lynam (right), Plant Manager, for achieving their set goals for three successive months. Seated (l. to r.) are Sub Okazaki, Jim Vinzant, Norm Zinker and Nathaniel Sundaram. Standing (l. to r.): Edward Pitts, Roy McCreight, Frank Howard, Burt Rosenthal, Taz Waller and Lynam. Not pictured is Katie Guida, Marketing secretary. The group celebrated with a ZD luncheon at the Pioneer Hotel in Woodside.



BELATED "SALUD"—In November, 1965, Bill Seifert (center) was awarded a plaque for Salesman of the Month by Vince Sabella, Eastern Industrial Regional Sales Manager (standing to Bill's left). The salesmen and office staff from the Jericho, L.I., New York office—including Dave Conway, Consumer Regional Manager (seated, right)—feted the occasion. Bill has since been promoted to Product Marketing Manager of Digital Integrated Circuits, MV.

# The Sports Scene...

## Spring Skiing Is the Thing Around Fairchild

MOUNT ABRAM, LOCKE MILLS, MAINE

SOUTH PORTLAND—Around 60 FS employees and their families rose early on February 27 to board a chartered bus, headed for the ski slopes of Mount Abram, Locke Mills, Maine.



MICHAEL RICHARD, 6-year-old son of Joseph Richard, turns around just in time to catch the camera's eye before mounting the bus for Mount Abram.

The excursion was graced by good ski conditions and maximum visibility. Thus, experts and beginners alike returned home weary from the exercise, but jovial nonetheless.

Group arrangements for lift tickets, transportation, ski lessons and equipment rental were made by the South Portland Recreation Council. Joseph Richard, a test engineer and Council member, was chairman for this event.

## CALIFORNIA: HEAVENLY VALLEY; ALPINE MEADOWS & SLIDE MTN.

PALO ALTO—The R&D Ski Club sponsored two Spring skiing trips in March. A group of fifteen took advantage of a company-subsidized package March 11-13. Transportation was via Greyhound bus and accommodations at the Tahoe-Paradise Motel.

The heaviest participation was drawn by the trip to North Shore, Lake Tahoe, March 25-27. Thirty-six skiers stayed at Evergreen Lodge and enjoyed good snow conditions at both Alpine Meadows and Slide Mountain.



R&D invades Slide Mountain.

## 1966 Fairchild Falcons Add Speed, Pitching Strength

MOUNTAIN VIEW—According to Manager Pat Campagna, this year's AAA Softball League will see lots of new speed and good pitching from the 1966 Fairchild Falcons.

Representing new talent on the mound are Al Johnson and Bob Harrison, pitchers. Sonny Fernandez has been added as catcher, Mike Haruff—2nd base, Dennis Murphy—shortstop, and outfielders Ed de-Martini, Chip Nasta, Jack Gifford, Chuck Camuso and Joe Palma.

Returning for their second season with the Falcons are Ed Lovelace—1st base, Ray Phillips—3rd base (and a Northern California all-star last year), Larry Phillips, Vince Fulginiti and Frank Aquino—outfielders, and Campagna.

The company-sponsored softball team has been warming up for AAA competition with non-league games throughout the state in recent weeks. A 1966 game schedule should be available soon.

## YOSEMITE PARK — BADGER PASS

MOUNTAIN VIEW—A riotous eighty ski fans from the peninsula traveled by cars to Badger Pass in Yosemite Park for the weekend of March 25-27.

Despite Spring snow conditions, the package was well worth \$20 per person: Lodging at Camp Curry, all meals while in Yosemite, unlimited use of lifts, two ski lessons each day and a party Saturday night. This was the Fairchild Ski Club's end-of-season jaunt.

## Swing Shift Bowlers Now Rolling in San Rafael

SAN RAFAEL — The Diode plant now boasts a Mixed Bowling League going full force on swing shift. Eight night owl teams hit the lanes at 1:30 a.m. and sometimes vie for standings until after 4:00 a.m.

Currently, Kenneth Herman's team holds a slim edge over that of Jane Maynard: 19 wins, 9 losses and 18 wins, 10 losses, respectively.

High series and high game honors in the League are led by George Fugere with his 500 and 188 averages. Running a close second is Gordon Tremoureux whose corresponding scores are 489 and 184. Madeline Reynolds' 176 average ranks third in high game.

Officers of the League are Gerry Paden—president, Joann Nelson—vice president, and Madeline Reynolds—secretary.

## FAIRCHILD TOPS SYLVANIA IN MV PING PONG PLAY-OFF

MOUNTAIN VIEW—The Fairchild Table Tennis team (MV) took first place in the 1966 Winter Industrial League of the Cupertino Table Tennis Club by winning a play-off match with Sylvania. The victory marked the first time that Fairchild has taken top honors since entering the league in mid-1964.

According to Jim Vinzant, Transducer, participation in the Industrial League is open to any groups of players from Fairchild. The league is divided into two flights (one, on Monday night and another, on Wednesday night) and meets at 19915 Price Avenue, Cupertino, at 7:30 p.m.

The championship for the league is determined by a play-off between the winning teams in both singles and doubles from each flight.



WINNERS—The table tennis team representing Fairchild in the 1966 Winter Industrial League are (l. to r.): Joe Fang (Inst.), Dave Morin (Inst.), Ralph Rasmussen (Inst.), Sub Okazaki and Jim Vinzant (both, from Transducer). The large trophy Jim is holding will be presented to the Company for the trophy case.

## LEATHERS ROLLS PAST REH IN MV MIXED BOWLING

MOUNTAIN VIEW — George Reh, who has held men's high game with an average of 253 for months, succumbed to the fantastic 266 bowled by Claude Leathers the end of March. Leathers also "aced out" Glenn Pollard from men's high handicap. His 300 easily topped Glenn's 276 average in the Fairchild Mixed League (MV).

Alberta Stidham still holds the feminine lead in both high game and high handicap. Her respective scores are a 234 and 284.

In team play, the Lively Ones lead the Rinky Dinkes by one game: 31 games won, 13 lost versus 30 games won, 14 lost.

## Day Shift Bowlers at Diode Schedule Banquet May 21

SAN RAFAEL—Plans currently are underway for the Mixed Bowling League Banquet (day shift) at Diode. The affair will be held in the Banquet Room of Nave Lanes on May 21.

In charge of further arrangements for this annual event are Leah Stevenson, Barbara Visceto, Bob Champion and Don Brown.



## Ceremony Marks Opening of New Hong Kong Plant

KWUN TONG, HONG KONG—More than 150 important figures in the U.S. electronics industry, as well as local dignitaries, gathered on March 9 for the Official Opening of Semiconductor, Ltd.'s 11-story factory in Hong Kong.

To begin the celebration, a huge firecracker was set off. The Opening ceremony which followed was performed by The Honorable R. C. Lee, C.B.E., J.P., an eminent personality in the Chinese community. Mr. Lee unveiled a commemorative plaque after a brief speech praising Fairchild for its confidence in Hong Kong.

There were addresses by John Carter, Chairman of the Board—Fairchild Camera and Instrument, and C. Ed Pausa, Plant Manager. As a finale, guests toured the plant, then reassembled at the Peninsula Hotel for a reception.

Since 1962 (when the Semiconductor division decided to expand markets abroad with operations in Hong Kong), this facility has enjoyed extremely rapid expansion. Not only does the plant boast more than 3,500 employees, but also sells its products to 12 other countries throughout the world, in addition to the Hong Kong market.



A firecracker, which extended from the 11th story to the ground floor, set off the ceremony in grand style.

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Dignitaries and swing shift employees wince at the noise from the fireworks. They stand on the dockside, facing the building.



After unveiling the Opening plaque, officials participating in the event, gathered briefly: (l. to r.) Ed Pausa, Plant Manager; Richard Hodgson, President — FCI; The Hon. R. C. Lee, C.B.E., J.P.; and John Carter, Chairman — FCI.



Guests were then conducted on an hour-long tour of the new plant.



Final Seal in Diode Production . . . .



In Transistor Production . . . .



The cafeteria's busy . . . .



And so are the cooks behind the scenes . . .



Applications Engineering . . . .



The finale — a reception at the Peninsula Hotel.

# A FAIRCHILD FOUNDATION...

## Materials, Mtn. View

(Part I)

DEPARTMENTAL FEATURE — Part I explains pictorially the processes used in the Crystal Growing and Slicing areas of the Materials department in Mountain View.

Materials, itself, encompasses many facets of preliminary fabrication that are important to the assembly facilities of the Semiconductor division. Each operation in Wafer Production and Header Manufacturing will be covered in forthcoming issues of *Leadwire*.



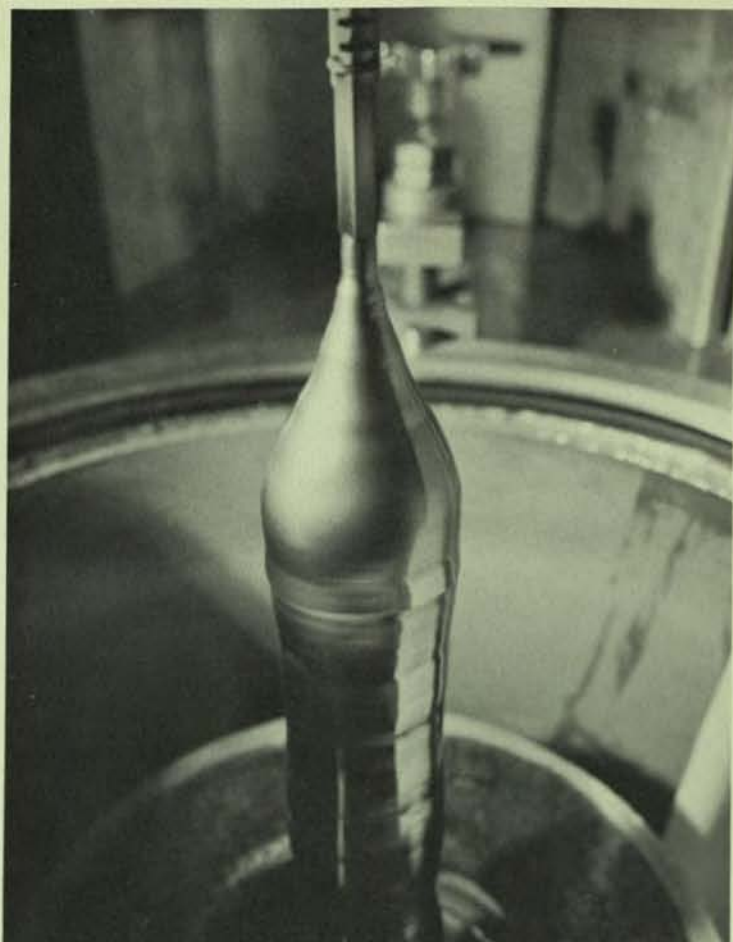
1. High-purity polycrystalline silicon is purchased by Fairchild, weighed into 400 gram charges, and placed in a quartz crucible. The batch is doped with either boron or antimony. Diane Joyce, seated at the weighing station, consults with Linda Berd (right) over the specifications on a cropped silicon ingot.



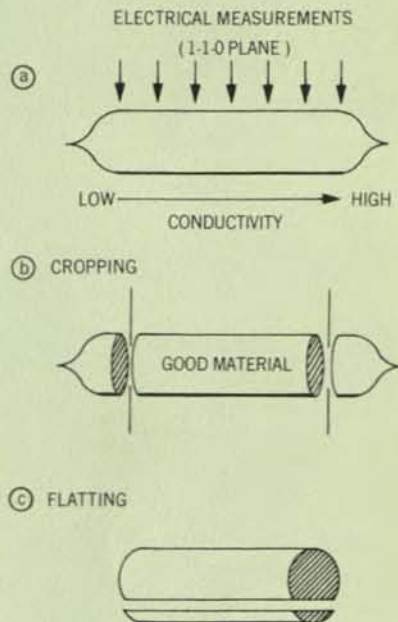
2. The doped charge is then heated in a crystal puller to 1420°C (the melting point of silicon) and a seed crystal is inserted. Joan Major performs this task as Dave Block, supervisor—Crystal Growing, observes.



4. Jovita Avalos checks the temperature on another type of puller, the Rf grower. According to Buzz Sawyer, foreman, this mechanism differs from the standard puller in the temperature, rate of pull and ultimate diameter of the silicon ingot (or "crystal") it produces.



3. As the seed crystal is slowly pulled upward, a solid silicon ingot is formed which is approximately 1/4 inches in diameter. Each crystal puller is capable of turning out five silicon ingots during a 24-hour period.



5. As shown in the diagram, (a) electrical measurements on a 1-1-0 plane are run along the length of the silicon "crystal" (which should read from low to high conductivity) and (b) the poor material is "cropped," or cut, off each end. The remaining good material travels to the Slicing area where (c) it is "flatted" on one side.





6. After flattening, the ingot is fastened to a metal bilet with heavy wax. Norma Moreno holds a mounted crystal, ready for slicing into wafers.



9. Ruth Whitley and her co-workers then classify the wafers into  $5\mu$  groupings. Each wafer is given a diameter check and type test (for resistivity).



7. Delrene Vazquez inserts the metal bilet into the arm of an automatic slicer. A diamond blade cuts the crystal into wafers, 10 mils  $\pm$  .5 mils in thickness. One silicon ingot produces an average of 140 slices.



8. The wafers are carefully removed from the bilet, washed, and dried under an infrared light. Betty Childers gazes over a sea of slices that are drying.



10. Following evaluation, wafers go either to Lapping or to Polishing. In each case, however, they must be waxed down on grinding discs before further processing. Diane Bailey adheres wafers to discs which have been warmed on hot plates and coated with wax.

Next Month: Part II — Lapping, Polishing, Oxidation and Epitaxial Growth.

## Carol Reports...



**SOUTH PORTLAND**—A cliché, "easy come, easy go", may be particularly appropriate to a Maine Fairchilder—especially the latter part!

A local cash-and-carry cleaning establishment, which is patronized by many Fairchild employees,

has set up a sweepstakes. To become a hopeful, the customer need only select a number, and each week thereafter, sign his name in a book. A number is drawn weekly. If the bearer of the number has registered his name for that week, he collects \$100.

Despite the fact that he visited this particular cleaner's no less than three times, our Fairchilder failed to register his name. His number was posted and by default, the \$100 went to a nearby neighbor (who was—perhaps—a little bit more on the ball).

## Maine Facility Welcomes Its First Co-op Student

Richard W. Johnson, who recently completed a 13-week work period in Maine, holds the distinction of being the facility's first co-op student. He will return to South Portland in June, following 13 weeks of academics at Northeastern University in Massachusetts.

Dick is completing his third year at Northeastern in electrical engineering. While at Fairchild, he worked in Product Engineering under the direction of Marty Tiernan, Department Head. His duties entailed testing product defects to determine their cause, then taking subsequent steps to remedy.

Prior to Northeastern, Johnson attended Tufts University. At one time, he joined a crew aboard the Atlantis II on a research expedition bound for Puerto Rico, under the auspices of Woods Hole Oceanographic Institute.

He points out that Northeastern is the first school to adopt a co-op (work/study) program. It offers a student experience in a chosen field, as well as an opportunity to earn money for defraying part of educational expenses.



Richard W. Johnson

## Business Girls Club of YWCA Hosted by South Portland

Members of the Business Girls Club, Young Women's Christian Association of Portland, were guests of Fairchild Semiconductor in Maine recently. The visit acquainted the ladies with Fairchild's facilities, benefits, training program, and manufacturing procedures.

Jim Brown, production supervisor, Don Loring, Personnel Manager, and his assistant, Jack Carter, conducted the group

on a plant tour. This was followed by a discussion of company history and a movie on the facilities and capabilities of FS.

The club, which got its start in mid-1964, meets twice a month for civic education, friendship and recreation. Many girls who work in the South Portland plant, live at the Y.W.C.A. and are members of the organization.



**YWCA'S BUSINESS GIRLS CLUB**—Among the members present are: Seated (second from left) Mrs. Kenneth R. Haskell, Young Adult Director of the Y.W.C.A., and mother of Philip J. Haskell, production supervisor in Micrologics. Standing (far left) is Miss Patricia Beaudry, coordinator of the organization.



**GRADUATES**—Seven gentlemen from the Maine facility were recently awarded Certificates of Completion for a 14-week Electronic Controls course by John Poirier (second from right), while Jack Magarian (center), Plant Manager, looked on. The recipients (l. to r.): Bob Buttarazzi, Bob Merrow, Norman Langelier, Dick Poulin, Ray Malatesta, Clifford Ashley, Jr. and Dana Faulkner. The program, held at Southern Maine Vocational Technical Institute in South Portland, was set up by Poirier (supervisor, Electronic Maintenance) who has made arrangements for a follow-up course in Transistor Electronics. Rupert E. MacLean from the Institute was instructor for the first course.



**ONE-TWO-THREE, KICK**—This South Portland threesome has much in common: Not only the casts, but also a keen sense of humor and a generous supply of perseverance. Marilyn Compton (center) and Janice Kelly (rt.) sustained their broken leg injuries the same day; Marilyn, in a skiing fall and Janice, in an automobile accident. Two weeks later, Linda Allen (left) also tumbled down the slopes and into a cast. Linda and Janice work in Test and Finish, and Marilyn, in the dispatch area.

## FIVE-YEARS SERVICE

Hap Roberts, Mountain View  
Richard Foster, Instrumentation  
Jerry Sanders, Mountain View  
Robert Busch, Diode  
Jack Brewer, Diode



D. Cornfoot



C. R. Bailey



H. Richman

## MOVING UP

**DOUG CORNFOOT** from production foreman, Test and Finish (South Portland), to product specialist. Doug joined Fairchild in 1963 from High Vacuum Equipment Corporation. He is a graduate (BS degree) of the University of Massachusetts and has served two years in the Air Force.

**C. RAY BAILEY** to Manager, Operations Analysis, from Assistant to the Controller, Accounting (MV). Prior to 1963 (when Ray came to FS), he was associated with Haskins and Sells in Detroit, Michigan. He holds both a BSBA and an MBA from Denver University. Member: National Association of Accountants and the Michigan Association of CPAs.

**HERBERT J. RICHMAN** from sales engineer to Computer Regional Sales Manager, Jericho, New York office. Herb came to Fairchild in 1964 from Kulicke & Soffa (Fort Washington, Pa.). He received his BSBA degree from Temple University, Philadelphia. In his current position, Herb heads computer sales efforts in the New Jersey, New York City, Connecticut and Westchester County, New York areas.

**GARY LEE KERNS** from foreman in DIC to product engineer, PIC in Mtn. View. A graduate of the California Maritime Academy, Gary joined Fairchild in 1965 from Shipowners & Merchants Towboat Co., Ltd. Born in Creston, Iowa.

**RALPH W. COX, JR.** to production foreman from electronics technician, South Portland. Ralph, who is a Maine native, came aboard FS in 1965, following over 18 years' service in the Navy. He was honorably discharged as Chief Petty Officer, electronics.

**RONALD D. TURNER** from staff photographer to assistant account manager for the Military, Industrial and Computer marketing programs in Marketing Services, MV. Ron has been with Fairchild since 1963. During this time, his photographic skills have represented the division in the Leadwire and in pictorial illustration of our product line. Born in Oakland, California, he holds an AA degree from San Francisco City College.

## NEW FACES

**RUSSELL C. FONDREN** joins Shiprock as a foreman in Die Fab. Born in Breckenridge, Texas, he graduated from North Texas State University (Denton). Russell has served seven years in the Air Force. Prior to Fairchild, he was employed by Texas Instruments.

**HERBERT M. SOSNICK** came aboard at MV as Marketing Services account manager for the Industrial market. Herb received his BA degree in Advertising from Michigan State University (in his native state). Formerly a copywriter for the May Company, he is a member of Alpha Delta Sigma.

**ROBERT MCFARLAND** has joined Memory Products (MV) as a senior engineer. Born in Teaneck, New Jersey, his formal education includes a BSEE degree from Duke University and a MS in Business Administration from San Diego State. Bob comes to Fairchild from General Dynamics. Member: NMA.

**GUNNAR GUNNARSSON** was a recent addition to General Accounting (MV). Before coming to Fairchild, Gunnar had 7 years' accounting experience in his native Iceland. In 1961, he was a trainee with International Bank for Reconstruction and Development, Washington, D.C. Gunnar holds the equivalent of a BSBA degree from the Wirtschaftshochschule in Mannheim, Germany.

**ABEL HENDRIK HARTOG** came aboard at MV as a process engineer in PIC (Proprietary Integrated Circuits). Abel holds an EE degree from H.T.S.—Groningen, the Netherlands (his native country). Former employment includes Sylvania and Clevite Corporation.

**SPENCER B. FITTS** is a new supervisor in QA at South Portland. Formerly associated with Portland Pipe Line Company, he received an associate degree in Industrial Electronics from Wentworth Institute in Boston, later graduating with a BSEE degree from the University of Maine. Member: IEEE.

**KENNETH M. COHEN** has joined CIC in MV as a product engineer. Ken attended Los Angeles City College and UCLA in his hometown, graduating from the University of California, Berkeley, with a BSEE. He has served two years in the Army and previously was employed by Packard Bell.

**LARRY BENDER** joins MV as art director in Marketing Services. Born in Milwaukee, Wisconsin, Larry holds a BA degree from San Diego State College and has completed art studies at the Art Center School, Los Angeles. He comes to FS from J. Chris Smith Design Associates in Southern California.

**GERALD A. DONOVAN**, a new foreman in Assembly at South Portland, comes to FS from Ford Motor Company. Born in Winthrop, Massachusetts, he graduated from Northeastern University, Boston, with a BS in Business Administration. Served four years in the Coast Guard.

**ALAN P. PHILLIPS** is a new industrial engineer at South Portland from E. W. Bliss. He received his education from South East London Technical Institute in his native England and has completed graduate courses at the University of Maine. Became a U.S. citizen in 1964.

**THOMAS M. BOOTH**, another Englishman, has been added to South Portland as a senior design engineer. Tom holds an English Higher National Certificate from Northampton College of Technology. He has won awards in mathematics at the Complex Differential Equation level.

**PO SHIU POON** came aboard at South Portland as sales liaison engineer. Applications. Born in free China, he received his BSEE degree from Cheng Kung University in Taiwan and his Master's from Kansas State University. In addition, he has completed further courses at Vanderbilt University and has taught at both Kansas State and Vanderbilt. Former employ: IBM Corporation.

**JACK D. ROWLEY** has been named QA manager, Microwave Products, in MV. In this capacity, Rowley will direct the Quality Assurance and Reliability programs for Semiconductor's line of solid state microwave sources and microwave transistors and diodes. A graduate of the University of San Francisco, Jack was formerly associated with Pulse Engineering, Inc. and Melabs. Member: American Society for Quality Control.

**RICHARD H. SKJERVEN** recently joined Fairchild Camera in the Office of Contracts Counsel. Headquartered in Mtn. View, Dick is responsible for legal advice and assistance in negotiating and administering contracts of Semiconductor/Instrumentation, plus two other divisions of the parent company. He holds both a BA and Juris Doctor degree from the University of North Dakota. Prior to joining FCI, Skjerven was employed by the Department of Defense.



J. Rowley



R. Skjerven

**PAUL J. SCHNITZ** joined MV's General Accounting as supervisor of Billing and Accounts Receivable, following six months' service in the Army reserves. A native of Chicago, Illinois, Paul received his AB in Engineering from Harvard and his MBA from Stanford University.

**DALE M. FARNSWORTH** came aboard South Portland as an industrial engineer. Born in Jonesport, Maine, he holds a BSME degree from the University of New Hampshire. Dale joined Fairchild from General Electric.

**DAVE POWELL**, a new Personnel administrator at MV, formerly held a similar position with California Packing Corporation. After graduation from St. Lawrence University in New York State, Dave served a three-year stint in the Marine Corps.

**ELFORD H. MESSER** comes to South Portland as a design engineer. Prior to FS, he was an instructor at his "alma mater"—the University of Maine—from which he holds a BSME degree. An Air Force veteran.

**LOUIS H. BIELER, JR.** is a new technical writer in Marketing Services, MV. He graduated (AB degree) from Princeton University in 1963 and completed his MBA at Stanford in 1965. Lou is a native of Philadelphia, Pennsylvania.

**RICHARD F. ROBERTSON** is a recent addition as foreman at Memory Products (MV). His formal education includes studies at the University of Tennessee. Born in San Francisco, Dick has served 2½ years in the Air Force.

# Amateur Photo Contest

sponsored by *Leadwire*

- Who's Eligible:** All Semiconductor/Instrumentation employees and their families.\*
- What Kind:** Black & White—prints any size.  
Color (transparencies, prints)—any size.  
Please—No Negatives!
- Categories:**
1. Sports/Action
  2. Human Interest (people, etc.)
  3. Scenics
  4. Still Life
- Deadline:** May 31, 1966
- Prizes:** One 1st Place—Kodak Instamatic Mark IV  
Super 8 Movie Camera  
Three 2nd Places—Polaroid "Swingers"  
Eight Honorable Mentions (2 per each category)

Pictures judged on basis of Content and Originality, rather than Technical Quality. Prints will not be returned without a self-addressed envelope.

Contest ends May 31, 1966; judging by Staff photographers on June 1. Winning entries featured on cover and in center section of June *Leadwire*.

Remember the deadline. Entries must be received by Harriett West (Marketing Services—MV) no later than May 31, 1966. Please print legibly name, dept./section and plant location on a separate piece of paper and include with photo. (For family members, also indicate relationship to you, as an employee.) Only one entry per photographer.

\* Professional photographers will be disqualified.

## Sign up Now for Fairchild Annual Golf Outing, June 5

**MOUNTAIN VIEW**—The Fairchild annual golf outing will be held on June 5, 1966, at Pleasant Hills Golf and Country Club in San Jose. This year's deadline for entries will be May 23, 1966. According to George Reh, entrants should sign up early since they will be scheduled on a first-in, first-out basis.

Golf competition will be based on a blind bogey handicap system, with Flights consisting of A, B, C, women, and guest. (Each Fairchild employee may invite one guest.) The first starting time is scheduled for 10:21 a.m.

Employees may use the entry blank on this page to sign up individually or as a foursome. Green fees have been estimated at \$4 per person, or the prevailing rate as of June 5, 1966. A \$2 deposit per person, non-refundable (but deductible from green fees), must accompany each application blank.

Pleasant Hills Golf and Country Club is located on White Road in East San Jose.

### Entry Blank FAIRCHILD GOLF OUTING June 5, 1966

Name \_\_\_\_\_ Name \_\_\_\_\_

Badge No. \_\_\_\_\_ Badge No. \_\_\_\_\_

Plant \_\_\_\_\_ Plant \_\_\_\_\_  
(MV, Diode, R&D, etc.)

Name \_\_\_\_\_ Name \_\_\_\_\_

Badge No. \_\_\_\_\_ Badge No. \_\_\_\_\_

Plant \_\_\_\_\_ Plant \_\_\_\_\_

Return this form with a \$2 deposit per person to Del Zimmer or George Reh (MV); Al Weddle (Instrumentation); Jack Jones (R&D); Gary Brandenburg (Diode); or Bill Geene (Transducer).

## LEADWIRE

Published by and for Employees of  
Fairchild Semiconductor/  
Instrumentation

Mountain View - Palo Alto - San Rafael  
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**DIODE PLANT**—Cleatus Dunkley, Audrie Graxiola, Janet Marz, Clarence Medeiros, Mickey O'Donnell, Margaret Queen, Barbara Visceto, Eleanor Wallin, Bobbie Talley.

**RESEARCH & DEVELOPMENT** — Peggy Vorse, Donna Parris.

**SOUTH PORTLAND**—Carol Hebold.

**INSTRUMENTATION**—Jack Ramon, Joan Appleman, Pat Campagna.

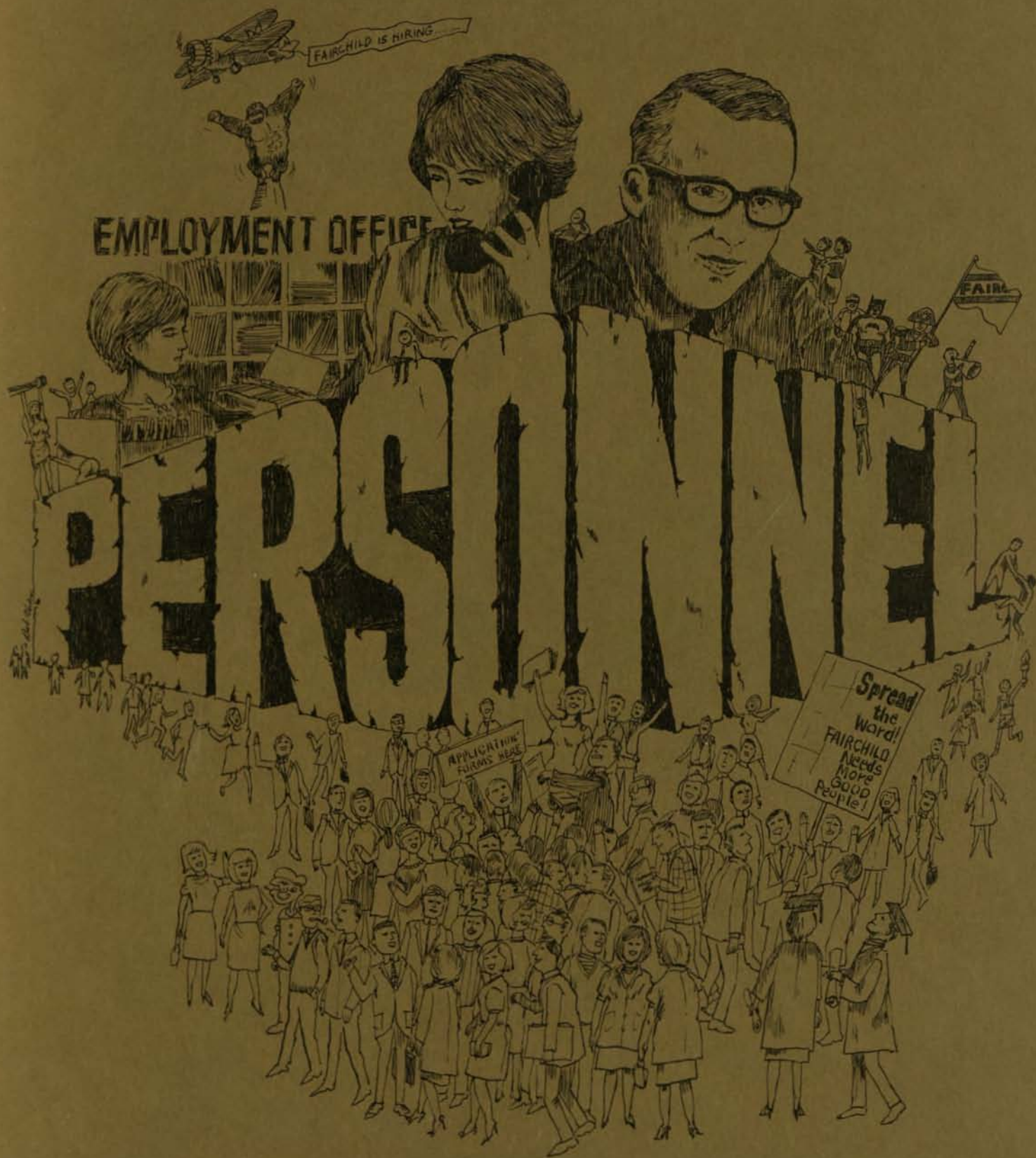
μL is a registered trademark of Fairchild Semiconductor, a Division of Fairchild Camera and Instrument Corporation.

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### ON THE COVER



A Chinese junk sails through Repulse Bay, on course to Hong Kong. Don Valentine, Director of Marketing, took this shot during Grand Opening festivities of Semiconductor, Ltd.



LEADWIRE

### *To the Reader*

What is a publication without readers? And where is an editor's responsibility if it's not to the readers?

The LEADWIRE is your publication, but because it is your publication you must also bear part of the responsibility for making it good. *To be a good publication it must be of interest to you*; so I'm depending upon each one of you to keep me posted about what's going on throughout the world of Fairchild Semiconductor and Instrumentation . . . that means not just at Mountain View, but at San Rafael, Shiprock, Palo Alto, Hong Kong, and South Portland. This is the best, time-proven method for putting together a good publication, and that's what I'm aiming for.

September's LEADWIRE couldn't have been without the photos, story suggestions, and expert reporting turned in by people like Iantha Adams (MV), Paul Brasseur (MV), Lucille Cartmill (Diode), Pat Cagnana (Instrumentation), Paul Kent (MV), Ana Larsen (MV), Dr. Robert Noyce (MV), Jack Ramon (Instrumentation), Madeline Reynolds (Diode), Yvonne Sears (Instrumentation), Jack Sheets (MV), Walt Skruch (Instrumentation), Bonnie Sweeney (MV), Keith Thomson (MV), and Charles Victor (MV). As your new editor, I certainly appreciated their help.

So if you have a news item or picture or a cute story, jot it down and send it to me. Better yet, just give me a call. Remember, this is your publication and as such it should reflect what happens to you. *For this I must depend upon you.*

## SemiDiv and Instrumentation Supervisors Go Back to School to Learn Safety Rules

Safety is serious business, but with the help of slides and movies, even safety school can be enjoyable business in addition to being beneficial.

Under the direction of Charles L. Victor, Chief Safety Engineer, a safety training course is being offered to supervisors at Mountain View's Semiconductor and Instrumentation facilities. Classes began July 21st, and supervisors attend one-hour sessions every other Thursday.

Vic believes the course will make supervisors more aware of safety dangers, environmental hazards, and unsafe working habits of em-

ployees that may lead to accidents. "Our aim is to prevent accidents before they happen. This requires a constant awareness that we hope to develop in this course. Hopefully it will be reflected in a minimum accident rate."

The course will be extended to outlying plants in the area some time in the future, but until then Vic and safety engineer, John Arthur, have a busy class schedule to maintain. Fortunately they have obtained able assistance from Paul Fullmer and George Hewitt, safety consultants from Insurance Company of North America which is participating in the program.

## Lanset Elected FCI Assistant Comptroller

Lawrence Lanset is heading east to Syosset and corporate headquarters as newly elected Assistant Comptroller of Fairchild Camera and Instrument. He will be responsible for financial planning and control, reporting to E. S. Hill, Vice President and Comptroller.

Larry joined Semiconductor (MV) in 1961 as Comptroller. An integral part of management, he was particularly valuable in planning and guiding Semiconductor's rapid expansion.



Before coming to Fairchild, Larry was associated with Ampex Corporation, Redwood City, California, and W. R. Grace and Company, New York. A native of Newark, New Jersey, he holds an accounting degree and an MBA in Business Administration from New York University. He lists membership in the National Association of Accountants and the Financial Executives' Institute.

Stanley Ross, also assistant comptroller, Fairchild Camera, will maintain his responsibilities for accounting and auditing.

## \$5 For Your Photos

Better pictorial coverage of happenings around Fairchild — that's what the LEADWIRE is after. Send in pictures of water fights at company picnics; action shots of tennis enthusiasts, bowling champs, or ski bunnies; or a sneaky snapshot of your boss frantically hunting for yesterday's committee meeting notes. If your snapshot or photo is used in the LEADWIRE, you will receive \$5. All photos will be returned.

## Fairchild Semiconductor Delivers 100,000 CT $\mu$ L Circuits to A.S.I.

In appreciation of the successful CT $\mu$ L program between Fairchild and Advanced Scientific Instruments, Minneapolis, Fairchild has presented A.S.I. with an enlarged photomicrograph of a CT $\mu$ L circuit. A.S.I. is using Fairchild CT $\mu$ L in their 6000 series of computers.



**Shown left to right:** Vito DiMucci, Engineering Manager, A.S.I.; Fran Krch, Central Computer Regional Sales Manager, F.S.C.; Jim Luce, Purchasing Agent, A.S.I.; Marshall Cox, Computer Marketing Manager, F.S.C.; Mel Snyder, Computer Programs Manager, F.S.C.; Jerry Larkin, Custom Integrated Circuit Manager, F.S.C.

# The Fairchild Scene...

## Fairchild Moonbeams Reach League Finals

Not to be outshined by the recent victories of the Fairchild Falcons, the girls' softball team, the Moonbeams, captured the Mountain View Women's Industrial League Division B Championship. Coached by Walt Skruch and Rick Miller, both of Instrumentation, the girls defeated the Communications Workers of America Local 9409 by a 7-4 score.

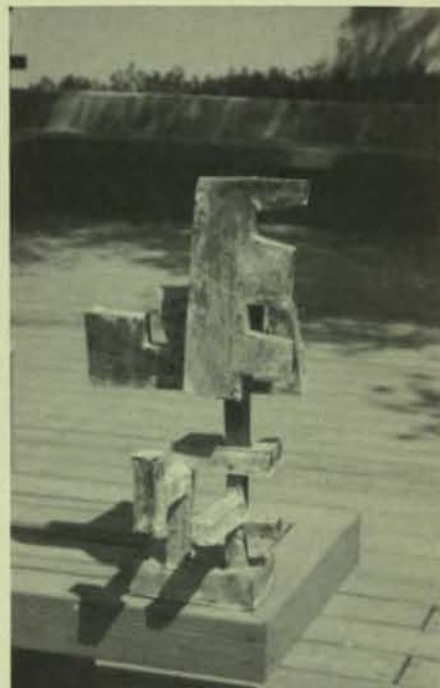
In a playoff for the League Championship, however, the Moonbeams wound up on the blank end of a 7-0 score, losing to the A-Division team, the Rebels (a throw-together team). The Moonbeams finished the season with a 4-3 record.

## He's All Wet



Les Haynes, Fab III—Masking, bet the girls on his swing shift that they couldn't turn out 5,000 exposed wafers during one shift. Never underestimate the power of women, especially when they know they get to drench the boss if they win. Obviously, Les lost the bet.

## Artistic Mystery Greet Brownbaggers On Instrumentation Outdoor Patio



Art can be beautiful, but in these days of modern art and sculpture, one might wonder. The people at Instrumentation (MV) are certainly wondering about the abstract metal sculpture that now decorates their outside dining patio.

Shortly after the unveiling of three pieces of art, another appeared. *Where it came from is still a mystery*, and its \$600 price tag is even stranger. According to rumor it seems to be a representative sample of off-time art from the artisans of the metal shop . . . or could it be just the remnants of some secret project found in John Hall's office after he left?

## Prisoner Of Love Freed in Time

Hoping to save him from a fate worse than death, "friends" of Ken Loveland, senior designer, applications (MV), had to resort to something more forceful than friendly persuasion.

Ken's fellow "friends" in application made a ball and chain for him and early on the morning of Friday, August 19th, they attached it to his ankle. He dragged it around all day, but finding they couldn't change his mind, the techs removed it at his bachelor party that evening.

The fate, marriage. The date, August 27th. *He made it to the church on time . . . without the ball and chain.*







"Old Glory" and "Le Drapeau Tricolore" flew together over the R&D Labs during a recent visit by Pierre Lamond, Director of Integrated Circuits. The flags symbolize the working relationship between Manufacturing and R&D.

## "Sell-a-Million" Jones *Salesman of the Month*



Terry Jones accepts his "Salesman of the Month" award from Ed Turney.

The people in field sales are talking about that Jones boy, Terry Jones of the Los Angeles office, that is. Landing two orders for Custom Integrated Circuits totaling more than \$6 million boosted him to the number one spot as salesman of the month in July.

According to Ed Turney, regional sales manager, computer market, "Terry's performance was remarkable, for he had been in field sales slightly less than a year when he made the sales."

Responsible for only two accounts, Terry's CIC sales to National Cash Register of Hawthorne, California, and Scientific Data Systems of Santa Monica, California, represented the two largest Custom Integrated Circuits orders ever placed with Fairchild Semiconductor.

Before venturing into field sales, Terry was with Product Marketing in Mountain View, having joined Fairchild in mid-1964.



## Jump Frog Jump<sup>p</sup>

The announcer said, "Ladies and gentlemen we have a company frog here from Fairchild Instrumentation in Mountain View," and Rick Miller led "Gigantous Jumpus" into the ring. With some coaxing the frog

sprang 7'6" (in three jumps), but not quite the distance necessary to win the Calaveras County Fair's annual frog jump contest held at Angels Camp, California. Herman Martin and Sharon Barnes (Diode) fared slightly better. Herman's entry leaped 11 feet, 8 inches, while Sharon's made a jump of 13 feet, 7 inches.



*meanwhile back at the Village—*



# In The Good Ol' Summertime

Picnics are synonymous with summer and they occur quite frequently at Fairchild.

**HIC, LIC, NPN, PNP, Personnel, Process and Development, Production Control, Power, and Special Products** combined forces to throw July 24's picnic. It must certainly stand out as a highlight of the summer for the nearly 1700 employees, children, and guests who invaded San Jose's Frontier Village that day.

The group not only enjoyed rides, gunfights, and a casual western atmosphere, but consumed ½ ton of New York steak, 3000 hotdogs, 1500 rolls, 500 lbs. of potato salad, 600 lbs. of beans, 4000 soft drinks, and 405 gallons of beer. *But who was counting at a time like that.*

Just a week later nearly 600 enjoyed a picnic thrown by employees of **Materials**. This time the scene was Blackberry Farm, located in Cupertino. Only pony rides, an entertaining clown, tug of wars, door prizes, and dancing to Eddie Beau and the Soul Survivors were able to lure the group away from the picnic tables.



*lazin' around Blackberry Farm—*



No matter how large a company grows and no matter how much automation lightens the workload, people are needed in even greater numbers. This is certainly true at Fairchild Semiconductor, for Fairchild is people . . . assemblers, draftsmen, machinists, secretaries, lab techs, sales engineers, production foremen. The list is endless.

**Advertisements and brochures, but most importantly, comments made by employees, stir up great interest in finding a job with Fairchild. And right in the middle of finding and hiring competent people is the Fairchild Employment Group. To them falls the responsibility of keeping Fairchild staffed.**

The more than 15 persons in Mountain View's employment group perform a myriad of jobs from interviewing and testing prospective employees to keeping employment records and correspondence paperwork up to date. This work is reflected in each of Fairchild's employment offices. Additionally, others concerned with professional hiring are interviewing and recruiting at colleges and in cities throughout the world.

Of the applications received, the largest portion of employee prospects at 545 Whisman Road, Mountain View, results from local newspaper advertisements, but the second most important source of new employees is referrals by employees or persons acquainted with Fairchild. Other sources include walk-ins and referrals from the State Department of Employment.

"At Mountain View's employment office as many as 500 persons a month seek factory-oriented jobs," according to Jack Sheets, Manager of Employment for the division. "Of course not all of these people join the employment rolls, but once they are interested in Fairchild Semiconductor, we're interested in selecting the most qualified persons to fill our employment needs."

To do this members of personnel administer dexterity tests, personality and aptitude tests, eye examinations and conduct personal interviews. If further job instruction is needed, they can provide it. The end result of their efforts gives foremen and department heads the best employees.

## 545 Whisman



**More and more qualified people will be necessary to meet Fairchild's employment needs, but the problem should be alleviated somewhat if employees will continue to spread the word to friends and relatives that "Fairchild needs more good people."**

Opportunities within Fairchild Semiconductor are varied and unlimited (take the success story of

Alyce Washburn, for instance). But still the word has to get around. According to John Walsh, Supervisor of General Employment, word from 545 Whisman is "Fairchild Semiconductor needs good people—help recruit someone this week." That might make lots of work for the people in the employment group, but they probably won't mind that. They're used to it.

# Road



## Up The Fabled Ladder Of Success

**"She's a remarkable woman . . ."**

**"She's the most capable woman I've ever met."**

**"Sure, I know Alyce.** You can go through this whole plant and you wouldn't find anyone who didn't know her . . . and they'd all have good things to say about her."

Those are the greatest words of praise a person could warrant, but it's very easy to see why Fairchild acquaintances of Alyce Washburn speak so highly of her.

Entering her office at Mountain View's Employment Office, one is immediately greeted by a warm, cordial smile. She's business-like, but friendly. She puts a person at ease. This in itself is quite important for she talks with many persons daily, each one of them looking for employment with Fairchild and each one of them with a varied background.

However, she probably remembers how she felt when she came to Fairchild looking for a job. Alyce started with the Mountain View plant in April of 1959. She began as an assembler trainee. Six months later she was a training assistant in the transistor plant. Another six months went by and she became an experimental assembler in R & D. She didn't stand still there very long; she advanced to an employment assistant and then a personnel assistant. Her responsibilities had grown to interviewing and supervising new employee indoctrination classes.

As of September 1st this year Alyce became supervisor of personnel records. Now she will be in charge of this group and will supervise all record keeping and paperwork coordination activities necessary to keep track of Mountain View personnel.

Quite an outstanding career for anyone, but a very remarkable climb for a woman who was also raising two children. Now a grandmother, she is still busy both at home and at Fairchild — maybe even busier than ever. But, if anyone can handle it, Alyce can. Just ask those who know her.

# She's Glad To Be Working

Mildred Gorham, South Portland, spoke for the "older group" when she penned a letter to the editor of the *Portland Press Herald*. Many a Maine employer and many of that "older group" no doubt took note. Her letter not only confronts a problem of the times, but reflects Fairchild's effort to maintain unlimited employment opportunities, or as the *Press Herald* called it, Fairchild's "good-business tolerance."

## As it appeared in the *Press Herald*:

Editor of the *Press Herald*:

*I have wanted to write this letter for a long time. It's an open "thank you" letter to Fairchild and all other plants and factories that have started hiring the older group of workers again.*

*For a long time we were the forgotten people. For many it was almost impossible to find work, and if we did, we didn't get too much pay. Now for me and for many others that has all changed. Since last December I have been working at Fairchild's in South Portland. I love it and it's a nice place to work, and fine people.*

*I went there scared, uncertain, sure I could never do that kind of work. At 61 you don't have the same confidence as you do when you are younger. But I found I could and am, and I have seen many other older people come there too. At first, scared, timid, etc., and in a week or two they are changed people. They walk and act with confidence and a new look on their faces and are years younger acting. Why? Because we find we can do useful work and are needed again and we get a good week's pay for it. Not 12 hours or 14 hours a day, as in domestic work, but for an eight-hour day, paid holidays, good insurance, etc.*

*For me, it has been like a new start in life. So this is a "thank you" letter and I mean it from my heart. Please folks, don't let us older ones down again. As long as we are useful and needed, we want to work and earn.*

**Mildred Gorham**



On the job..... Mildred Gorham

## Carol Reports

**SOUTH PORTLAND** — The girls' bowling league closed out another season with a delectable filet mignon banquet, held at the Sebago Room of the Sheridan Eastland Hotel in Portland. Carnation corsages were presented prior to dinner and trophies were awarded after.



The Pigeons — Joan Spencer, Eleanor Jewell and Lori Meserve — flew away with the title and a 78 to 18 record, while the Pips — Theresa Costello, Marlene Baker and Roberta Murchland — squeaked into second place with a score of 54 points against 42.

Pauline Belair rolled a high single game of 118, and her seasonal average of 87.8 was high for the girls. Christine Laberge won the high three game series with a total of 303 pins.

PHOTO: Left to right seated are Pauline Belair; Betty McClay and Dolly Farnandez, secretary-treasurer. Standing, Joan Spencer; Eleanor Jewell; Agnes Roy, vice president; Sally Craft; Theresa Costello, president; and Christine Laberge. Other members of the team, not shown in the photo include Elaine Poitras, Marlene Baker, Lori Meserve and Joann Pitts.



Displaying his catch in his right hand and his first place trophy in his left is South Portland's Bob Fowler, Senior Industrial Engineer.

Bob lured his 21 pound, 14 ounce winner in the surf fishing division with an Atom plug at the July 31st annual striped bass fishing derby sponsored by the Maine Bass Club of Biddeford.

# Falcons Sweep Regionals On Way To World Championship Tourney

The Fairchild Falcons are flying high as the newly-crowned champions of the Class AAA Regional Softball Tournament. The team also placed five members on the regional all-star team.

**It took the Falcons just five straight victories to wrap up the Championship as other Metro Tournament winners, stunned by league-leading pitching and hitting, fell by the wayside.**

The Falcons squared off against the Merced, California, team for the Championship. Down 4-3 in the sixth, the Falcons rallied in the seventh to tie the game at 4-4 and to send it into overtime. Starting pitcher Guy Sparrow, relieved earlier by Al Johnson but back in the lineup, cinched the game for the Falcons with a homerun in the eighth to win the game 5-4.

Earlier in the tournament the Falcons' first victory came as a result of two-hit pitching by Johnson, when they trimmed the Rector Motors team from San Mateo by a 6-2 score. The Napa team was the next Falcons' victim, falling 8-2 in a superb one-hitter pitched by Sparrow. Rich Balswick took the mound against the Masons of Santa Clara, throwing a two-hitter that beat them 5-1. In the fourth game of the series, John-

son blanked the Merced team 7-0 with another two-hitter.

No one was happier or more enthused about the victory than player-manager, Pat Campagna. Confident all along that his players could take the tourney, he had nothing but words of praise for all his team members and the nearly 400 Fairchild boosters who rooted the team to victory. "Without their help, we couldn't have done it," Pat remarked. "We needed every one of them and it's going to be awfully quiet in the ballpark at Indianapolis without them."

At Indianapolis, site of the World Championship, the team will be competing with 23 teams from throughout the world. It will take five more straight wins to bring home the coveted World Championship. Two losses and the Falcons will have to fly home. One loss and the team must win eleven games in a row.

Pat is taking 23 players to Indianapolis, five of whom made the Regional All-Star team. Ray Phillips was named Most Valuable Player for the whole Regional Tournament; Mike Haruff, all-star shortstop; Dennis Murphy, all-star catcher; Al Johnson, all-star pitcher; and Ed Loveless, utility all-star first baseman.



Championship action

## San Rafael Bowlers Wind Up Season

Three o'clock in the morning and the San Rafael Swing Shift Bowling League had just rolled the last strike of the season. While the rest of the city slept, league scorekeepers were busily figuring out the winners.

High game for the night was rolled by a member of the distaff, Jane Maynard. She posted a 209. Just a few pins behind her, valiantly trying to salvage masculine superiority was Gordon Tremoureux's 199 high game.

The Men's High Handicap Series was won by George Gugere, while Rachel Owen captured the Ladies' High Handicap Series. A rather unusual award, the rare "triple score award" donated by the Women's International Bowling Congress, was given to Bea Sartain and Lola Harris. Those unfamiliar with the award will be happy to learn that it is given whenever a bowler rolls three games of the same score.



Pat Campagna accepts winners trophy



Swing shift champs, Rachel Owen, De-lores Cleland, and Shirlee Scott.

## Norby Gets Boost At Instrumentation West



Instrumentation (Palo Alto) has just created a new department to handle the development of all product lines from research to manufacturing according to Charles Askarnas, Operations Manager.

Melvin E. Norby has been named to the new position of Manager of Development Engineering. He moves up from Supervising Engineer.

Reporting to Norby are: Noel Montagnon, Manager of Systems Development; George Metz, Manager of Instrument Development; Haig Soojian, Manager of Oscilloscope Development; Donald Torburn, Manager of Mechanical Design; Edward Minsky, Manager of Engineering Services; and Christos Chrones, Manager of Semiconductor Development.

## Head Industrial Nurse Named

Bonnie Page, R. N., was promoted to Head Industrial Nurse, Fairchild Semiconductor/Control Division facilities, at Mountain View and Palo Alto. In addition to administering dispensary services at both facilities, she will be working with management and the company physician on improving health services.

## moving up

**Ricardo J. (Kim) Alfaro II** moved from Advertising Account Manager, Consumer, Computer, and Microwave products, to Advertising Account Supervisor (MV). Kim now supervises all of the Advertising Account Managers and will be responsible for coordinating product advertising, promotion campaigns and collateral materials production for the entire division.



KIM ALFARO

**M. Anwar Afzali** changed from Supervisor, Fab I, to General Foreman, Fab II.

**Joseph F. Ball, Jr.** moved up to the position of Plant Accounting Manager from Cost Supervisor at South Portland.

**Don Blanchard** moved up to fill the newly created position of General Foreman-Training (South Portland).

**Paul M. Brasseur, Jr.**, advanced from Senior Technician to Assistant Engineer Circuit Design Group (MV).

**Leonard Brown** is now Senior Product Marketing Engineer for Linear Integrated Circuits while continuing to meet his responsibilities as Sales Engineer.

**Richard Burzycki** moved from Supervisor, Incoming Inspection, to head of Materials Control Engineering Section (MV).

**Harlan W. Clausen** advanced from Industrial Engineer and Production Foreman to New Products Marketing Engineer.

**Gardner De Spain** was shifted from Sales Promotion Manager to Assistant Marketing Services Manager (MV). He will continue to be responsible for all of the company's promotion services, including sales promotion, technical writing, photography section, art services, printing, and direct mail campaigns.

**George W. Gray** transferred to Customs Integrated Circuits, assuming a product engineering position. George was formerly General Foreman of the Quality Assurance Final Acceptance areas.



CHAZ HABA

**Chaz Haba** was promoted from Southwest Military Regional Sales Manager to the newly created position of Military Field Sales Manager (MV). In his new position Chaz will be responsible for domestic sales to all our Military customers.

**Richard Kors** is now Southwest Military Regional Sales Manager (MV). Dick was formerly Sales Engineer.

**Arthur E. Marles** moved from Test Equipment Technician to Production Foreman, Test and Finish (South Portland).

**John R. (Jack) Milligan** advanced from Plant Accounting Manager, South Portland, to Controller, Semiconductor, Ltd., Kwun Tong, Hong Kong.

**Paul Newkirk** was promoted to General Foreman, Modules, from Foreman.

**Thomas Peardon** was moved from scheduling, Special Products, to production planning supervisor, Production Control (MV). Tom will be responsible for coordinating all production planning and scheduling within the main MV manufacturing plant.

**Charles M. Self** advanced from Supervisor, Special Assembly, to General Foreman.

**Mark Stock** shifted from Senior Electronics Technician to Assistant Electronics Engineer.

**Andrew Swank** was recently appointed General Foreman of the Quality Assurance Final Acceptance areas.

**Tom Welch** moved to Assistant Engineer, Product Engineering and Discrete R. F. Devices from Senior Technician (MV).



# NEW FACES

**Charles M. Botchek**, new at R & D, is Senior Engineer in LIC. A graduate of Washington State University, he was previously employed by Boeing and Douglas Aircraft companies.

**James Carrol** is a new Computer Department Sales Engineer. He will be working in Wakefield, Massachusetts.

**John H. Cobb** joined the Finance Department Staff (MV). He received his MA from Oxford University, Oxford, England, and was a lecturer at the Oxford College of Technology until just recently.

**Norman Doyle**, originally from Dublin, Ireland, came to Mountain View as Senior Engineer, Consumer Application. Norman worked previously for English Electric Company, British Broadcasting Corporation, and Canadian Marconi Company.

**Bradford Craig Duncan** joins Fairchild as Profit Planning Analyst (MV). He just recently completed undergraduate and graduate studies at Stanford.

**Warren H. Frayne** joined Operations Analysis (MV) as a Cost Accountant. He will be responsible for Dicing, Assembly, and Class operations in the Transistor and Integrated Circuits plants. Warren comes to Fairchild from the Firestone Plantations Company in Harbel, Liberia. He is a Michigan State graduate.

**John David Fullagar**, new LIC engineer (R & D), comes to Fairchild from Transitron Electronics. Born in Cheshire, England, John received his BS and MA from Trinity College, Cambridge.

**Stanley Goobich** joined Mountain View's Marketing Services Group as Department Ad Manager. Stan graduated from the University of California, Berkeley, and completed his MBA at Cal. He was formerly copy supervisor with Robert Ebey Company, Incorporated.

**Thomas V. Graham** joined Diode as a Process Engineer. A graduate of Montana State College, Tom was formerly a manufacturing engineer with National Seal Division, Redwood City, California.

**John Edward Hanna** was named Circuit Design Engineer (MV) working on Circuit design of F.M. receivers in the Entertainment Section of Consumer Application. Ted graduated from the University of Waterloo, Ontario, and is currently working on his Masters. He was formerly with Dominion Electrohome as an Assistant Engineer.

**Barrie L. Henderson** reported as General Supervisor in the Finance Department (MV). He will be responsible for the Accounts Receivable and Billing functions as well as the General Ledger and Statements Section. Barrie brings to Fairchild 16 years of diversified accounting experience. Most recently he was employed by Boas & Loomis. He attended graduate school at the Institute of Chartered Accountants of British Columbia.

**Frank Christopher Jones** graduated from Kings College in London and worked for Ferranti, Ltd., General Electric Company, Ltd., and the Board of Trade Patent Office. He joins R & D as an Engineer in Device Development.

**Robert Earl Kinsman** returns to Fairchild as a Foreman with R & D after an absence of two years. Formerly he was photographer and lab tech. In between times, Bob worked as Foreman for General Micro Electronics and was employed by Raytheon and Signetics.

**Burton Lee** joined the Operations Analysis Staff and is responsible for Wafer Fab accounting. He graduated from Golden Gate College and was formerly with General Metals Corporation.

**Donald Earl Lewis**, engineer at R & D, joined Fairchild after completing undergraduate and graduate work at Stanford. He will be working in Device Development with LIC.

**Thomas More Menzies** joined R & D as an engineer in Digital Integrated Electronics. A graduate of California Institute of Technology, Tom just recently received his Masters from Stanford.

**Jeffrey B. Morgan** recently joined Mountain View as a member of the General Accounting Staff. He is supervising the Accounts Payable Section. Jeff recently completed his MBA at the University of California, Berkeley.

**James R. O'Neill** is a new member of the General Accounting Staff at Mountain View. He just recently completed his MBA at Stanford.

**Roberto F. Peralta** recently joined Operations Analysis and will work in Tijuana, Mexico. He will be responsible for Power accounting. Roberto graduated from Catholic University of Peru and has done graduate study there and at the University of San Francisco. He was formerly employed by Haas & Haynie Corporation.

**Charles E. Runge**, a graduate of Iowa State, came to Fairchild as a Senior Engineer (R & D). He was formerly a mathematician with the Atomic Energy Commission.

**Roger Bruce Rusert** joined R & D as an Engineer. An undergraduate of Carleton College, he received his Masters from the University of California, Berkeley.

**Mario Scavino** was named Industrial Engineer, I. E. Standard Products at San Rafael. Originally from Italy, Mario received his Doctorate from Politecnico in Turin, Italy. He has worked for Fiat in Italy.

**Eric E. Woodman** recently joined the General Accounting Staff (MV). He holds a B.S. in Accounting and has completed further studies at the University of Santa Clara.

**Manuel Selya** joins Diode as Foreman, Class Area and ComFab Supervisor. A graduate of Northeastern University, Manuel has worked for Portsmouth Naval Shipyard; American Sugar Company; and more recently, Ganteaume & McMullen, Incorporated.

**Suleyman Sir** joined Mountain View as an applications engineer working in consumer application. A native of Turkey, he graduated in electrical engineering from Brigham Young University.

**Albert Hayden Stone, Jr.**, new Production Supervisor, is overseeing "Can Line" at San Rafael. He was Administrative Services Officer with the Marin City Department of Public Social Services and a graduate of California Lutheran College.

**Robert G. Teal** transferred to Mt. View as Electrical Engineer from Microwave where he was a microwave technician. Bob was with radio station KDAC—Ft. Bragg, California, as a broadcast engineer before he came to Fairchild.

**Jeremy M. C. Tucker**, a native of Britain, came to Mountain View as an Engineer. He is working in Applications.

**Anthony D. VanDersteen**, originally from London, England, graduated from Walthamstow and received his graduate degree from Wimbledon in London. He started at Mountain View as an Engineer in Circuit Design. He formerly worked for DeHavilland A/C where he was an engineer.

**Richard T. Westlake** comes to Mountain View as Applications Engineer. A graduate of the University of Waterloo, Ontario, Canada, he is completing advanced studies at the University of Santa Clara. Dick was formerly with Dominion Electrohome as a Project Engineer.

**Garth H. Wilson** is a new member of the technical staff at R & D as CW Circuits Group Leader, LIC. He received his Bachelors, Masters, and PhD from the University of California, Berkeley. Garth worked previously for E-H Research Labs and Beckman/Systems.

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## Five Years Service

Irma Jean Burch.....	Mountain View
Lois Egelston .....	Mountain View
Marcelina Giron.....	Mountain View
Richard McShaffrey.....	Mountain View
Clara Penders .....	Diode
Angelina Staiti .....	Mountain View
Cecilia Thatcher .....	Mountain View
Charles Van Ness.....	R & D

**Stanley A. Bednarski** was appointed Instrumentation Engineer at South Portland. Stan, a native of Czarnolozy, Poland, received his B.S. in electrical engineering from the University of Ottawa and his M.S. from the University of Toronto. Before coming to Fairchild he was with Northern Electric Company, Ltd., Ottawa.

**Zack F. Brown** was appointed Materials Control Specialist at South Portland. A U.S. Navy Commander, Retired, Zack is an engineering graduate of the U.S. Naval Academy and he received his MBA from Harvard. During his 23-year career in the Navy, Zack was responsible for supply/logistics, production planning, inventory control, and purchasing contracting.

**Richard F. Dowd**, recently appointed Administrative Assistant at South Portland, supervises order entry and R.M.A. activities in the Order Processing Group. A native of Detroit, he has a B.S. in Marketing from the University of Detroit. He was employed by Dun & Bradstreet, Incorporated, prior to joining Fairchild.

**John T. Malinoski** joined the South Portland group as Production Planner. A native of Brooklyn, New York, John attended Farmingdale Technical Institute and City College of New York. He came to Fairchild from Silicon Transistor Corporation.

**Bruce E. Peterson** joins Fairchild as Accounting Supervisor at South Portland. A graduate of the University of Massachusetts, Bruce formerly worked for Arthur Young and Company, Boston, and the Massachusetts Institute of Technology, Instrumentation, as a staff accountant.

**Richard W. Robichaud** has recently been appointed Production Foreman, Die Fabrication, at South Portland. A graduate of Boston University, Dick was formerly with the Friendly Ice Cream Company of Massachusetts, and Raytheon Semiconductor, Norwood, Massachusetts.

**Michael R. Romano** was appointed Production Controller at South Portland. He graduated from Colby College where he received his B.A. in business management. Mike came to Fairchild from Ben Mont — The Dow Chemical Company of Bennington, Vermont. While there he was manager of the laminating and coating department.

**Lloyd V. Slocum** was an associate professor at the University of Maine before coming to South Portland. He is Senior Production Engineer, Integrated Circuits. Lloyd graduated from Pennsylvania State University where he also received his MSEE.

**David A. Wolf** joined South Portland as Sales Liaison Engineer specializing in Customer Inquiry. Dave graduated from Northeastern University and previously worked for Cramer Electronics.

NEW FACES  
AT  
SOUTH  
PORTLAND



STAN BEDNARSKI



JOHN MALINOSKI



BRUCE PETERSON



DICK ROBICHAUD



MIKE ROMANO



LLOYD SLOCUM



DAVE WOLF

# LEADWIRE

Vol. 8, No. 8

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**SAN RAFAEL** — Cleatus Dunkley, Audrie Graxiola, Janet Marz, Clarence Medeiros, Mickey O'Donnell, Margaret Queen, Bobbie Talley, Anne Parfitt.

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**SOUTH PORTLAND** — Carol Hebold,  
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LEADWIRE

## *To the Reader*

You're going to be pretty busy these next few days. If you are registered to vote, you'll have to get to the polls on November 8th and vote your candidates into office.

And as if that wasn't enough, another group of people need your assistance, the United Fund. Be sure to read the feature in the Leadwire to see just how far your United Fund Dollars go.

Then there's the Leadwire. I still need your help with story ideas and photos. The only thing I can promise in return is a better Leadwire talking about folks you know and behind the scene happenings at Fairchild.

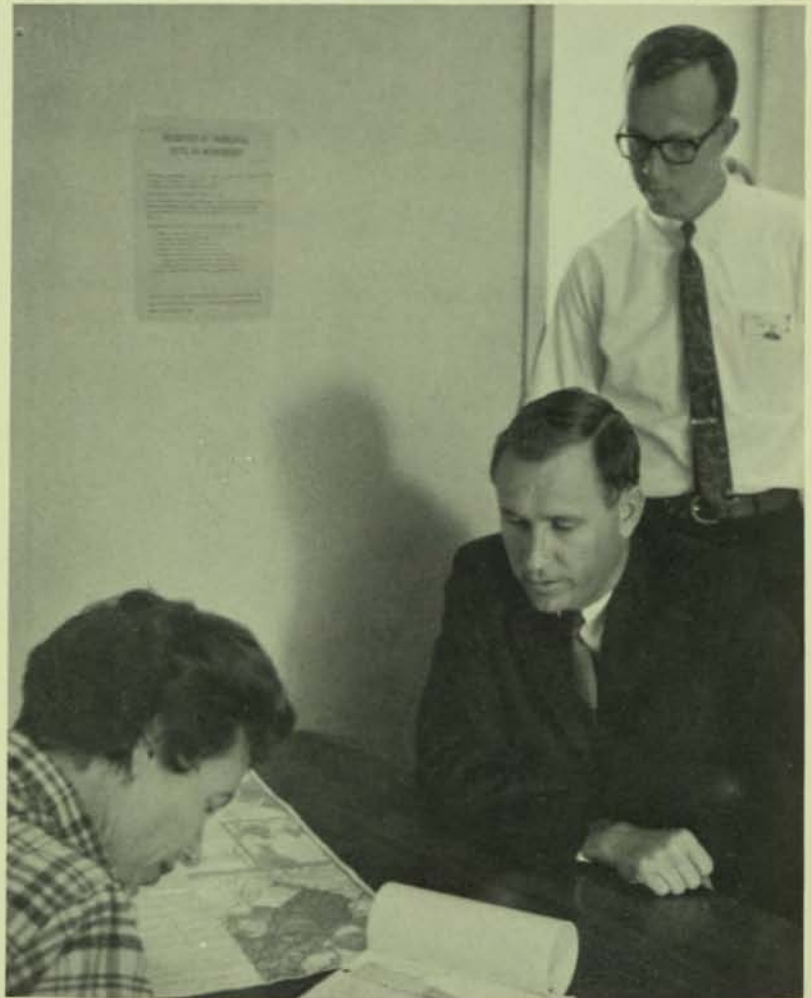
More news is coming in but there never seems to be enough . . . I hope to hear from you soon.

*jh*

# BE SURE TO VOTE NOV. 8TH

November elections are fast approaching. Thanks to a three-day voter registration drive, sponsored by the League of Women Voters of Los Altos Hills, 212 more Mountain View employees will be eligible to vote in the coming elections.

Taking time to register so that they can vote November 8th are Hal Wright (Government Contracts) and Cloyd Marvin (Complex Arrays).



## WORKING MANY WONDERS

It's time once again for the United Fund Campaign, and your "fair share" contribution will, indeed work many wonders for many persons.

Fair share contributions equal only one hour's pay per month, or an amount equal to three minutes per day. This is very little when you realize that a gift of \$12 provides three dental visits for a child or two home calls by a visiting nurse so that a sick or injured person can stay at home instead of requiring more expensive care.

A gift of \$36 provides a wrist support or brace for an arthritic so that he may help himself and \$60 provides two and a half weeks' care at a United Fund day nursery for a child whose mother is sick or must work.

Last year Fairchild employees at Palo Alto and Mountain View locations pledged more than \$34,000—more than doubling their 1964 pledge total. The average gift was over \$23 and many gifts were greater than \$100. This year Fairchild hopes to improve the excellent showing of last year.

Contributions made by employees go even farther because it's Fairchild's practice to donate a sum based on pledges received in the employee campaign.

The total employee gift goes directly to United Fund agencies, but the company contribution is put to other charitable uses. At Mountain View it is placed in a fund managed by the Employee Charity Committee. Quite regularly during the year, this group of 23 men and women meet to decide how the corporate gift should be distributed. It is used to boost local projects and charities as well as the United Fund.

Over the past year the company's donations were well spent, providing local youth groups and Scout Troops with weeks at camp, enrichment trips, tents and other equipment for summer projects. Mountain View's Community Council received a typewriter and duplicating machine enabling the council to continue a job program. Support was also



given to a summer employment project and a YWCA "Fun in the Sun" program that served underprivileged residents of Mountain View and Palo Alto by providing a Volkswagen bus, 12 tricycles, and woodworking equipment.

Awaiting final approval are such projects as the completion of a nursery school project by providing one entire classroom, a Volkswagen bus for "Friends Outside," 100 pair of shoes to be distributed by the Mountain View Community Council, and a weekend enrichment program to benefit farm workers' children.

There are many good reasons why you should give to the United Fund. Only a few have been stated here. A very small payroll deduction is convenient for you and so beneficial to others. It truly works many wonders.



## DON O'ROURKE NAMED TOP SALESMAN FOR AUGUST



"Salesman of the Month" honors for August went to Donald O'Rourke of the Wakefield office. Don wrote an order for 400,000  $\mu$ A 703 Linear Circuits designed for the H. H. Scott Company to be used in their Hi-Fi Stereo units. But this was not Don's only big sale.

"Don's had a very good year," commented Dave Conway, Regional Sales Manager. "Earlier he landed an order for 5 million UHF devices from the F. W. Sickles Division of General Instrument. He also wrote the first order in the country for 0019 Epoxies—300,000 from H. H. Scott, and he obtained the first

large power commitment—100,000 TCU 5206's from Symphonic Electronics."

Don joined Fairchild Semiconductor in October of 1965 as sales engineer working out of the Wakefield office. He is responsible for the sale of Fairchild's complete line of silicon semiconductor products to all consumer customers in the New England region.

A native of Boston, Don graduated from Boston College and obtained an associate degree in electrical engineering from Northeastern University. He and his wife and three children live in Westwood, Massachusetts.

## South Portland Gal Uses Leadwire Cover As Inspiration For Painting

Eleanor Leyko, a first shift Fairchilder in hermet assembly began painting five or six years ago. She finds it both pleasurable and profitable. To those two adjectives should be added "practical," as she applies the money she receives for her paintings toward a college education for her daughter, Linda, now a second year student at Simmons College, Boston.

Inspired by last January's Leadwire cover photo (a Maine winter scene photographed by Dick Steinhilmer), Eleanor realistically interpreted the icy scene in very cool colors. She captured the brilliant white glare of sun and snow skimming the cold deep blue waters using acrylic paints on an 18 x 24 inch canvas board. Acrylics are waterbase paints that give the effect of oils.

To complete the picture (which took "three months, off and on") Eleanor chose a soft wood frame that she finished in blue-gray tones to complement the colors in her painting.





## AT WESCON

One of the features at the Western Electronics Convention held in Los Angeles in late August was an Integrated Circuits Symposium. That's Floyd Kvamme, Microcircuits Products Manager (second from the right), speaking for Fairchild.

## R&D MAN SPEAKS TO ELECTROCHEMISTS

## FAIRCHILD AND TI AGREE ON SEMICONDUCTOR CROSS-LICENSE

Fairchild Camera and Instrument Corporation, S. G. S. (Fairchild's European affiliate) and Texas Instruments entered into a cross-license agreement for the patents belonging to each other in the field of semiconductor devices and related manufacturing equipment.

Dr. Bruce E. Deal was the featured speaker at the San Francisco Section of the Electrochemical Society meeting held September 28th. Speaking on "Passivation of Semiconductors," Dr. Deal explained the use of dielectric layers on semiconductor surfaces as well as the vari-

The agreement, extending for ten years, covers patents throughout the world except Japan. Included in the grants are licenses under the Fairchild patents on the Planar process and under Texas Instruments' patents covering integrated circuits.

This marks the 10th licensing agreement involving Fairchild's Planar process which has been negotiated. Other firms, previously announced, include RCA, Raytheon, IBM, ITT, Sperry Rand, Philco, Sili-conix, Nippon Electric and Elliott-Automation, Ltd.

ous methods of producing them.

Dr. Deal, who has been with Fairchild Semiconductor's Research and Development Laboratories for the past three and a half years, has been quite active in the local section of the Society and has served on its various national committees.

## *It's Almost Ski Season Again*

Circle New Year's weekend on the calendar. The Fairchild Ski Club (MV) has planned four weekend trips starting with the New Year's weekend jaunt to Heavenly Valley. Most of the trips will be by bus. Once again arrangements will be handled by Argo Ski Holiday. Complete details will be finalized and then mailed to all departments.

## hong kong a-go-go

Not quite three years ago, the Epoxy Entertainment Section (Hong Kong) was struggling to ship 50,000 transistors a week. On August 15th of this year that group completed the largest single shipment ever made to a customer and sent by Fairchild in a single day. The combined shipment of transistors and diodes went to Atlas Electronics of Hong Kong. It consisted of 3,355,000 units . . . enough to make up a whole truckload.



Sending the record shipment on its way were S. L. Kwok, C. Wong, C. S. Low, David Fung (Superintendent, Final Test), C. Smith, C. S. Moh (Head of Transistor Storage and Shipment), K. V. Chan, T. K. Tung, and H. W. Wong.

## WITH JOHN CARTER *Man on the Move*



### DESTINATION: FAIRCHILD AUSTRALIA, PTY. LTD.

John Carter, Chairman of the Board and Chief Executive Officer of Fairchild Camera and Instrument Corporation, paid a flying visit to Kilsyth, Australia, at the end of August to look over the Fairchild Australia laboratories. The blend of ideal working conditions and employee enthusiasm left him quite pleased with all he saw.

Since its beginnings some 2½ years ago, Fairchild Australia has experienced the same kind of fantastic growth felt throughout the world-wide system of Fairchild. Now in brand new \$2 million laboratories and employing some 200 people, the future looks even better. Plans are now in the making to employ over 600 persons by the middle of 1968.

Official tour leaders for Carter's visit were John Baldwin, General Manager, and Robert L. Major, Director of Marketing. Both were forced to admit that Mr. Carter showed the interest of the average tourist, wishing to see a kangaroo and other Australian wildlife before he winged his way to another Fairchild port of call.

During his lightning tour of Fairchild Australia, the camera caught John Carter in the laboratories, on the production line, and with John Baldwin, General Manager (center) and Robert Major, Director of Marketing.







## MEET ROBERT ALLEN, DIRECTOR OF FINANCE

Robert M. Allen joined Fairchild Semiconductor as Director of Finance, replacing Lawrence S. Lanset, who is now Assistant Comptroller for Fairchild Camera and Instrument.

In his new position, Bob will be responsible for foreign and domestic financial operations while supervising profit planning functions and cost accounting operations and analysis. As his title indicates, he will be directing financial planning.

A graduate of UCLA, Bob completed his masters at USC. At 36, he brings to Fairchild Semiconductor a varied background of practical experience. Before joining Fairchild, he was controller for Lilli Ann Corporation and also served as president of Custom Aire Products and Vice President of the Rubber Corporation of California. He also spent 6 years with Pacific Semiconductor in various operating and financial capacities.

After his long workday, Bob leaves Mountain View for Mill Valley—one of the longest commutes in the Bay area. There he and his wife, Marlene, and their two children, Bill, 11 years old, and Lori, soon to be 10, make their home.

Slightly more than a year ago Chris Coburn won the ultimate in classic car competition. His 1927 Bentley captured the overall 1st place trophy at the Concours d'Elegance at Pebble Beach in Carmel, California. This is the largest classic car competition in the world. Before that, Chris' Bentley had won the Virginia City Hill Climb, and numerous other prizes. It was time to retire the classic beauty from competition—or so he thought.

But late in September Chris and his wife couldn't resist entering a "His and Hers" combination that literally stole the show at the Concours d'Elegance held at Peacock Gap Country Club just north of San Francisco. Margaret's 1930 "boat-tail" Rolls Royce sat there looking pretty for Playboy Magazine photographers while the famed 1927 Bentley captured 1st place in its class. (Naturally.)

Chris, Director of Marketing at Instrumentation, claims his interest in classic cars began during his childhood. "I used to admire all the big cars that passed through Blackhall. That's the small village in northern England where I lived. We could never afford a car, so I suppose that had something to do with my wanting to own the cars of that era."

Chris was not able to see his dream realized until about five or six years ago. Now the Coburns own four classic cars. Besides the Rolls Royce and the Bentley, they have acquired a 1926 Bentley and a 1931 Aston-Martin/LeMans.

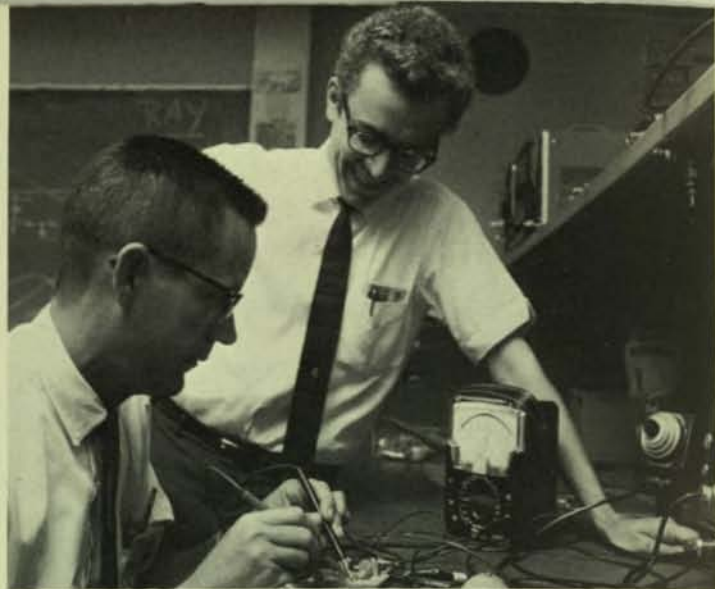
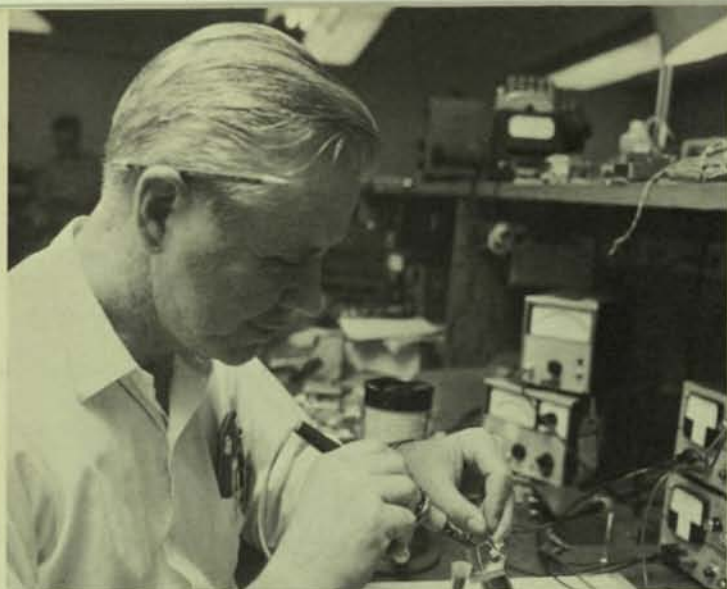
As Chris puts it, "I think of them as a link with the past—of things done more lavishly and in a more craftsmanlike way." He sees all of his cars as beautifully functional and they are that.

One look at Chris' calloused hands shows the care he takes to bring out their beauty. He's polished and cleaned his cars to perfection. And that his cars are functional is very obvious. The people in Instrumentation will attest to that, for Chris drives the 1927 Bentley and the Rolls to work two or three times a week.

The Bentley will do 90 mph on the freeway according to Chris, but he keeps it well under that—just to give fellow motorists a longer look at elegant craftsmanship from out of the past.

## Coburn's Classics





Three years ago Fairchild entered the microwave business — with four people and an idea. Today it is no longer just an idea. Microwave Products now employs well over 100 people and has moved into large quarters at 2513 Charleston Road in Mountain View.

This group of people has become the largest supplier of solid state microwave signal sources to telecommunications manufacturers and is supplying numerous components to the radar industry. Fairchild also has met the rigid commercial airline altimeter requirements.

For a point of clarification, microwave signals are high-frequency signals that are transmitted for short distances (about 100 miles) through space. As "micro" suggests, microwaves are tinier than radio signals.

The microwave method of transmitting does the same job that conventional communications techniques (such as the telephone wires) perform, but does it better. For example, microwave frequencies offer tremendous traffic-handling capacity. A single telephone relay installation operating at microwave frequencies is able to handle more than 1000 simultaneous conversations. It would take numerous telephone lines to do the same thing. To top that, using microwave frequencies requires no telephone poles and no lines — only simple relay stations.

A LOOK AT  
**MICROWAVE**



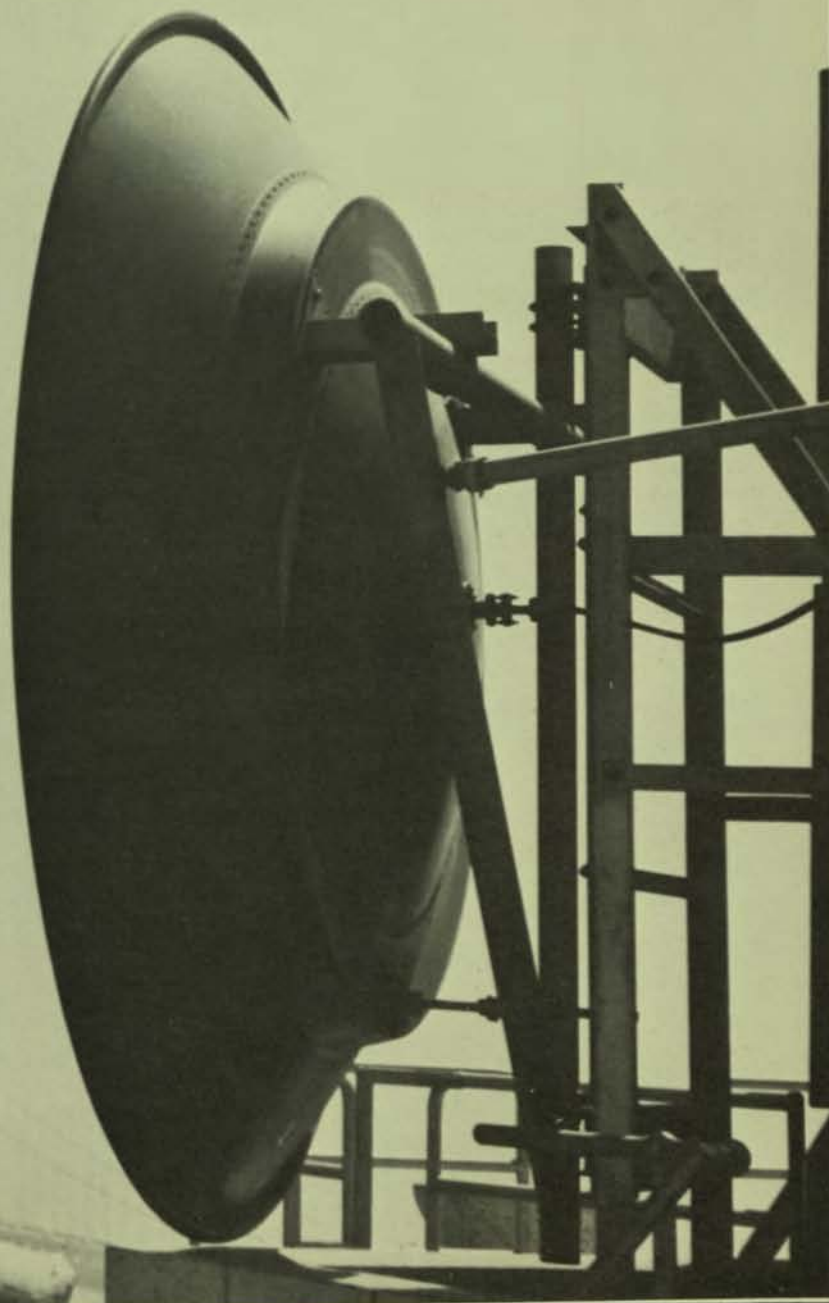


Microwave theory is not new. It has been known to scientists and students of advanced electronics for many years, and microwave equipment is no stranger to most people. Airports use microwave radar to keep a visual check on aircraft; telephone companies use microwaves to handle thousands of cross-country conversations; microwaves are used in television and radio communications; law enforcement agencies use radar to monitor auto speeds; and microwaves are used in precise distance measurements. Microwaves are even being used to cook foods—in radar ovens.

In the future, people in remote sections of the world will be brought closer to their neighbors by the expansion of mass communication facilities using tiny microwaves.

A basic principle of microwave construction is the use of Fairchild-produced microwave transistors and diodes that operate at high frequencies. Production activity is currently geared to the development and delivery of solid state signal sources and fundamental oscillators.

Microwave telecommunications is a fast growing industry and competition is growing just as rapidly. This will require continued research and marketing efforts if Fairchild is to remain the leader in the field. And it probably suggests that the microwave group will be forced to expand facilities and capability—proving that from little microwaves big things happen.



# Enjoying the Last Days of Summer

From Maine to California Fairchild employees flocked to the beaches, swimming pools, and picnic grounds to give summer a final farewell.



Nearly 3000 South Portland employees and their families converged at Thomas Point Beach, Brunswick, Maine. Hot dogs and soft drinks were available to snack on until dinner time when Chicken Barbecue Caterers of Wells served their specialty, complete with watermelon for desert. Activities for the youngsters included free pony rides, scavenger hunts and swimming. The older group was kept busy competing in water bag throwing contests, dance contests, and other races. Door prizes given away included portable television sets, transistor radios, a Polaroid camera, and a cordless carving knife.



Frontier Village in San Jose was once again the scene for a Fairchild employee invasion. A few stout-hearted employees manned the cooking and serving details for the rest of the 1100 R & D employees. As always, there were great stage coach rides, volleyball games, burro rides, canoeing, and other rides and games; not to mention the good food, particularly steak and corn on the cob. Highlight of the picnic was a long-distance balloon launch contest. Balloons were found as far as 90 miles away from the Frontier Village launching site.



Nearly 1700 Diode employees and their families joined forces at Vichy Springs at Napa, California, for the company's annual picnic held September 11th. Thanks to Jim Williams and his committee chairmen, Jean Wickliff, George Miller, Karen Calloway, Joan Fugina, and Wayne Snodgrass the children enjoyed games and free rides in Kiddie Land, and everyone enjoyed swimming, live music for dancing, door prizes, plenty of beer and soft drinks, and a good fried chicken menu.



That same day, down the road about one hour's drive southwest of Mountain View and deep in the heart of the Santa Cruz Mountains the Marketing Department outing was going on. Cowell Redwood State Park gave nearly 350 Mountain View employees a chance to "get away from it all." The group enjoyed a steak dinner menu and then moved on to more strenuous activities: hikes through the giant Redwoods, horseback riding, volleyball, and scrimmage football. For the children there were games and pony rides.



Memory Product's picnic at Swift Park in Fremont, California, gave more than 100 employees and their families a chance to get to know one another. This fast growing department's late August picnic was a combination of good food and fun for all who attended. Children were given lollipops and balloons and competed for prizes in various games. The adults, meanwhile, were trying to best one another in novelty relay races and contests. The prizes were transistor radios and good California wine, so you can bet the competition was stiff.





## INSTRUMENTATION ELECTS NEW RECREATION COUNCIL

Employees at Instrumentation recently cast their votes for representatives to their newly established recreation council. The council will coordinate all recreational activities for both Palo Alto and Mountain View Instrumentation groups.

Members of the new council are: David Anderson, Mimi Emory, Charlie Gibbs, Marcia Humphrey, Jerry Pillsbury, Dottie Ray, Joe Rodriguez, Walt Skruch, and Barbara Sleeth.

# SPORTS

## DIODE'S BATMEN BREAK EVEN



Top row (l. to r.) — G. Tremoureux, G. Brandenburg, A. Danks, F. Rittiman, M. Feldtman, H. Spence, B. Faiss, J. Harris

Seated (l. to r.) — H. Knopp, B. Mack, T. Branch, A. Frugletti, J. Bell. Hal Clausen was not available for the picture.

As the softball season draws to another close, San Rafael's entry in the Marin County Softball League finished in the middle of the league with an 8-8 record. But next year should be a good one if the last game of the season is any indication. The team rallied for a staggering 22-8 victory over Independent Journal.

Leading team hitter for the team in League contests was Jack Harris (Marketing) who carried a .500 batting average. For all games played this season Tom Branch (Fab) hit .562 and Hal Knopp (QA) averaged .455. Bruce Mack (QA) got the most hits during the season, collecting 23, and Al Frugletti (Marketing) led the team in runs scored, crossing the plate 18 times.

Playing amid injuries, errors, and often times very poor officiating (of course), the team's hitting carried them through the season remarkably well, and many games were lost by only one run. Yes, next year should be much better.

## TENNIS TOURNAMENT DECIDES '66 CHAMPS

## skin divers of the world . . unite!

Diode's new skin diving club, the "Kelp Explorers," don't promise to provide underwater maidens and mermaids for members but are urging people interested in skin diving activities to join them. They would like to share their combined knowledge of the sport with beginners and encourage novices to put on a pair of flippers and join them on some of the upcoming diving trips.

The club already numbers 15. Charter members are: Jack Brewer, chairman; Al Grisemer, co-chairman; Jene Annis, secretary-treasurer; Dieter Bartels; Tony Bachman; Russell Browning; Tom Graham; Cliff Heberlein; Bill Irons; Tom McGuire; Max Moore; Chuck Self; Mel Snyder; Wayne Snodgrass; Karel Svoboda.

At the club's first meeting Bill Irons and Karel Svoboda showed slides of their recent diving trip to Catalina. Many meetings and trips are planned for the months ahead.



WINNERS OF THE YEAR (l. to r.) — Barry Fidelman, Marv Rudin, Dave Oberlin, Lowell Goetze, Herb Woo, and Gunther Haller.

Hank Blume, missing from the picture must have been chasing tennis balls.

The Tennis Club officially closed its 1966 season September 24th and 25th crowning its champions in a tournament held at Foothill Junior College.

Out of 25 participants, the top singles winner was Gunther Haller (Reliability). Second place went to Herb Woo (Applications), third to Lowell Goetze (Management Information), and fourth place to Henry Blume (Applications).

Doubles winners were Marv Rudin and Dave Oberlin (both from R & D), and the team of Lowell Goetze and Barry Fidelman (Marketing) took second place.

Though the season is over, the club challenged the Kani Kai Tennis and Racquet Club of Sunnyvale to a round of matches on October 15th. Tennis Club members, their families and friends also had an opportunity to enjoy the swimming facilities.



# FALCONS TAKE 4TH PLACE IN NATIONAL TOURNEY

Fairchild's flyin' Falcons closed out their second season recognized as one of the top softball teams in the nation as a result of their fourth-place finish in the National Fast Pitch Softball Tournament, recently completed in Indianapolis, Indiana.

Disappointed that they didn't come home World Champions, the team got a boost when it was announced that Ray Phillips, leading hitter for the team, was named All-American Second Baseman. Ray picked up 9 hits in 16 times at bat during the tourney which made him a leading hitter for the tournament.

The Falcons swept their first game 10-0 from Portales, New Mexico, when Al Johnson pitched a 3-hitter and Phillips collected 4 hits including a homerun. In the second test, this time against Springfield, Missouri, Rich Balswick pitched a no-hitter to give the Falcons a 2-0 victory. Unfortunately Rich walked a man in the sixth to spoil his perfect game, but Ray Phillips kept his hitting streak going, batting 2 for 3.

The going got tougher for the team, and the Falcons lost 2-0 to Clearwater, Florida, champions at one time for eight straight years and the eventual winner of this year's tourney. With Clearwater lead-

ing 2-0 in the seventh, the Falcons gave the Bombers a real scare when, with one out, they loaded the bases. But the threat was short-lived, and the side was retired.

That loss pitted the Fairchild team against the Texas Instruments team from Dallas, and the Falcons stayed in the tournament edging TI by a 1-0 score. The run came in the seventh on a single by Phillips, a Dallas error, and Mike Haruff's base hit. Not to be overlooked was Al Johnson's 3-hitter that beat one of the five best softball pitchers in the world, Bill Massey.

The Falcons had played flawless ball until now but literally fell apart against the heavy-hitting Providence, Rhode Island, team, losing 8-0. Two losses and the Falcons were out of the tourney.

"We were glad to take fourth, but we could have done better," commented Manager Pat Campagna. "Rain delayed our second game and the pressure really built up. From then on we were playing a pretty rugged schedule—sometimes two games a day, but the team held together very well. Playing in the tournament this year was the best experience we could have gained. Just wait until 1967 and it will definitely be a different story."



The Fairchild Falcons were able to wing their way to Indianapolis thanks to assistance they received from many Falcon rooters. Employee attendance at a benefit All-Star game (which the Falcons won 6-0) and at a booster dinner and generous contributions made by the R & D, Instrumentation, and Mountain View Recreation Councils netted nearly \$1000 toward Falcon trip expenses.

Probably the greatest victory of the whole tournament, in the eyes of Bob Noyce, Group Vice President, F.C.I., was the 1-0 defeat the Falcons handed Texas Instruments. As a result, Bob received the following telegram which he passed on to Pat Campagna and Falcon team members.

FCHLD MTV

9-24-66 214-251-1492 TO 910-379-6435  
FAIRCHILD SEMICONDUCTOR ATTN BOB NOYCE  
MTVIEW CAL

1 - 0. CONGRATULATIONS. JUST DON'T THINK ALL THE GAMES ARE GOING TO COME OUT THIS WAY.

PAT Haggerty, MARK SHEPHERD AND CECIL DOTSON  
TEXAS INSTRUMENTS INCORPORATED  
DALLAS TEX

FCHLD MTV

TEXINS DAL

*cc: Pat Campagna  
Vince Fulginiti*

## moving up

RICK BLUE advanced from Director of Microwave Product Components Marketing to Product Marketing Manager at Microwave, Mountain View. He joined Fairchild just a year ago as Senior Sales Liaison Engineer.

DAVE CULLEY has been appointed Manager of the Long Range Planning Group of the Operations Planning and Distribution Department (MV).

SANDI KILE recently moved from the Personnel Department in the Semiconductor Division (MV) to the Personnel Staff at Instrumentation. With Fairchild for over two years, she held positions in recruitment, employee records, and employee relations activities.

MARTIN OUDEWALL was promoted from Product Manager of Power and S.C.R. Section to Plant Manager of the Tijuana facility.

ROBERT REBER advanced to Product Manager at Tijuana. He was formerly Supervising Engineer (Power and S.C.R. Section).

ROBERT L. SOUTHWICK has been assigned the new responsibility of developing and implementing a standardized drawing number system for the Fairchild Instrumentation Division. Bob was formerly Supervising, Material Control.

## NEW FACES

JAMES ADAMS, from Fife, Scotland, joined Fairchild (San Rafael) as a Mechanical Design Engineer. He was formerly Chief Production Engineer for B.S.R., Ltd., East Kilbride, Scotland. James received his education at Newton Heath Technical College in Manchester and did graduate work at Dundee Technical College, Dundee.

HERBERT ALBER recently joined the Profit Planning Staff in Mt. View. He will be responsible for Long Range Planning. Herb comes to Fairchild from the Burroughs Corporation. He holds both an MBA degree and a BA degree from the University of Michigan.

WILLIAM J. BANKS recently joined Fairchild, South Portland, as personnel assistant to the Supervisor of the Credit Union. He previously served as a special agent for the Patrons Mutual Insurance Co. He received his B.A. degree from the University of New Hampshire and served as a Lieutenant in the U. S. Air Force.

ROBERT L. BENJAMIN recently joined the General Accounting Staff as Payroll Supervisor. Bob has had 10 years experience with the Carrier Corp. in New York. He attended Syracuse University, New York, and is a member of the National Association of Accountants.

SANDY D'ARCY, a graduate of the University of Missouri at Kansas City, is the new Customer Liaison man for the Military Market (MV). In this capacity, Sandy will arrange visits to the factory and see that customers are supplied with necessary information. His wife, Judy, is Collin Kidd's (SGS Liaison) secretary.

LEON LERMAN was recently named Manager, Microwave Manufacturing. Before joining Fairchild he was with EIMAC Division of Varian Associates. Leon was born in Argentina. He graduated from Alfred University, Alfred, New York, and has done advanced work at Northeastern University, Boston University, Newark College of Engineering, and the University of California. He is also past president of the Northern California section of the American Ceramic Society.

FLOYD H. STOUTAMORE, newly assigned training foreman at R&D, comes to Fairchild from Lawrence Radiation Laboratory in Livermore, California. He received his B.A. degree from the University of Wyoming.

## LEADWIRE

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Editor: Judy Horst

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Cover Photo: Ron Turner

A microwave relay tower stands against the sky — one of many stations sending a broad band of frequencies over long distances to insure continued communication.

### Reporters:

MOUNTAIN VIEW — Wes Cox, Lois Eagleston, Nellie Covington, Ginger Tygret, Keith Thomson, Judy Dunkelberger, Paul Brasseur, John Walsh, Phil Lenihan, Iantha Adams, Katie Guida.

SAN RAFAEL — Cleatus Dunkley, Audrie Graxiola, Janet Marz, Clarence Medeiros, Mickey O'Donnell, Margaret Queen, Bobbie Talley, Anne Parfitt.

RESEARCH & DEVELOPMENT — Peggy Vorse, Donna Parris.

SOUTH PORTLAND — Carol Hebold.

INSTRUMENTATION — Jack Ramon, Pat Campagna, Anna Ackerson, Walt Skruch.

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## 5 Year Anniversaries Don't Go By Unnoticed

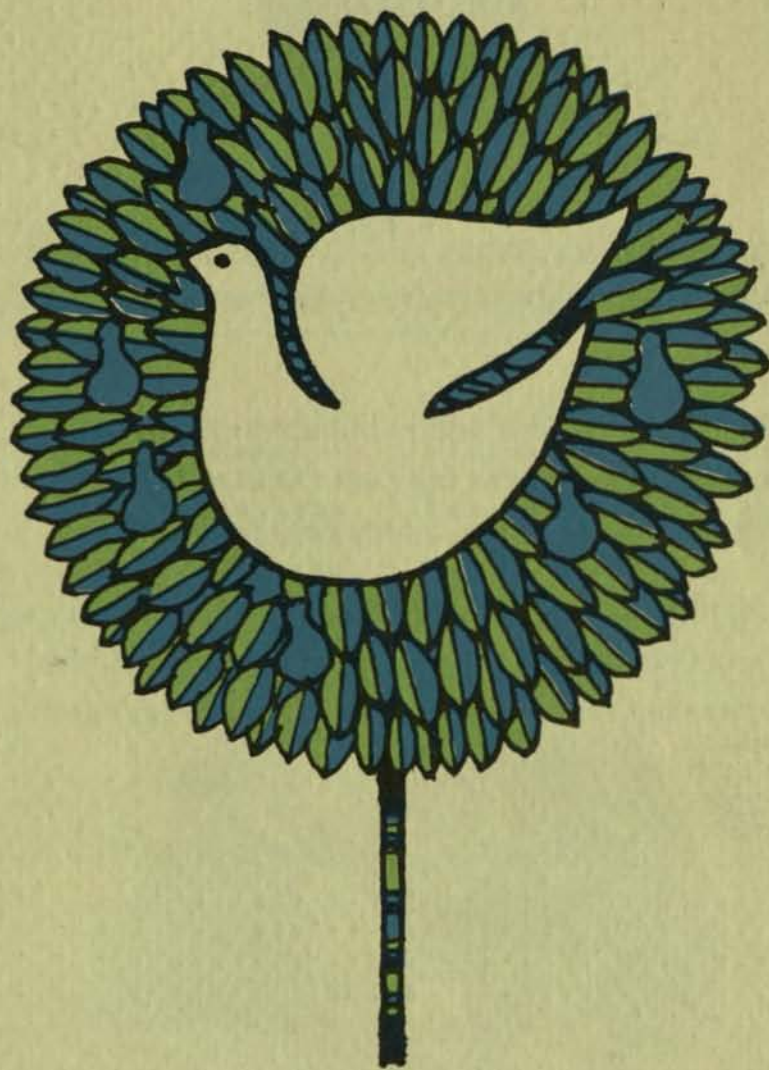
Nearly 55 members of the mask manufacturing group (MV) secretly planned a celebration for ANGIE STAITI as she marked her fifth anniversary with Fairchild. Hazer Dughman, foreman, gave Angie the traditional five-year pin, and then the group shared a huge cake ordered especially for the occasion.

When DAVID ANDERSON, Drafting Supervisor at Instrumentation, passed the five-year mark in August, drafting room buddies joined forces to throw a dinner party for him. In addition to receiving his five-year pin, Dave was given a cartoon symbolizing the "rocky road to success." Reports have it that in spite of the group assembled, an orderly affair was maintained.

DICK McSHEFFREY'S five years with Fairchild earned him five candles on a huge cake. The inscription on it read, "Five years? Poor Fairchild." Though he might have worried about it, he needn't have concerned himself. The people at DYT, S. A., Mexico City hosted a party that proved they think quite a lot of him.

## Five Years Service

Dorothy Bertram	Mountain View
Raymond Bortner	Mountain View
Marjorie Bowen	Mountain View
Claud Childress	Diode
David Corbin	Instrumentation
James Doherty	R&D
George Dowdy	Mountain View
Petrus Ebbing	Instrumentation
Robert Foglesong	R&D
Mary Ann Johnson	Mountain View
Marion Killeen	Mountain View
Jerome Larkin	Mountain View
Olga Miller	Mountain View
Jose Mora	Mountain View
Nicholas Phillon	Mountain View
Robert Reinecke	Mountain View
Tyler Rockhold	Mountain View
Toshiko Sasaki	Mountain View
Joseph Short	Mountain View
Frances Staiti	Mountain View
Natalie Toll	Mountain View
Virginia Tygret	Mountain View
Charles Watson	Mountain View
Jean Worden	Mountain View



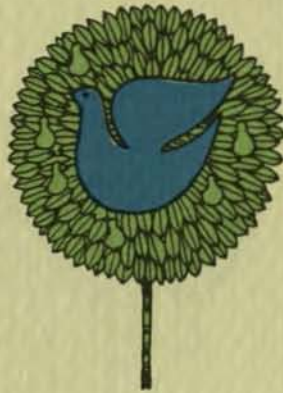
*Leadwire*  
*Christmas 1966*

*During this holiday season I'd like to join with Charlie Sporck and Tom Bay in wishing you a warm and wonderful Christmas season.*

*We'd like to extend our sincere thanks for the fine job you have done in the year just past. Your enthusiasm and contributions have made it a very good year.*

*It is our fondest hope that the friendship and good will of this season will prevail throughout the coming year and that Christmas will bring renewed joy to you and your family.*

*L. W. Joyce*



*"a partridge in a pear tree"*

**Christmas Through The Ages . . .** This year when you're trimming the tree, filling Christmas stockings or hanging mistletoe—give a thought to where you got your favorite Christmas custom. Chances are it goes farther back in history than you realize. In fact, many historians believe that Christmas itself may have had its origins in ancient Greek and Roman festivities to observe the midwinter change of seasons.

While the birth of Christ was celebrated on various dates as early as the third century, the observance wasn't officially sanctioned until a century later. Pope Julius I authorized an investigation to determine Christ's probable birth date which led to the selection of December 25th. On that date in 353 A.D., the feast of the Nativity was first observed in Rome.

The use of greenery at Christmas also grew out of Greek and Roman customs. Holly, for example, was a favorite decoration of the Romans who made lavish use of green boughs and garlands to honor Saturn, their god of agriculture. Mistletoe was a plant called "all heal" by the Druids who believed it had the power to miraculously cure disease and counteract poisons. Today's more romantic meaning probably is derived from some early marriage rite.

It was in heavily-forested northern Europe that

decorating Christmas trees began. St. Boniface, an eighth century monk who converted the pagans living in what is now Germany, convinced them to stop worshipping Odin's sacred oak and instead to adorn fir trees in their homes in tribute to the Christ child.

A fourth-century bishop of Turkey, Saint Nicholas was the real-life predecessor of Santa Claus. According to legend he dropped a bag of gold coins down a chimney into a stocking which a poor girl had hung by the fireplace to dry. Hence, our custom of hanging Christmas stockings.

Christmas carols can be traced back to the 13th century and St. Francis. Originally a "carol" signified a dance rather than a song, and it was St. Francis who led the villagers in joyous dancing around the Nativity Scene.

One of our most recent customs, the exchanging of Christmas cards, began in England in the

1840's. Christmas cards were first introduced in the United States by Louis Prang, a German immigrant who printed his first "Seasons Greetings" in 1873.

This year have a very "Merry Christmas" and give a thought to where your favorite Christmas customs came from. They really give special meaning to the Christmas season. And, by the way, wonder who wished the first "Merry Christmas"?





*"two turtle doves"*

#### Steve Zelencik Named Top Salesman



Steve Zelencik (right) receives his award from Regional Sales Manager Ed Turney.

Steve Zelencik booked the largest single order for Semiconductors in the history of Fairchild Semiconductor (from the Burroughs Corporation) and it was also the largest single IC order ever given in the Semiconductor industry. As a result, Steve was named "Salesman of the Month" for October. "Steve's been with Fairchild for about a year. In the past twelve months, in addition to covering Burroughs, he's made several other major contributions to the growth and success of Fairchild Semiconductor," commented Computer Marketing Manager Marshall Cox.

Ed Turney, Regional Sales Manager, added, "While Steve credits the Burroughs sale to a group effort, he truly deserves the congratulations of everyone, for the sale and this award."

#### Fairchild Signs Largest Circuit Agreement Ever

Twenty million silicon integrated circuits, transistors and diodes will be shipped by Fairchild Semiconductor to the Burroughs Corporation over the next two years under terms of an agreement jointly announced by the two companies. Included in the gigantic procurement is a requirement for the largest quantity of monolithic integrated circuits ever specified in a single purchase.

The order specified Fairchild CT $\mu$ L integrated circuits and standard line transistors and diodes to be used in four highly successful Burroughs commercial general purpose computers, the B2500, B3500, B6500 and B8500. CT $\mu$ L, which utilizes a complementary transistor logic circuit to achieve new levels of speed, reliability and economy, was developed jointly by Fairchild and Burroughs engineers in 1965.

Under terms of the agreement, Fairchild will ship components to Burroughs facilities in Detroit, Michigan; Pasadena, California; Plainfield, New Jersey; and Paoli, Pennsylvania.

#### The Making of a Sale

Big sales like the recent Burroughs sale are not found in Christmas stockings. They just don't happen; they're put together by many people and urged on by a fellow called a field salesman. He's the one who keeps the orders coming in and all of us so busy.

A Fairchild field salesman knows a lot about Fairchild products and his customers' component needs. With this knowledge he sets into motion the designing-in of Fairchild products to meet his customer's needs. From this designing-in phase he must then show the customer that Fairchild can do the job.



### *"three french hens"*

It may mean having a pilot system built to prove feasibility or building proto-type units to prove reliability, stability, performance, or repeatability. This product development phase can take from one month to three years. Big sales don't come in a hurry.

During this product development phase, the field salesman submits to product marketing a projected six-month product forecast so that manufacturing is given time to plan for present and future business.

After Fairchild has proven its capability to build the customer's components, the salesman must obtain delivery information and price guidelines and again make sure manufacturing can meet the scheduled delivery date. Now he's ready to submit Fairchild's bid.

The customer's decision to buy is then based upon Fairchild's quality, delivery capability, history, price structure, and other competitive quotations.

If Fairchild is successful, the wheels begin to turn. The order is scheduled, parts are built, and shipments are made according to the designed schedule. And the field salesman? Well, there's always another big sale to be made just around the corner and lots of details to be worked out before it's successfully put together. His work is never done.

#### **Dr. Noyce Receives Franklin Institute Award**

Dr. Robert N. Noyce, group vice president of FCI, was awarded the Franklin Institute's gold Stuart Ballantine Medal for outstanding achievement in communications at ceremonies held October 19th in Philadelphia. He was recognized for his sophis-

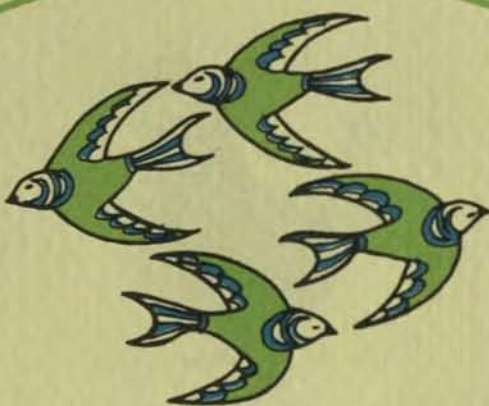


Dr. Noyce receives honors from Dr. Wynne Laurence Le Page, President of the Franklin Institute.

tication of the monolithic integrated circuit for industrial use.

Franklin Institute Awards are presented annually to "men and women who have fearlessly sought to learn and harness the secrets of the Universe." The honor roll of former medalists includes scientists and inventors from 21 different nations.

Dr. Noyce shares the award with another electronics researcher, Jack S. Kilby of Dallas, Texas, deputy director of the Texas Instrument Corporation's Semiconductor Research and Development Laboratory. Both men were recognized for scaling down and improving the reliability and performance of increasingly complex electrical circuits used for such purposes as radio and television receivers and for computers. Components of these circuits are microscopic in size and can now be mass-produced with relative ease.



*"four calling birds"*

*Above all, Christmas is a time of giving. Many Fairchilders give their time and services to worthy causes throughout the year. One such person is Rudy Pasos.*

#### **An Amateur Diplomat With Official Status**

Rudy Pasos, Supervisor Engineer at Instrumentation in Palo Alto, is a native-born Costa Rican, now an American citizen, and father of five children. He's also newly appointed Consul of Costa Rica in San Jose, California. Routine? Certainly not. The appointment is the only one of its kind. He received his unique appointment as a result of his efforts to foster a "Sister City" program for San Jose, Costa Rica, and San Jose, California.

Sister city programs started during the Eisenhower administration when San Jose, California, adopted and was adopted by Okayama, Japan. A group of people in San Jose picked San Jose, Costa Rica, to participate in a similar sister city program, but met with little success.

In 1964 Rudy's picture appeared in a San Jose, California newspaper. Mr. Luiz Juarez, long active in the sister city campaign, saw the picture and knew of the distinguished Pasos family, and he enlisted Rudy's support.

Ironically, at this same time the volcano Irazu (Ee-rah-sue) erupted in Costa Rica. One of the worst jobs in the aftermath was keeping streets and highways free of ashes. Costa Ricans needed help. They didn't want outside interference, but they would accept a Costa Rican's help. That Costa Rican was Rudy Pasos.

Rudy rallied the support of San Jose, California. With the help of Representative Charles Gubser, a roadsweeper was found and sent to Costa Rica



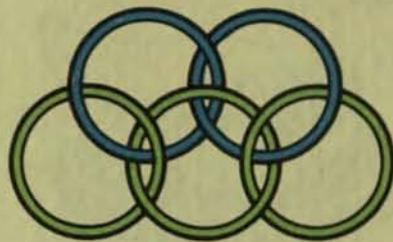
Rudy Pasos, Consul of Costa Rica, presents San Jose's Mayor Ronald R. James the flag of Costa Rica.

in the name of the sister city. Food and other aid was sent and it was gratefully accepted. A local television station made a film "Ill Wind of Irazu" which showed the volcano's damage to Californians and made many friends for both San Joses. The "ill wind" had blown some good. The sister city ideal was finally given a chance and it proved itself.

Relations between the two cities have grown ever since and currently involve many people. Rudy enlisted Rotarian support in both cities. Now Rotarians exchange visits regularly.

Rudy, a ham radio operator, also got hams into the act. His network of ham radios now is on the air regularly once a week to exchange technological





*"five golden rings"*

information, to solve agricultural problems, or to discuss health needs. Additionally, this information exchange benefits countries to the south, for a ham's radio signal can literally be heard around the world.

Today professors, students, businessmen and city officials are also participating in exchange programs. Right now Rudy's working on an exchange program for the University of Costa Rica and San Jose State, and he hopes that the governor of the province of San Jose and the President of Costa Rica will come to California.

Now as consul, Rudy will be attending many diplomatic functions and can work even harder for both his countries. But even though he will have official status, official license plates, a diplomatic passport, and diplomatic privileges none of it means as much to him as what he's doing.

As Rudy puts it, "Of prime importance in a successful marriage is for my mother to love my wife and my wife to love my mother. In this case Costa Rica is my mother and the United States my wife. I'll work awfully hard for them to love one another. That's all I've tried to do." And, he's done it remarkably well for an amateur diplomat.

#### **New Developments at R & D**

Skiing's in season and the R & D Ski Club is "off and skiing." Two group trips to the Lake Tahoe area are planned. Other activities planned include ice skating and more films like the Warren Miller filmstrip shown at this season's first meeting. President Ed Duffek says that membership numbers around 60 and that both skiers and nonskiers are coming out for what should be a very good year. . . . R & D hosted members of the Fall Joint Computer Conference with a mid-November



Open House designed to give them a first-hand look at Fairchild. Besides a tour of the facility, the group met with R & D personnel. Here, Dr. Gordon Moore, Director of R & D, discusses recent product developments with some FJCC visitors. . . . And speaking of Dr. Moore, he was named the recipient of the 1966 award for the best tutorial paper presented at the 1965 National Electronics Conference in Chicago. He received an honorarium and a plaque for his paper, "MOS Transistor As An Individual Device And In Integrated Arrays."



*"six geese a-laying"*

### Carol Reports

Recreation Council members are working hard these days. On South Portland's holiday agenda are two annual Christmas events — the Children's Christmas Show and the adult's Christmas Dance.



Paul Scully

The Children's party planned for December 11th includes a clown, a magician, and television's Ken MacKenzie and his band. And what's a Christmas party without candy and gifts? So there will be plenty of both. . . . This year's Christmas Dance is slated for the following Saturday, December 17th. Plans call for hors d'oeuvres, two bands to provide constant music, and the awarding of a color television door prize. Fred Arehart is heading up the arrangements committee; Cynthia Heal, publicity; and Jo Ann Gerry, decorations. . . . The rec council should also take a bow for the Halloween Hop held Saturday, October 29th. Prizes went to the funniest, most original, and best costumes worn to the masquerade dance, and the prizes were well worth fighting for — an AM-FM portable radio, a portable TV, and a Polaroid camera. . . . It looks as though Foreman Paul Scully would rather fight than switch — switch sports, that is — as he approaches the 18th with a "never say die" attitude. The scene was the Men's Golf League tourney held early in the fall. First place winner was the team of Collomy, Haskell, Staggs, and Childs. Officers for the 1966 season were Roland Collomy, president; Jack

Carter, vice president; and Gordon Burger, secretary-treasurer.

A young fellow who should have been along on that outing was 11-year-old Tommy Legere, son of mark and pack foreman Jerry Legere. Tommy was one of three area boys who qualified for this



Tommy Legere

year's New England Schick Junior Golf Tournament. It was his first attempt on the rugged Purpoodock Country Club and he qualified with an 84 on the par 71 course. Tommy began his golfing career at age six, caddying for his father, and he developed his swing in the family's back yard. He swings from his heels. Tom's also a straight "A" student, president of his sixth grade class, and enjoys football, basketball, and swimming. He's catcher for his hometown Little League baseball team, too. That's more than enough to make any father proud, and you can bet Jerry Legere sure is.

### Items from Instrumentation

Instrumentation celebrated Thanksgiving with a traditional turkey dinner and all the trimmings. Appropriately, Tom Bird and his group from Point-to-Point Chassis Wiring brought mounds of food for a Thanksgiving potluck. Each girl brought her special seasonal dish and Tom carved the turkey. It is reported that both Birds did fine. The inevitable wishbone was splintered, though, but the wish was for more holidays and more potlucks. . . . Stanford School of Nursing sent two



*"seven swans a-swimming"*

of its most charming fifth-year students to Instrumentation in a program designed by Stanford and the Santa Clara County Health Department to



Lee Anne Farishe, Michele Meyer

acquaint senior student nurses with public health nursing and community health services. Nurse Ann Albert hosted Michele Meyer and Lee Anne Farishe and explained the advantages of industrial nursing to them. The girls also got a guided tour of both Instrumentation and nearby Transistor. . . . John Segenski reports that electronic technicians at Palo Alto Instrumentation know how to make the best of anything. When the techs found an old ping-pong ball in one of the bench drawers, they improvised. A plug rack served as the net, an old door was converted to a table, and lab notebooks became paddles. Harold Sargent and Mike Thompson battled for the make-shift championship. . . . Instrumentation's Recreation Council selected its first set of officers. Leader for the upcoming year is Walt Skruch, president; Barbara Sleeth is the new secretary; Maria Humphrey, treasurer; Charlie Gibbs, publicity; Dave Anderson, accommoda-

tions; Jerry Pillsbury, entertainment; and Joe Rodriguez, equipment. . . . "The In-Laws" matched against the "Misfits"? The "Alley Oop's" against "Steve's Harem"? Holy Handicap, it's Instrumentation's bowling league, and leading the league after nine weeks of play are the "Who Knows"? Who knows how long they will stay there, for they are just one of ten tough teams. Maria Humphrey, her husband Bill, son Joe, son-in-law Mike Jorgenson, and daughter Michele compose the team rightfully called "The In-Laws." You have to enjoy bowling to be a member of their family, and they all do every Tuesday night at the Moonlite Lanes. Maria also serves as league secretary. Another Humphrey, Fran, and Michele Jorgenson are leading distaff bowlers; for the men, leaders are Ralph Coibacchini and Geneva Robertson. . . . Golf winners in Instrumentation's November tourney, the second time around (the first time it rained), were Walter Marks, Barry Klaas, and Dave Hall. Shirley Johnstone led the ladies. The second time it rained, too, and harder. . . . And as this is the Christmas season, Instrumentation's Children's Christmas Party to be held December 17th at Mountain View High School should be a barrel of fun. There will be toys and candy canes for every child, and caroling, Christmas skits, and that grand old man himself, Santa.

#### **The Word from Diode Country**

"'Tis the season to be jolly," and you can bet that Diode is because the ancient yuletide carol is being sung loudly and clearly by San Rafael's two Christmas choirs. Jean Wycliff organized the groups, and Faye Norvell directs the day shifters and Emma Mae Young the swing shift choir. Both choirs are singing during the lunch and dinner hours in the Cafeteria on December 22nd. Swing



*"eight maids a-milking"*

shift carolers include Dolores Huggins, Sonora Armistead, Jewell Ficklin, Yvonne West, Thurlene Peerte, Carolyn Watson, Georgia Harper,



Maribeth Mullins, Gloria Williams, and Jerry Thomas. Pictured is the day shift group. Across the top are Bobbie Vason, Archie Jones, Lillian Singleton, Juanita Danner, Patsy Nach, and Faye Norvell. And in the front row are Coraletta Henry, Sandra Overstreet, and Bobbie Talley. Eloise Wright and Jean Miles must have been practicing those high notes when the picture was taken. . . . Jean Wycliff also reports that she, Maxine Hamilton, and Eleanor Francis plan to decorate the cafeteria and the Christmas tree again this year, and that during the Christmas week many different departments will be enjoying potlucks and gift exchanges. . . . And speaking of potlucks, a Thanksgiving potluck luncheon was held by the module line on the 23rd. About 35 people enjoyed the baked ham and all the trimmings. . . . As a reminder to any of you who might have eaten too much at the potluck or over Thanks-

giving or just might put on a few pounds during the Christmas holidays, each sunny afternoon at 2:00 a group assembles in the back lot for exer-



cises. Just thought we'd mention it. . . . And in keeping with the physical fitness program, Diode's basketball team is working out the aches and pains of its 0-2 season. The team shows lots of promise, or so say team members Tom Branch, Al Frugletti, Bob Beaudoin, Dave Sielstad, Harry Spence, Stan Manning, Dave Edwards, Mike Feldtman, Bob Hartman, Gary Brandenburg, Bruce Mack, and Mario Scavino. But they are quick to add that they could use a few more tall players and lots of rooters. Interested players should contact Mike Feldtman. . . . Meanwhile back at the bowling lanes, two teams are tied for first place and three other teams are within five games of the top slot. Leaders with 22-11 records are the "Rejects" (Sharon Johnson, Tom Branch, and Bobbie and Jim Potter) and "The Clan" (Hilda Kaliczak, Janet Marz, Mike Damico, and Jim Smith). Leading bowlers, looking quite happy



*"nine ladies dancing"*

about their high averages this season, are Janet Marz (145), Anne Parfitt (155), Evelyn Koeble (148), Hal Knopp (172), and Hal Clausen (167).



Mike Damico (172) was figuring out a way to add a few pins to his average when the picture was taken. . . . In the Marin County Industrial League, Fairchild remains in first place. Fairchild's Bombers are leading the league in every department except losses. . . . It looks as though by the New Year all of the 12,000 square foot addition will be occupied. Here, Sharon Johnson and Georgia Wenners carry on amid the normal confusion of moving.

**From Mountain View**

Can you remember back to the less hectic days of Halloween, when there were no last minute

gifts to buy, but the season was still swinging? Well, bet this group can. Caught at a Halloween pow-wow were Sam Guida, Cheri Zumwaldt, Liz



Peterson, Don Nicolai, Gertrude Tuchman, and Don Kitchens — all part of the Fairchild Controls group. . . . In the true Halloween spirit Memory Products threw open its doors for an Open House held Sunday, October 30th. Nearly 120 persons attended. Memory Products has also been busy participating in the Fall Joint Computer Confer-



ence. . . . Friday evening the place was completely empty. Monday morning Hi-Rel was there, lock, stock, and computer. Hi-Rel's new home is on



*"ten lords a-leaping"*

the corner of Whisman Road and Middlefield Road. . . . The "Stockouts" still lead the Fairchild Mixed Bowling League. The team is 28-12 for the



season. Right behind them is the "Number Thirteen" team (27-13). Sam Hatfield sports the highest series (606) and claims the high game, too (246). For the women, Norma Lias has the highest series (560), and Juanita Warrick the high game (232). . . . What happens when a Mustang meets a deer? Well, it ain't no joke—a busted bumper and a smashed grill. Just ask Don Massey of Marketing Transistors. He and Rich Barry, Marketing Microcircuits, had planned a weekend of skiing at Lake Tahoe. Rich cut his right leg skiing, went back for more and twisted his right ankle. Don got snow in his waterproof watch (which is a polite way of saying he fell a lot), and on the way home his Mustang collided with a deer. They're game guys though, and they're heading back to the slopes again soon. . . . Maybe the guys should plan to go next time with the Ski Club. After the New Year's trip, three more are planned for the Lake Tahoe area. Tentative dates are January 20-22, February 17-19, and March 10-12. Package costs for the weekends will be about \$20-25 each.

Information will be mailed to all departments soon. . . . A farewell sendoff for two Foremen switching shifts in the Materials Slicing Area re-



sulted in a surprise potluck honoring the two fellas. Rumor has it Wayne Howard and Joe Desimone are ready to switch again just for some more of that good home-cooked food. . . . And if that wasn't enough, the girls in the Materials area (Slicing and Polishing) are planning big things again. This time it's a Christmas Luncheon at the Chief's Club at Moffett Field on the 23rd. Marty Barcroft and Ray Gale are sponsoring the group of nearly 40. . . . If you can't guess by now, all the Christmas Dance posters decorating hallways make it very clear that Christmas is here. The Recreation Council reports that every department has some plans for a Christmas get-together. So it should be a very Merry Christmas at Fairchild.



*"eleven pipers piping"*

**At Shiprock**

One bright and shining Christmas ornament at Fairchild is the award Shiprock received from the San Juan Business and Professional Women's Club. The plaque has a doorknob mounted on it and was awarded to Shiprock for its employment of women and particularly "opening the door to the employment of women."

**From Fairchild Australia**

It was hard to say which was more popular—looking through microscopes or enjoying ice



cream and soft drinks. Either way Fairchild Australia's November 12th Open House provided a golden opportunity for budding engineers to learn all about today's world of science and electronics. Here, Plant Engineer Ken Woods explains to one young engineer the type of circuitry he may be working on one day, and a mother shows her son what she does each day at work.

**United Fund, A Great Success**

The best gift of the Christmas season was yours

to the United Fund. You made it the most successful drive ever. United Fund Chairman Jerry Haugen reports that the first estimates show that Mountain View employees pledged more than \$47,000, an amount exceeding last year's total by about 37%.

During the campaign, some of the Charity Committee members toured local United Fund Agencies to see just where your dollars go. The group visited the San Jose Day Nursery, Hope for Retarded Children, the Salvation Army, Family Service Agency, and Brandon House.



Charity Committee members who met many United Fund people that day were Anna Larson, Lillie Stein, Millie Wilkenson, Jim Newton, Missy Strebis, Val Knowles, Sue Grimmer, Midge Bowen, Paul Kent, and Tino Venson. Shown also with the group are Florence Krumpotic, Campaign Associate, and William Piehl, Director of Case Work from Family Service (third and fourth from the right).



## *"twelve drummers drumming"*

### MOVING UP

KEE BLACKWATER advanced to Production Assistant at Shiprock. He joined Fairchild in 1965 as a Mechanic Trainee and became a Mechanic Leadman last August. Originally from Utah, he completed auto mechanics training at Okmulgee Technical Institute in Okmulgee, Oklahoma.

ROBERT C. CHAMPAGNE has been appointed Product Manager, Special Assemblies (Diode). He has been employed by Fairchild since 1959 and formerly was Section Head, Electronics Fabrication and Maintenance.

FRANK ELLIS recently advanced from Senior Electronic Technician to Assistant Engineer at Diode, San Rafael. He attended Heald Engineering College of San Francisco and before coming to Fairchild in March 1965 was employed by Lockheed.

CHARLES A. JAHRLING was promoted to Foreman at San Rafael. He has been with Fairchild since 1963 and was previously with Dumont Manufacturing Corporation.

WAYNE LAWSON (Diode) was promoted to Assistant Engineer. He completed two years of engineering study at the University of California and has been with Fairchild since 1960.

STAN MANNING was promoted to Applications Engineering Foreman at San Rafael. He attended San Francisco City College and Heald's Engineering College. His new responsibilities will include characterization of both new and standard products.

ARMANDO (CHARLIE) NILA has been promoted from Group Leader to Foreman of the Test Area in Transducer of the Controls Division. He is now responsible for all calibration and final testing of Controls devices shipped from the West Coast manufacturing facility.

### NEW FACES

RICHARD DRONKERS recently joined Fairchild as a Senior Industrial Engineer at the Diode plant. Richard is a native of Holland and attended Merchant Navy College in Amsterdam and Technical College in Haarlem. Before coming to Fairchild, he was employed by Gevato Meat Canners, Driebergen, Holland.

FRANK J. FINELLI has been appointed to the position of Intermediate Accountant at the South Portland plant. He earned his B.S. degree at Fordham University, N.Y. and did graduate work at Fairleigh Dickinson University, N.Y. Frank was previously employed by Grassy Sprain Tax, Inc., N.Y., and Allied Chemical Corp, N.J.

JOHN M. FRIER came to Fairchild as an applications engineer with the Controls Division (MV). An engineering graduate of the U. S. Naval Academy, he was formerly a research engineer with Lockheed Missiles and Space Company, Sunnyvale, and previous to that, a Navy pilot.

JIM JORDAN recently rejoined Fairchild as a sales engineer. He will be headquartered at the Hollywood sales office. He attended the Citadel in Charleston, S.C. and received a BSME degree from the University of South Carolina. Before returning to Fairchild, Jim was employed by Texas Instrument.

### 5-year Service Awards for December

Pearl Ammons	Diode
Marietta Bauer	Diode
Virginia Chattman	Diode
Janice Clark	Diode
Dave Culley	MV
Edward Duffek	R&D
Diana Garrison	Diode
Joyce Hamblin	Diode
Mae Hendriks	MV
Donald Koller	MV
Betty Little	Diode
Donna McClintock	Diode
Richard Moreau	MV
Jeanette Olds	Diode
Margaret Osmar	MV
Donald Pezzolo	Diode
Donald Smith	MV
Jonnie Tedrick	Microwave
Linda Williams	Diode
Thelma Wilson	MV



# LEADWIRE

Vol. 8, No. 11

Published by and for Employees of  
Fairchild Semiconductor/Instrumentation  
Mountain View • Palo Alto • San Rafael  
Hong Kong • South Portland, Maine • Shiprock, N.M.  
Croydon, Australia • Ontario, Canada  
Tijuana, Mexico

From all the Leadwire staff, and me, too, a big thanks for all your help this past year. We'd like to add our "Merry Christmas" to the many good wishes of the season, and may you have the best Holiday season ever.

Judy Horst, editor  
Larry Bender, Gaylord Lineaweaver, art direction  
Ron Turner, photographer  
and all the reporters

**MOUNTAIN VIEW**—Wes Cox, Lois Eagleston, Nellie Covington, Ginger Tygret, Keith Thomson, Judy Dunkelberger, Paul Brasseur, John Walsh, Iantha Adams, Katie Guida, Edna Lockes, Missy Strebig, Wanda Smith.

**SAN RAFAEL**—Cleatus Dunkley, Audrie Graciola, Janet Marx, Clarence Medeiros, Mickey O'Donnell, Margaret Queen, Bobbie Talley, Anne Parfitt, Eleanor Francis.

**RESEARCH & DEVELOPMENT**—Donna Parris, Dianne Cotton, Janet Jones.

**SOUTH PORTLAND**—Carol Hebold.

**INSTRUMENTATION**—Jack Ramon, Pat Campagna, Anna Ackerson, Walt Skruch, Jeanne Meyers.

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## The Twelve Days of Christmas

On the first day of Christmas my true love sent to me,  
a partridge in a pear tree.

On the second day of Christmas my true love sent to me,  
two turtle doves.

On the third day of Christmas my true love sent to me,  
three french hens.

On the fourth day of Christmas my true love sent to me,  
four calling birds.

On the fifth day of Christmas my true love sent to me,  
five golden rings.

On the sixth day of Christmas my true love sent to me,  
six geese a-laying.

On the seventh day of Christmas my true love sent to me,  
seven swans a-swimming.

On the eighth day of Christmas my true love sent to me,  
eight maids a-milking.

On the ninth day of Christmas my true love sent to me,  
nine ladies dancing.

On the tenth day of Christmas my true love sent to me,  
ten lords a-leaping.

On the eleventh day of Christmas my true love sent to me,  
eleven pipers piping.

On the twelfth day of Christmas my true love sent to me,  
twelve drummers drumming,

eleven pipers piping,  
ten lords a-leaping,  
nine ladies dancing,  
eight maids a-milking,  
seven swans a-swimming,  
six geese a-laying,  
five golden rings,  
four calling birds,  
three french hens,  
two turtle doves,  
and a partridge in a pear tree.

# Leadwire



# Plan Ahead

Planning is the essence of a good organization, and a publication is an organization of thoughts and ideas for the purpose of communication. So there's no getting around it, a publication just has to be organized and it just has to be planned.

And planning requires thought, so that's where the *Leadwire* begins—floating around in the heads of the artist, photographer and editor.

Take the article on Incoming Inspection for instance. After deciding the article's direction, several hours were spent talking with the foreman of the department and his girls . . . talking about their work, their backgrounds, the department's relationship to other manufacturing operations, just trying to get an idea of their day at Fairchild. Then it was time to take the pictures and make the story jell.

After a first draft, the experts (those people in Incoming Inspection and the subjects of the article) made sure that the copy read true. And it was only after their "editing" and further editing that the whole package (photos and story) went to the artist. He took it from there, placed it with fourteen other pages, and in two or three weeks the printed *Leadwire* hit the stands.

The same time and thought goes into every page of the *Leadwire*; though we're not big time, we try; and every month (as the saying goes) we try harder.

*Judy Horst*

## Picture this

It's called metallographic art, and what you see here and on the *Leadwire* cover are the best examples of it in the world.

In 1966 Fairchild Semiconductor received the "best in class" award for Unusual Imaging Techniques (Fig. 1), and in 1965 the "best in class" award for Replica Electron Microscopy (Fig. 2). Responsible for this achievement were Gene Meieran, Ilan Blech, Bob Warneke, and Doug Mattern, all of Materials and Processes at R & D. Their entries were the best of those submitted by nearly 1000 scientists throughout the world.

**Figure 1:** This picture shows an x-ray topograph of a piece of Silicon web dendrite enlarged about ten times. Its image was formed by scanning the single crystal sample in front of a highly parallel x-ray beam and recording the diffracted beam on a piece of high resolution film scanned along with the sample. Since the beams diffracted from crystal defects are more intense than beams diffracted from perfect crystal areas, the recording film picked up the defects in the

crystal as a set of black lines. The film, when photographically enlarged, showed an entire set of defects within the sample and revealed the location of dislocation networks of amazing complexity.

**Figure 2:** This is an electron micrograph of a replica of a Beryllium-Oxide ceramic surface, enlarged about 35,000 times. The replica was formed by stripping a cellulose acetate film with the imprint of the BeO surface from the surface, shadowing it with a thin evaporation of a heavy metal such as Au, and then strengthening it with an evaporated layer of carbon. The plastic was then dissolved, leaving the shadowed film which was examined in the electron microscope. Hills and valleys in the sample surface were revealed as light and dark areas in the electron microscope. This particular sample has terraced hills and valleys and is remarkable for its resolution and contrast.

**Figure 3:** Bob Warneke, Gene Meieran, Doug Mattern, and Ilan Blech examining a sample on the electron microscope.



Figure 1

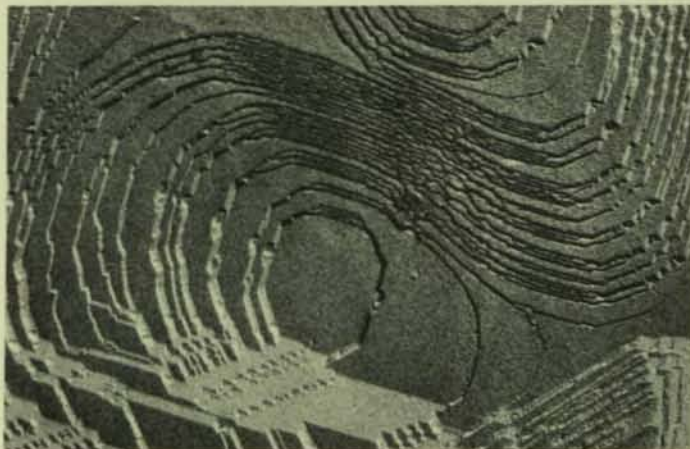


Figure 2

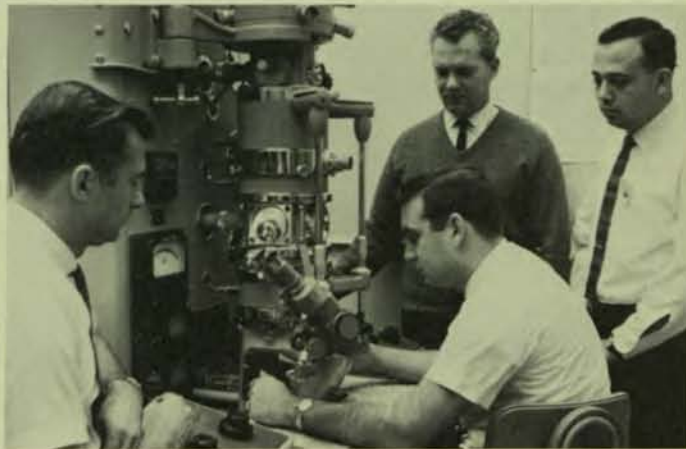


Figure 3

# TELL THE WORLD

write a technical article!



Fairchilders from Instrumentation and Semiconductor published more than 50 technical articles in electronics journals and magazines in the last six months of 1966, more than ever before. No doubt, there were more ideas that went unpublished simply because people didn't get around to writing them.

What a shame! Because most publishers pay for technical articles ranging from a flat \$25 for a short piece to \$15 a column for longer articles which include photos, drawings, or other illustrative art work. In addition Fairchild pays most employees \$100 for every published article that credits the author and Fairchild. That's because Fairchild is gaining stature as a company whose people are outstanding forces of progress in the industry.

The point to remember, however, is that no matter how great your idea is, it's not doing you any good just running around in your head. So put it on paper, and let the Information Services (MV) people help you get it published.

Here's a list of some of the articles published in technical, scientific, and popular trade magazines during the last half of 1966:

## R & D

Ilan A. Blech and Harry Sello, "Some New Aspects of Gold-Aluminum Bonds," Journal of the Electro-Chemical Society.

Bruce E. Deal and Ed Snow, "Barrier Energies in Metal-Silicon Dioxide-Silicon Structures," Journal - Physics and Chemistry of Solids.

Bruce E. Deal, Ed Snow, and Andrew S. Grove, "Properties of the Silicon Dioxide-Silicon System," SCP and Solid State Technology.

Desmond J. Fitzgerald and Andrew S. Grove, "Radiation-Induced Increase in Surface Recombination Velocity of Thermally Oxidized Silicon Structures," Proceedings of the IEEE.

Donald Forbes, "Impact of Semiconductors on Ceramics," Ceramic Age.

Andrew S. Grove and Desmond J. Fitzgerald, "Surface Effects on p-n Junctions: Characteristics of Surface Space-Charge Regions Under Non-Equilibrium Conditions," Solid-State Electronics.

Andrew S. Grove, "Mass Transfer in Semiconductor Technology," Industrial Engineering Chemistry.

Thomas Klein, "Contour Deposition—A New Epitaxial Deposition Technique for Semiconductor Devices and Integrated Circuits," Solid-State Electronics.

Richard Lane, "The Comparative Perform-

ance of FET and Bipolar Transistors at VHF," IEEE Solid State Circuits Journal.

John E. Lawrence, "The Cooperative Diffusion Effect," Journal of Applied Physics.

John E. Lawrence, "Diffusion Induced Stress and Lattice Disorders in Silicon," Journal of the Electro-Chemical Society.

Gene Meieran, "High Temperature X-Ray Topography of Si Wafers Strained by Thin-Surface Films," Applied Physics Letters.

Howard E. Murphy and L. Jack Kabell, "An Integrating Digital Light Meter," IEEE Journal of Solid-State Circuits.

Leslie Vadasz, "Temperature Dependence of MOS Transistor Characteristics Before Valuations," IEEE Transactions on Electron Devices.

## MOUNTAIN VIEW

John Brown, "Switching Diodes," Electronics World.

Harry S. Suzuki, "Combined VHF Television Tuner and IF Strip," IEEE Transactions.

James Giles, "How to Measure Linear IC Performance," EEE.

Robert Hood, "Integrated Circuits: Their Future in Appliances," Metal Products Manufacturing.

Derek Bray, "Try Diodes for Remotes Gain Control," Electronic Design.

Howard Zinschlag, "A  $\frac{1}{2}$  D Integrated Circuit Memory," Computer Design.

Larry Blaser, "An Integrated Circuit for Consumer Products," Electronics World.

Murray Siegel, "Printed Circuit Attachment Methods for Cerpak Flat Packages," Electronic Communicator.

J. Irwin and R. Jensen, "Precision Digital Clock Uses ICs," Electronic Design.

Gene Carter, "Economical IC Test Set Provides Gate Input/Output Characteristics," Electronic Design.

Will Alexander, "Low Impedance Bias Circuit Improves Amplifier Linearity," Electronic Design.

R. J. Widlar, "Design Techniques for Linear Integrated Circuits," Electronic Communicator.

J. H. Friedrich, "A Flexible Microcircuit Scratchpad," EEE.

R. F. Noble, "Optical Tape Readers," EDN.

Bert Frescura, "Mesa Isolation for Integrated Circuits," EE.

William Smith, "Tape Reader and Display," Electronic Communicator.

Larry Blaser and Derek Bray, "Color TV Processing Using Integrated Circuits," IEEE Transactions.

Derek Bray, "Semiconductor Video Amplifiers for Monochrome and Color TV Receivers," IEEE Transactions.

## INSTRUMENTATION

Christos Chrones, "Automatic Testing for Low-Current-Beta Transistors," EDN.

Ed Minsky, "How Fairchild Photodrawing Halves Drafting Costs," Engineering Graphics.

Russ Walton, "Displaying MOS-FET Characteristics," Electronic Engineering.



# Taking transistors for granted

Within its short life-time (since 1948), the transistor has found its way into almost every type of electronic wizardry that man has designed. We can buy pocket radios, television sets, portable phonographs, and many other electrical devices—all of which employ transistors in one way or another.

We can now place complex satellites in orbit around the earth, and giant computers have been shrunk to the size of an ordinary office desk—all made possible by the transistor and the integrated circuit.

And these are all made possible by you, for you spend at least eight hours of your working day vitally concerned with producing the best solid-state components in the world. And it's because of your work here that each of us enjoy "all the comforts of home," the ones that we have come to take for granted. For instance:

*Home coffeemakers with thermistors (special resistors that change with variations in temperature) for precise temperature control.*

*Cordless electric knives with complete switching action performed by semiconductors called silicon controlled rectifiers (SCR's).*

*Mixers and blenders using transistors which allow smooth control of speed.*

*Clothes dryers in which SCR's provide automatic dryness controls.*

*Golf carts with SCR's in motor-control circuits to*

*provide precise speed control and an ability to go farther without battery recharge.*

*Refrigerators, air conditioners, and freezers with thermistors that sense temperature changes and trigger SCR's that switch on the motors.*

Sound complicated? Well, it's just the practical application of transistors, diodes, and integrated circuits. The list is endless and even includes children's dolls with portable batteries and light-sensitive photoconductors to make them cry when patted.

As for the future, the end is nowhere in sight. Wrist radios and electronic computers the size of an ordinary typewriter are upon us. The microminiaturization of electronic equipment is moving at a rapid pace. And its impact can be illustrated by the wide applications of inexpensive transistor radios and television—from entertainment to classroom education to a means of providing rapid technological and educational advancement for underdeveloped nations.

Or closer to home, it will be only a short time before integrated microcircuits take over most of the logic functions now performed electromechanically in home appliances. The housewife will someday control her appliances remotely by plugging an electronic device into any receptacle in the house. And, at the push of a button, the SCR in her pocket-sized control unit will signal another in the appliance and the task will be done. It may even be possible to program housecleaning months in advance . . . what a life, and it's coming, and everyone at Fairchild is playing a major role in it.



# Incoming Inspection

This is Incoming Inspection, and this is Supervisor Vince Fulginiti. He's the head man here and the people behind him don't have time to stand around and pose for pictures like this.

Some 200 different kinds of materials for production of transistors, diodes, and integrated circuits are bought from outside vendors. But before they can be used in actual production at Mountain View and satellite plants, Incoming Inspection, Material Controls (MV), sample tests every one of those products for reliability.

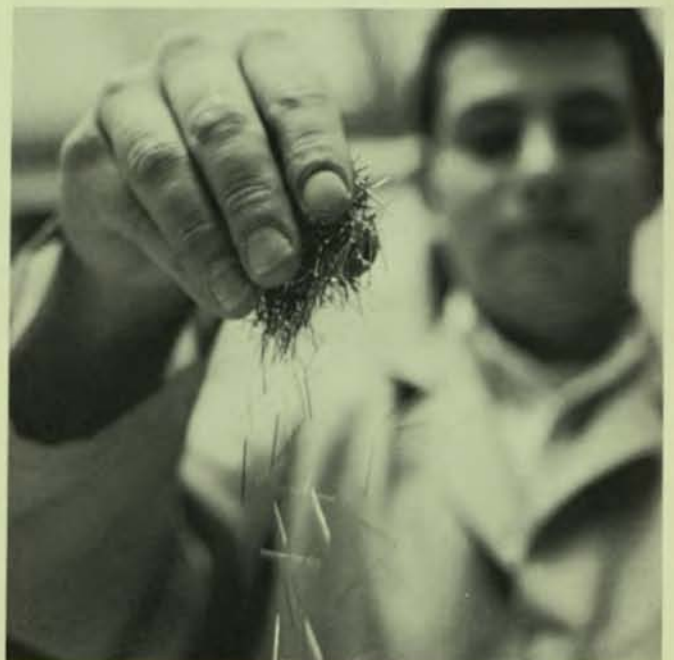
Vince and his crew of top inspectors sample test everything from the strength of gold wire .0011 mil thin to dip packages. They test against environmental conditions, for solderability, for size and consistency, and for durability under stress and strain.

This group also performs an assembly operation for transistors just to see that the parts will withstand production and function properly. Vince's group is also in contact with vendors, informing them of faulty merchandise and often making suggestions to improve product reliability.

Almost every girl on Vince's team is a veteran Fairchilder. For instance, Lena Jobe joined Semiconductor in October 1958, Phyliss Flot in May 1959, Julie Howard in June 1959, Vel Gale in November 1959, Paula Nyburg in July 1962, and Dee McGowan in February 1963. Why, Kitty Troncoso (she's been with Semiconductor slightly more than a year) and Carole Chrisman (almost a year with Semiconductor) are considered "newcomers." Rounding out the group are Jon Hoefler and Ernie Reyes, also relative newcomers in this group. Vince, himself, received his five-year pin last November.

But then this department counts on the experience of each of its members. Incoming Inspection must pass judgement rapidly and accurately so that manufacturing can meet its production schedules and be assured that quality components are being used in the manufacturing process.

While military specifications serve as a guideline, all incoming materials get that extra ounce of inspection because these people know exactly what they're doing. After all, they're very well qualified.



Parts and supplies are received from the shipping and receiving area. Ernie Reyes breaks out a random sample from the lot for testing.





The breaking strength of gold and aluminum wires is checked as is its elongation.



Kitty Troncoso submerges Dip bases in a chemical solution, Zygo. Each beaker is placed in a pressurized "joy bomb" to check the porosity of the ceramics.



Phyllis Flot and Paula Nyburg visually inspect TO-3 Headers which eventually will go to Tijuana. Supervisor Vince Fulginiti assists Paula with what might be a reject. Dee McGowan and Kitty Troncoso are concerned with Die Attach testing.



Carole Chrisman needs a sharp eye to measure frames on the Comparator. The frames must conform to specifications shown on the screen.



The sample is categorized and checked according to military specifications. Running the Glass Seal Test on TO-18 Nail Headers, Dee McGowan uses helium to check for leakage.

## You're working for Ted Brown



... and as December's Salesman of the Month, he's been working very hard for you.

Ted Brown of the Indianapolis sales office is keeping Semiconductor's production at top levels. In December he booked a million dollars worth of sales, 75% of which will be shipped during the first quarter of 1967 and the remainder in the second quarter.

To quote Bill Dresser, Consumer Regional Sales Manager, "There have been salesmen of the month, but Ted Brown is 'the' salesman of the month to us, because he's done it the hard way, selling a variety of products, twelve in all!"

Through Ted's efforts Semiconductor is now supplying more than 90% of the silicon products being used by RCA. And in addition to this, he's received commitments for an additional four million diodes and 500,000 zener diodes. Ted's also the first in the U.S. to book the first HED order, and it was for 100,000.

So if you're working on switching diodes, NPN general purpose amplifiers, or zener diodes, they're probably on their way to Ted's customers. And Ted, well, he's out there drumming up more business to keep you busy.

## Ed Pausa: Man of many decisions



Ed Pausa's day starts with about a million phone calls from all corners of the Semiconductor world, and as the day progresses it doesn't get less frantic, but busier. On his agenda for the day appear never less than three or four meetings, and Ed's secretary keeps the flow of traffic to and from his office progressing in a somewhat orderly fashion.

Ed is Plant Group Manager, and that means he oversees the Silicon Materials, San Rafael, South Portland, Shiprock, and Canadian plants for the Semiconductor Division. But Ed's used to work of this nature, having started in NPN production and management in 1959 and progressing through the ranks to Plant Manager of the South Portland plant in 1962. In December, 1964 he was named Resident General Manager of the Hong Kong operation.

It was with the unveiling of "Fairchild 71" (a program of Semiconductor goals and plans for the future) that Ed was brought back to the mainland as Plant Group Manager. He should be familiar to quite a few people at Mountain View . . . from earlier Semiconductor days, and he's thoroughly enjoying seeing so many old friends.

Ed reports to Don Yost, Director of Domestic Operations, and it's his job to insure efficient production of enough Semiconductor products at the right cost and quality to meet market demands. More specifically, he plays an important role in establishing new plants, introducing mechanization programs, setting up new production capabilities, and getting programs going that will make work easier, less expensive, and more effective.

When Ed calls it a day, it's usually seven or eight o'clock at night, and he's made many decisions and made them correctly. After all, that's his job. It's then that he heads for home to his wife, Janice, and their children Geoffrey, 5, and Ronnie, 4. And it's then that some more decisions must be made . . . the real decisions, as every family man well knows.

## From Hong Kong



When Chung Lee Chow packed his suitcase it was for almost a three-month stay in the United States. Mr. Chow is employed by Fairchild Semiconductor Limited of 135 Hoi Bun Road, Kwuntoug, Kaulouu Hong Kong. Or to put it more simply:

香港半導件廠  
香港九龍官塘  
海濱路一三五號  
周永禮

Mr. Chow is an electronic engineer in charge of maintaining all electronic equipment used in the Hong Kong plant. His visit to the U.S. included trips to Mountain View, San Rafael, and Palo Alto plants of both Semiconductor and Instrumentation Divisions. Then he flew East to Clifton, New Jersey, and South Portland, Maine.

The principal purpose of Mr. Chow's trip was to study the maintenance methods used in each plant he visited and to meet with test equipment designers and manufacturers.

Fairchild Instrumentation developed a tester, the Series 300, for the Hong Kong operation. Several of these testers and the Series 500 (Grandpa of all semiconductor testers) are under Mr. Chow's care. He also has 6200's (curve tracers), 7100's (DVM), 6100's (switching time testers), 7515S's (Rf testers), and half a dozen other types to manage. The Hong Kong plant uses lots of equipment.

## Items from Instrumentation

At the IEEE Show Fairchild Instrumentation will be placing major emphasis on three new semiconductor test systems — one each for transistors, integrated circuits and complex arrays.

A preview of things to come and of major significance to instrument users will be the introduction of three new digital voltmeters. The introduction of these units will mark the first time an instrument manufacturer has successfully used integrated circuit construction on a large scale. These meters along with the division's Model 7100A will provide across the board coverage of DVM uses to fill the growing demands of industry for accurate, dependable digital voltmeters at the lowest possible cost.

Also to be displayed is a modified transistor curve tracer which can be interfaced with a digital voltmeter providing digital readout of tests being performed. This instrument will be useful in applications requiring precise measurement.

Fairchild Instrumentation's components group will announce 20 new IC products including 16 operational amplifiers, two operational amplifier power supplies, one photoconductor and one counter module.



Fernando Andre doesn't promise a 400-pound Black Sea Bass every time, but he hopes to provide beach outings, spear fishing and diving trips, and underwater photographic excursions for those interested in forming a diving club. And for beginners, lessons will be made available. So, anyone who's interested should get in touch with Fernando. He needs signatures of interested underwater enthusiasts so that

he may obtain Recreation Council approval.

It's official, the Rec Council will be sponsoring the support of a needy child overseas through the Foster Parents Plan. Dave Anderson is working out the details and hopes to let everyone know the minute a child is selected. Every one who contributed to the \$180 necessary for the project can feel pretty proud.

Oops! The "Who Knows" let the "Alley Oops" sneak into first place and capture the mid-year bowling league lead. Happy about the results were Carolyn Tinker, Gerrie Daughtry, Ken Howser, Gordon Tinker, and Don Daughtry, "Alley Oops" team members. They finished 39-21 at mid-year.

## At Shiprock



Bessie Natatchez started working at the Shiprock plant November 16, 1965. She works in the Quality Control department. Kee Blackwater has been with Shiprock since May 3, 1965. He's a Production Assistant. Neither one of them has ever missed a day of work. That's quite a record and worthy of special recognition. And that's just what Plant Manager Phil Perry had in mind when he presented Bessie and Kee with letters of commendation and congratulations for their perfect attendance record.

## The word from Diode country



Chuck Self is proof that a Foreman's job does not stop at paperwork. Chuck, General Foreman on the Special Assemblies line at Diode, put in a few hours on a marking machine, filling in for an operator who was absent that day.

The San Rafael Bowling League finished the first half of the season with the "Diode Diddlers" out in front of "The Clan." High honors are still shared by Anne Parfitt and Thelma Merrill for the ladies, and Mike Damico and Rich McIntyre for the men.

And in Marin Industrial League bowling, the Diode team is still pacing the league. The loss of two key bowlers during the first half temporarily cost Fairchild first place; however, a fantastic second half effort brought the team back into first place with a 12 win, no loss record. Team members and their averages are: Hal Knopp (167), Bill Morton (162), Jim Smith (159), Tony Manino (158), Bruce Mack (155), and Jack Harris (151).

Rounding out the sports scene, Diode's softball team is getting organized for another year of Marin County League play. With a year's experience under their caps, the Diode team appears ready to greatly improve on last year's record. The team's 40-game schedule will be released soon.

## Family competition is Record-Breaking



Marilyn Buttke

Charlene Buttke

Mary Ann Rue

Last month Marilyn Buttke set a record marking 100,000 glass micro-diodes on the micro marker in just 6.7 hours, and now she's broken that record by 16,000 units. So that Marilyn doesn't have to wait to have the maintenance department fix her machine when it's overworked, her Foreman, Chick Draper, has so much confidence in her that he gave Marilyn her very own fix-it kit.

But the story doesn't end here. It seems that Marilyn's sister-in-law, Charlene Buttke, just broke Marilyn's latest record. She marked 120,000 units. In turn, that brings us to Charlene's sister, Mary Ann Rue. She works in the test and finish area, too, on one of the reelers. And if there's a record to be broken, she'll be shooting at it. After all, it's in the family!

## New developments at R&D

Mid-year bowling results show "Kitty's Katz" (Kitty Christensen, Tom Gillum, Helen Ennor, Sheila Bantillo, and Joe Ruiz) way ahead of the other seven teams in the R & D bowling league. Kitty's team won 40½ games and lost only 19½.

And at Aptos Beach Golf Course, Kitty was competing with about 40 R & D golfers in another of the monthly winter golf league tournaments. This time Terri Mead took the women's low net honors with a 66. Low gross for the men was Jack Jones' 89, Joe Suprak went around in the fewest putts (33), and Cletus Linsenmayer was closest to the pin on the 125-yard 17th hole. He put his tee shot 9'8" from the pin.



Running these activities and all the rest in the coming year will be the newly-elected Recreation Council. New members are Liz Frisz, Lillian Peterson, George Steres, Chet Gunter, and returning member Donna Parris.

Liz Frisz and Diane Cotton have begun sorting through extra technical journals and periodicals accumulated over the past year in the R & D library in preparation for moving into new library quarters sometime soon. The new library will almost triple storage accommodations, that is, if Liz and Diane can dispose of the extras that are just sort of in the way.



## Carol reports



Having dug out of a blizzard of work and snow, Carol Hebold reports that Christmas did indeed reach the Fairchilders of South Portland. In fact, South Portland's Children's Christmas party was the hit of the season. Nearly 1800 sons and daughters of South Portland employees attended.

Don Patchell, first shift line mechanic, received an extra holiday gift he wasn't expecting. Bowling in the New England Candlepin Championships, Don cracked several world's records. He tallied a ten-string 1,395, breaking the previous world record, and his last five strings were 184, 145, 208, 126, 149 for 812 and another world high. The 184, 145, 208 link totaled 537 for another record. But best of all prize money in the tournament netted him \$1,370, quite a handy sum for the Christmas season.

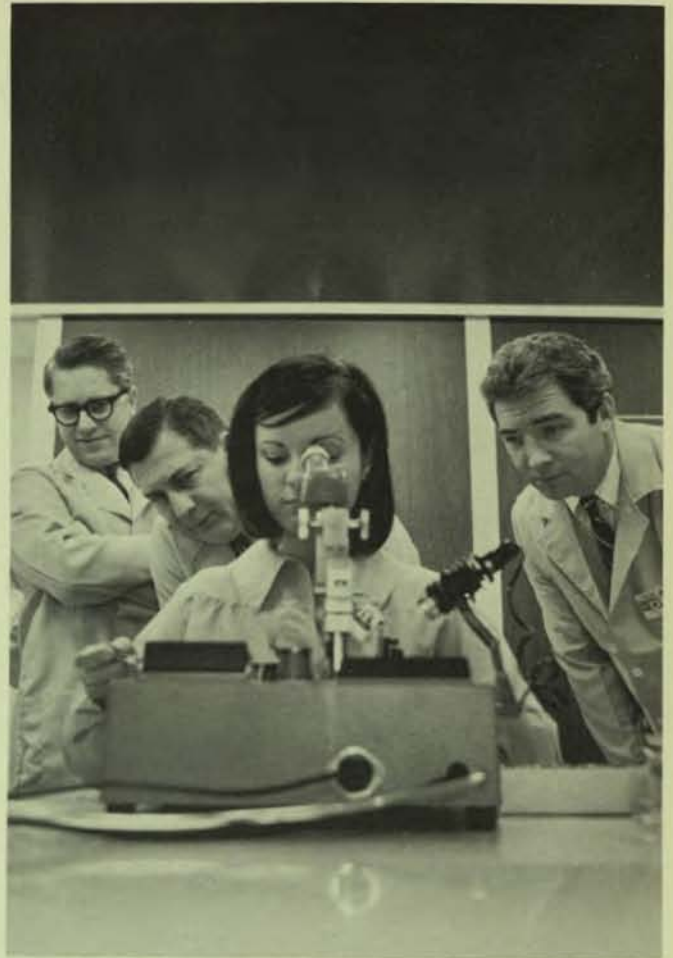


Meanwhile back at work, Jennie Cook, wafer fab operator, and Plant Manager Jack Magarian proudly inspect the first vials of wafers ready to be shipped from South Portland's new wafer fabrication plant. The vials are headed for Shiprock and Hong Kong. Don Shea, wafer fab's Product Manager, reports that the transfer of NPN wafer production is proceeding ahead of schedule and that Module I will be at full capacity by the end of January. February 1st is the target date for production to begin in Module II.

## From Mountain View



Rodger Likens, Engineer in Materials, just completed a 60-hour course in time study. He was one of 10 men studying the Work Factor method designed to give its graduates a method for analyzing a job and making changes in a work station for better performance. In other words, he hopes to make production operations easier and faster, and that should make everyone happy.



There's a new addition in the Military Products building . . . a brand new Integrated Circuit assembly area. The new area will enable Military Products to meet customer demands for high reliability military integrated circuits, a growing market. Don Hart, Integrated Circuit Department Head, and John Ready, Military Product Manager, led the first tour, and Don Yost, Director of Domestic Operations, and Jerry Sanders, Military Sales Manager got a first hand look at the operation. Lucy Geronimo demonstrated an automatic die attach machine, just one of the functions to be performed by Don's department.

For heaven's sake! Plan to take advantage of Mountain View Ski Club weekends. Such fun, and there are only three more left. February 17-19th the club is going to Alpine Meadows. March 3-5th a trip to Yosemite is planned. Then March 10-12th the club will be going to Squaw Valley to ski. Each trip is a real bargain.

Running the Recreation Council this year will be Dave Heck, President; Bryce Herbst, Vice President; Ty Rockhold, Treasurer; and Mary Ann Jankord, Secretary. Ed Tappen will serve as Alternate Officer; Dick Hoff and George Reh, Sports Coordinators; Bea Custer and Mike Fullmer, Picnic Coordinators; Ed Kiburis and Lowell Goetze, Christmas Coordinators.

# An important message from the Credit Union

Your Credit Union is proud of its past year, and is only sorry that because the auditors might be looking that it must conform once again to the rules of banking. Contrary to popular opinion, or wishful thinking, the Credit Union *will not* be giving money away this year. *But*, the Credit Union promises to continue giving you the very best deal anywhere on loans and savings.



Bob Lindsey's got the right idea for a weekend away from it all and he might even strike it rich. Bob, a lab tech in Applications spent the weekend panning for gold in true "old west" fashion on an old mining claim owned by Tom Mills' family and located just outside El Dorado. Tom's also from Applications which means he must not have found that long lost claim yet.

The Stockouts held on to their league lead to take top bowling honors at mid-year. Contributing to the team's 36-20 record were Agnes Myreholt, Ada Perez, Joe Perez, Jim Pulliam, Sammie Hatfield, and Bryce Herbst. In a playoff for second place the Lively Ones bested the Night Strikers and the Invincibles. As second half play progresses, the Tenth Framers are leading the league with a 7-1 record.

The sound of spring training is in the air, and Pat Campagna's getting the Fairchild Falcons into shape for the coming softball season. The Falcons will be practicing on Sundays at McKelvey Field in Mountain View, and Pat hopes that anyone who has played Triple A Softball will come out for the team.

## FAIRCHILD SEMICONDUCTOR FEDERAL CREDIT UNION

### STATEMENT OF CONDITION

December 30, 1966

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#### RESOURCES (What We Own)

LOANS TO MEMBERS .....	\$1,109,174.79
(Your savings help your fellow workers)	
CASH IN BANK AND ON HAND .....	62,438.29
(Always ready to service your needs for money)	
OFFICE EQUIPMENT .....	17,442.15
(Cost of equipment, less accumulated depreciation)	
OTHER ASSETS .....	4,661.85
(Prepaid insurance and prepaid supplies, etc.)	
TOTAL ASSETS .....	\$1,193,717.08

#### LIABILITIES AND MEMBERS' EQUITY (What We Owe, Reserve and Members' Equity)

NOTES PAYABLE .....	\$ 50,000.00
(Money we had to borrow to meet your loan demand)	
ACCOUNTS PAYABLE & SUSPENSE .....	149.84
PAYROLL DEDUCTIONS RECEIVED .....	110,892.95
RESERVES .....	26,776.80
(Earnings set aside to protect your savings)	
MEMBERS' EQUITY:	
SHARES OWNED .....	981,565.21
(This proves that our members are thrifty)	
UNDIVIDED EARNINGS .....	24,332.28
(Available for dividends)	
TOTAL LIABILITIES AND MEMBERS' EQUITY .....	\$1,193,717.08

## Very special occasions

Five-year anniversaries are just that, and they are times for thinking back to the first day at work or the funny little things that happen in the ordinary course of the working day. And the most amazing thing . . . it all happened "just yesterday."

Helping Phyllis Draper celebrate her five-year anniversary was a fun thing for the 25 or so members of the Production Control group (MV). They plotted a surprise party, and believe it or not 25 people can keep a secret.

Meanwhile up at Diode, Plant Manager Jim Diller has really been a busy man personally delivering five-year awards. Here he is with Gwen Brooks of Special Assemblies who marked her fifth year with the Semiconductor division in January.

There were more than 50 five-year anniversaries in the Semiconductor and Instrumentation divisions in January, and in February some 40 or more. Guess that's a sign that both groups are getting up there in age.





## Moving Up

JOSEPH ABOUSLEMAN moved up from Mechanic to Senior Mechanic in the Plant Maintenance Department at Mountain View.

JIM BRYSON is now managing Instrumentation's Systems Development. Jim has played a big role in the development of Instrumentation's 4000 systems.

MAYNARD CAMPBELL was promoted to Senior Mechanic in the Plant Maintenance Department at Mountain View.

BARRY FIDELMAN, previously an NPN Product Marketing Engineer, joined the PNP group and will be working with Eastern Military and Eastern and Central Computer salesmen.

CLINTON HAINES is now a Senior Mechanic in Plant Maintenance at Mountain View. Clint was formerly a Mechanic.

RICHARD LaPOINTE was promoted from Mechanic Trainee to Mechanic in Plant Maintenance at Mountain View.

JERRY LARKIN has been named to the position of Product Manager of Large Scale Integration and Memory Elements. He was formerly Custom Circuits Manager.

CHESTER LAUCHNER advanced to Senior Mechanic from Mechanic at Mountain View.

CLOYD MARVIN just took over as Digital Integrated Products Manager. He will be responsible for coordinating product position in Digital Circuits.

NOEL MONTAGNON has been appointed to head the Systems Research activities in Instrumentation Research. Noel was formerly Manager of Systems Development.

JIM MOSLEY moved up to Senior Mechanic in Plant Maintenance at Mountain View.

FRANK RITTIMAN, formerly of Diode, joined the Digital Products Marketing group at Mountain View as Product Marketing Engineer.

RONALD H. SMITH, was named Design Engineer at South Portland. Ron has been with Fairchild Semiconductor since December 1963 when he started work as a Designer.

BRAD WILSON is now a Senior Mechanic in Plant Maintenance at Mountain View, having advanced from the position of Mechanic.

## New Faces

FRED ALEXANDER is now working as DVM Product Engineer at Instrumentation. He formerly worked with Cimron and Wavetech.

JOE BROWN is NPN Product Marketing Engineer working with Consumer and Computer/Industrial accounts. Joe was with Lockheed Missiles and Space Division before coming to Fairchild.

PRAVIN J. DOSHI is working at R & D as Senior Engineer working on Integrated Circuit design and development. Originally from Rajkot, Gujarat, India, he previously worked for Honeywell EDP.

CLIFFORD E. HEINITZ has been named to the position of Production/Materials Control Manager for the South Portland facility. Cliff was formerly Operations Director of National Semiconductor Corporation where he was responsible for the plant activities of affiliates in Europe and Hong Kong.

RAY JODOIN, formerly of Motorola in Phoenix, joined the Digital Products Marketing group as a Product Marketing Engineer.

RON MELVIN joined Instrumentation as DVM Product Engineer. Ron previously worked with Lawrence Radiation Lab and E. I. Dupont.

MIKE NOBLE recently joined Industrial Relations (MV) as a Personnel Assistant. A graduate of San Jose State, Mike formerly worked for CMCR, a Marketing Research firm.

ROY STEVENSON is a new Sales Engineer with the Semiconductor Division. He will be working out of the Orlando, Florida sales office. He was formerly an Assistant Engineer with the Illinois Institute of Technology Research Institute.

SAM TOY joined Instrumentation as Amplifier Product Engineer. He worked previously with the University of California and Beckman Instruments.

RICHARD E. TREVISAN joined Fairchild Instrumentation as Purchasing Agent, responsible for all phases of Purchasing. Dick was previously employed by the western operation of Sylvania Electronics Systems and Shockley Transistor Corporation. VITALI VIZIR joined Semiconductor (MV) as an Engineer in Silicon Material. Born in the Ukraine, he previously was employed by Metallurgie Hoboken, Antwerp, Belgium.

## Five-Year Service Awards

Steve Ammann	Instrumentation
Dorothy Beck	MV
Mildred Behrman	MV
Marrieta Bowman	Diode
Lois Cates	MV
Margaret Ernst	MV
Nancy Fierro	MV
William Fockelmann	MV
Chuck Fraker	MV
Tina Gemignani	MV
Marget Gurumlai	MV
Charles Haba	MV
David Hoefler	MV
Yvonne Huhtula	MV
Arlene Jackson	MV
Perry Kerby	Controls - MV
Betty Kerr	Diode
Ben Kimura	Instrumentation
Caroline Lujan	MV
Orville Lykins	MV
Margaret Madrid	MV
Ted Marlborough	MV
Larry Miyamoto	Instrumentation
Ann Norris	MV
Roy Parlette	Instrumentation
Betty Philyaw	MV
Hilda Perry	MV
Josephine Quinlan	MV
Ruby Rivera	MV
Susie Rivera	MV
George Ross	Diode
Michael Seyffert	MV
Marshall Smith, III	MV
Mary Smith	MV
Bob Southwick	Instrumentation
Marlene Souza	MV
Lilly Stein	MV
Velma Teixeira	MV
Lillian Tonis	MV
Ching Tseng	Instrumentation
Emilie Westhoff	Diode
Bill Whitcomb	Instrumentation
Judy Wood	MV

## Leadwire

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Leadwire

# What's New

We've had some very exciting changes here at Fairchild this last month.

Tom Bay is back to take charge of Fairchild Semiconductor. An MIT graduate, Tom is the man responsible for making Semiconductor's first sale—\$1500 worth of FT-4000's (you oldtimers will remember them as 2N696's) to IBM in 1958. Director of Semiconductor Marketing for the first eight critical years of our trail-blazing existence, and General Manager of the Instrumentation Division for the last year, Tom is eager to set new records in new directions.

Equally exciting is Vic Grinich's challenge as the new General Manager at Instrumentation. He feels a bit like David setting out against Goliath, but I don't know anyone with a stronger arm or better air. It was in Vic's garage that eight of us started Fairchild Semiconductor, and he has always been a key man in the research and development programs that have made us leaders in the industry.

Instrumentation and Semiconductor are complementary activities; each giving the other an advantage in serving the best interests of our customers. It's a sign of our strength that we have people available to bring into these jobs who are thoroughly familiar with the problems and promise of both Divisions.

Our overall goal is to remain a state-of-the-art leader in the electronics industry on a volume basis. That means we have a lot of new territory to explore. We're going to need a lot of new ideas, new approaches, new techniques, and new people to supplement what we have. But, more about our specific goals next month.

In the meantime, I want to emphasize that the strength we need to reach our goal comes from you. Our only resource is the good people who work for Fairchild. Only people act, invent, inspire, produce, and get things done.

Fairchild has always been proud to have people like Tom Bay and Vic Grinich. We are proud of having people like you to back them up.

*Bob Joyce*



Tom Bay was one of the first employees hired by Semiconductor when he joined the company in December 1957. Prior to that, he had worked for Fairchild Camera and Instrument Corporation as a sales engineer in the Midwest and then was appointed Marketing Manager of Fairchild Controls Corporation. At Semiconductor, he became our first Marketing Manager, a post which evolved to Director of Marketing as the company expanded its product lines. In November 1965 he was named General Manager of the Instrumentation Division, a post he held until his recent appointment as General Manager of Fairchild Semiconductor.



Vic Grinich was one of the original founders of Fairchild Semiconductor; in fact, it was in his garage that the company started. From Semiconductor's beginning Dr. Grinich has contributed much relating to device design, characterization, and applications. He served as Associate Director of Research and Manager of the Applications Department until the formation of the Instrumentation Division. In December 1965 he was appointed Technical Director for the Instrumentation Division, and it was he who established a research department for the investigation of future electronic test equipment requirements.



Don Yost now assumes the duties of International Operations Manager in addition to his responsibilities as Director of Domestic Operations. Don joined Semiconductor in January 1960 as Works Manager of the San Rafael plant. He moved to Mountain View as Transistor Plant Manager in July 1962, and in May 1965 he was named Domestic Operations Manager for the entire Semiconductor Division.



John Sentous, new Manager of Integrated Circuits, started with Semiconductor as a production supervisor in June 1959. He moved on to become Process Engineer and Small Geometry Products Supervising Engineer. In June 1963, he became Planar Product Manager, and in June 1966 John took over as Operations Manager of Discrete Devices.



Will Steffe replaces John Sentous as Manager of Discrete Devices. Will came to Fairchild in January 1963 as a Senior Engineer working in microcircuit manufacturing. Later that year he moved to R & D to work in the design and development of new silicon devices. He was made a member of the R & D technical staff in November of that same year. Will became Head of the Transistor and Diode Development Section in January 1964 and Manager of Device Development in January 1965.



Jack Kabell takes over for Will Steffe as Manager of Device Development at R & D. Jack came to R & D in October 1960 and since that time has served as Manager of the Transducer Department. During his stay he supervised the development of photodevices of various kinds.



Ben Anixter, new Marketing Manager for Integrated Circuits, started with Semiconductor in June 1960 as an applications engineer at Diode. He has worked as Special Product and Micrologic Sales Liaison, Transistor Senior Product Engineer, and in field sales. In February 1965 he was appointed Transistor Product Marketing Manager and in December 1965 was named Discrete Devices Product Marketing Manager.



Ward Gebhardt moves up to become Discrete Devices Marketing Manager. Ward started with the Semiconductor Division in February 1965 as Diode Product Marketing Manager, and last October he was appointed Manager Module Products Marketing.

# Viva!

## Electro-Mex!

"Festividad," or gaiety; that's Tijuana, all right. Bargain shopping, bullfights, racing, jai-alai, and an exotic nightlife. A city of more than 300,000 persons, Tijuana rightly claims the title of being the most visited city in the world. Unbelievably, nearly 80,000 tourists flood the city's streets and cabarets every weekend.

Just two blocks from the center of this supercharged activity is a more industrious undertaking, for the people of Tijuana must work at things other than tourism. Electro-Mex De Tijuana SA, a Fairchild Semiconductor subsidiary, is a pioneer in Mexico's electronics industry. Established last year in June, the company is also an early result of an industrial development program sponsored by the Mexican government to raise the standard of living in northern border cities.

Electro-Mex was a mere idea last April, but by July the first final sealed power unit came off the line, and by year-end two million units had been manufactured. In just nine months the plant has grown from a dirt floor to a modern manufacturing facility housing the production of small signal transistors, power transistors, silicon controlled rectifiers, and diode components.

The nearly 100 Electro-Mex employees worked this miracle as they quickly learned new job skills to match new production needs. To Martin Oudewaal these people have made the company's outstanding performance possible. And, to Mexico they are pointing a way to "prosperidad," and that means prosperity. **Bravo!**

Festividad, alegría, eso es Tijuana. Gangas, corrida de Toros, carreras de caballos, Jai Alai, y una exótica vida nocturna. Una ciudad de más de 300,000 personas. Tijuana recibe merecidamente el título de ser la ciudad más visitada del mundo. Increíblemente cerca de 80,000 turistas inundan las calles y centros de diversión de la ciudad cada fin de semana.

A solo 2 cuerdas del centro de esta sobre cargada actividad se lleva a cabo una tarea más industriosa, ya que la gente de Tijuana debe de trabajar en otras cosas distintas al turismo. Electro-Mex de Tijuana, S.A., subsidiaria de Fairchild Semiconductor, es en México modelo en la industria electrónica. Establecida en junio del año pasado, la Compañía es también un resultado inmediato del progreso del desarrollo industrial patrocinado por el Gobierno Mexicano para elevar el nivel de vida de las ciudades fronterizas.

Electro-Mex era solamente una idea el pasado mes de abril, y para el mes de julio siguiente la primera unidad de fuerza sellada salió de la línea y a fines de año dos millones de unidades habían sido producidas. En solo nueve meses la planta ha crecido de un piso de tierra a una moderna planta manufacturera que da alojamiento a la producción de transistores de señal pequeña, transistores de fuerza, rectificadores de silicio controlado y componentes para diodos.

Casi un centenar de empleados de Electro-Mex han hecho este milagro y han aprendido y desarrollado rápidamente nuevas aptitudes para cumplir con las necesidades de producción. En la opinión de Martin Oudewaal, esta gente es la que ha hecho posible el notable desarrollo de la Compañía. Para México, esta gente está enseñando el camino a la prosperidad. **Bravo!**

1 Elodia Ramirez and Otilia Garcia applying a dielectric on the high voltage power x-tors to prevent arcing of the units.

2 Federico Sanchez, installation mechanic, adjusting final seal machine.

3 Alfonso Velazquez, line mechanic, Maria Amada Amezcua and Anita Romero, lead bonders.

4 Martin Oudewaal with his staff. Standing from left to right, Roberto Peralta, Lee Hill, John Crosby, Enrique Mier y Teran.

5 John Kunselman, staff member, instructing Juan Jose Plascencia and Ramiro Zuñiga, both line supervisors in die attach techniques. Operator is Socorro Gonzales.

1 Elodia Ramirez y Otilia Garcia aplicando un dieléctrico en los transistores de fuerza de alto voltage para prevenir el arco.

2 Federico Sanchez, especialista de instalación, ajustando una máquina de sello final.

3 Alfonso Velazquez, especialista en equipo, revisando las soldadoras ultrasónicas, operada por Ma. Amada Amezcua y Ana Romero.

4 Martin Oudewaal y su grupo de asistentes. De pie de izquierda a derecha: Roberto Peralta, Lee Hill, John Crosby y Enrique Mier y Teran.

5 John Kunselman, un asistente del Sr. Oudewaal, instruyendo a Juan Jose Plascencia y Ramiro Zuñiga, ambos supervisores de línea, en la técnica de la soldadora de dado. Operadora Socorro Gonzales.



1



4



2



5



3

# Order Processing



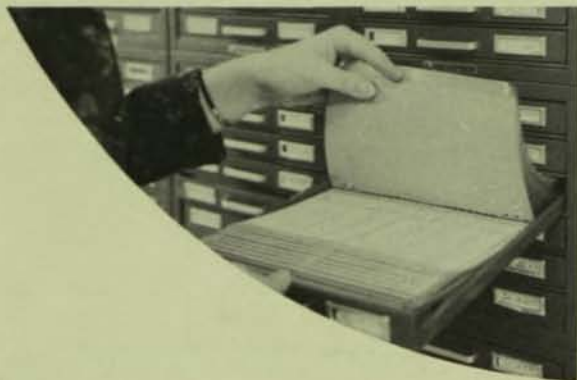
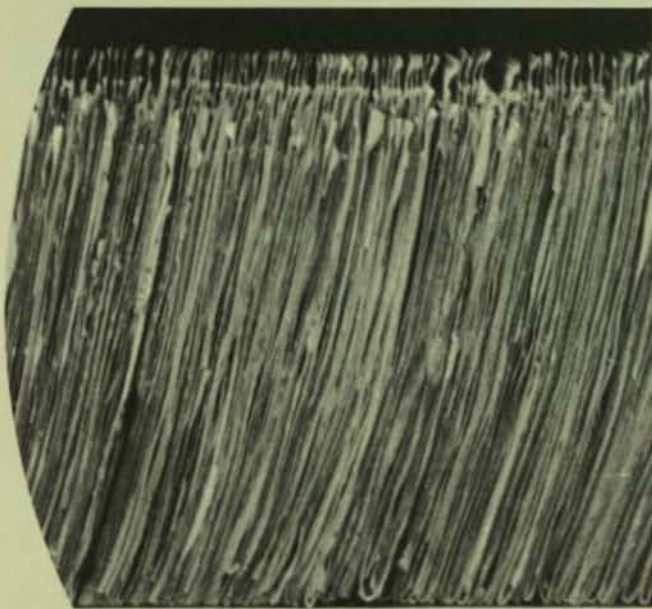




Round and round it goes; where it stops nobody knows. It's not an oversized roulette wheel, it's not an enlarged long-playing record, it's not a cage for a go-go girl, it's not the revolving pavilion for next year's Christmas tree.

It's the hub of Order Processing, the newly acquired Acme Rotary Centrac, and when it stops, it's right where the people in Order Processing want it to stop. It contains all the paperwork for a sales order, and it's made the filing and consequent location of open orders (salesmen's orders until delivery is made and the customer is satisfied) easy to control. And, that's what Order Processing is all about.

Order Processing is part of Marketing Operations under the direction of Carl Steffens. It's 28 people, and their job is to receive orders and to enter them accurately and timely into the computer system so the wheels of production will begin to turn. If the Inquiry section receives customer and salesmen inquiries, Order Processing makes any changes in the order as requested. All returns, credits, and changes are recorded here and the order is put back into that magnificent revolving machine. The order's right at their fingertips, and with 7000 orders to control they can't afford to have it any other way.



# Ye Olde Instrumentation

There is in the land of California a company producing unique silicon devices (semiconductors, if you prefer). This company, Fairchild Semiconductor, wanted to produce the best devices in the world, and so a very special department was established in the year of 1960 to test these devices and to make sure they could withstand almost everything under that warm California sun.

The 25 or so people of this department, appropriately called the Instrumentation Department, built the best test equipment to test the best devices. Activity progressed at a rapid pace. Data logging systems for QA and Hi-Rel, digital readout Beta testers, and complicated Go/No-go test systems were produced, until the Instrumentation Department literally burst at the seams.

"We need more room" came the cry from the department, and Semiconductor customers were beginning to shout "We need your test equipment." So, in 1962 the Instrumentation Department and its 75 people moved to 844 Charleston Road

in Palo Alto, and Semiconductor's test equipment entered the outside market.

Several very good years passed and in April of 1965 a very important decision was made concerning this department. Everyone thought it was time to form a separate Instrumentation Division devoted solely to the development and production of testing equipment. So that's what happened, a new division of Fairchild Camera and Instrument emerged and it encompassed the recently acquired DuMont instrumentation group in New Jersey, too. Shortly thereafter as more room was needed, Instrumentation's production and management staff moved to 475 Ellis Street in Mountain View and Research and Development spread out in the Charleston Road Plant.

From 25 people to 500; from a small department to a division; and once again Instrumentation is on the verge of another big move — to a very permanent and hopefully large enough home. Which all proves that "nothing succeeds like success."

# Ye Olde New Instrumentation

(or where they're really at)

In these days of hippies and teenyboppers, you got to grow. You got to be with it, man, and in the case of Instrumentation, it's like they're movin'.

Well, in more readable language, Instrumentation's getting a new pad. Ground breaking ceremonies were held February 21st, and a 155,000 square foot plant is planned for a 21-acre construction site located in Sunnyvale (just south of Mountain View). The single story structure will bring the division's research and development, engineering, production and management facilities together under one roof. The plant is expected to be completed this fall.

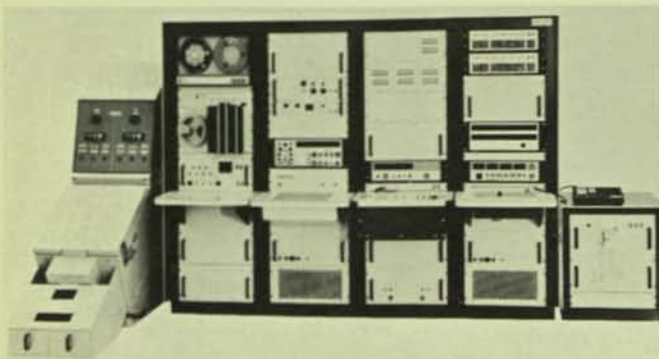
And, that's not all that's new. Instrumentation's just opened a new regional sales and service office in Los Angeles. The L.A. office will sell and service the division's swingin' lines

of digital voltmeters, oscilloscopes, and groovy curve tracers. Sharing this building on West Imperial Boulevard is Instrumentation's new Semiconductor Test Facility — the country's first integrated circuit and transistor test facility. This operation brings the cost of testing within the reach of small laboratories and manufacturers who can not purchase all the sophisticated equipment required. The facility will also help large volume users keep their cool during peak load periods. Backbone of the facility is Instrumentation's Series 4000M Automatic Integrated Circuit Test System.

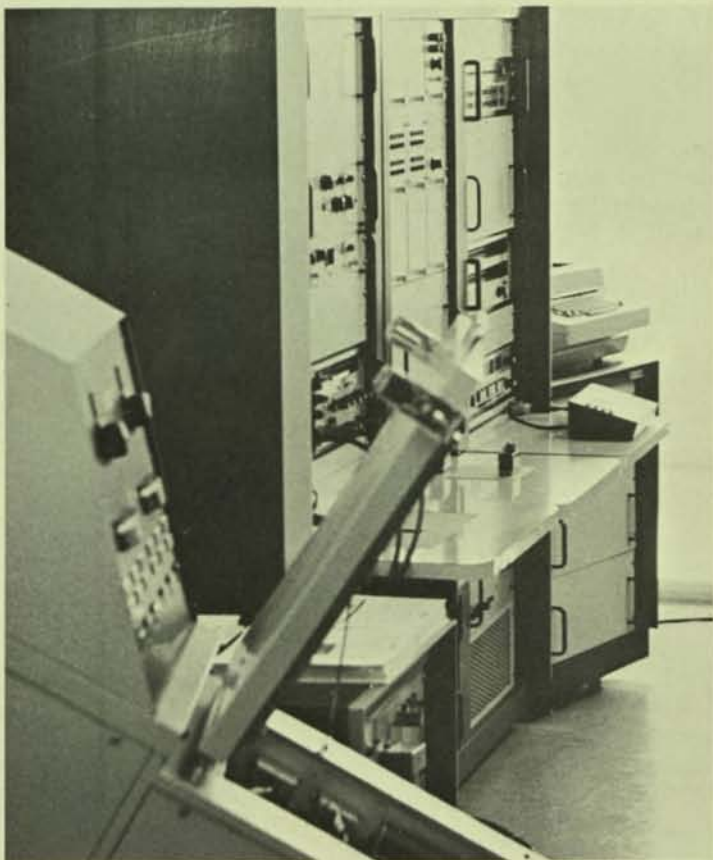
That piece of equipment is plugged in to perform DC, switching time, environmental and linear tests as well as data and program logging. And, like that's what's happening outside the world of teenyboppers and hippies, but what's happening very much inside the world of Instrumentation.



Dr. Victor Grinich, one of the founders of Fairchild Semiconductor and Instrumentation's General Manager; Tom Bay, Fairchild Semiconductor's General Manager; Gordon Miller, Sunnyvale's acting City Manager; and Oscar Liebert, President of the Sunnyvale Chamber of Commerce, officially shovel the first load of dirt from the site of Instrumentation's new 155,000 square foot plant which will be located at 974 E. Arques in Sunnyvale.



Fairchild Instrumentation's Series 4000M Automatic Integrated Test System is the nucleus of Instrumentation's and the nation's first integrated circuit and transistor test facility located at 5410 West Imperial Highway, Los Angeles.



# The Space Age Semiconductor

from an article by L. H. Bieler (Writer, Marketing Services, M.V.)

*"Lunar Orbiter Sends Back Best Pictures Yet" . . . "New Moon Photos of Landing Site" . . . successes we are coming to take for granted.*

But, did you know that all the integrated circuits on Lunar Orbiter were made by Fairchild Semiconductor? More than 1000 IC's in each unit are used in flight control and computers.

In the Gemini Series, 40% of all components were made by Fairchild. In the Minuteman program, all the transistors came from Fairchild; and in the Apollo program, the main guidance computer is built with Fairchild parts—over one million RTL units. In a refined version of the original Apollo computer dual 3-input RTLs were used rather than single 3-input RTLs. This change enables a smaller computer to be used, and herein lies the basis for recent advancements in U.S. space programs.

A computer large enough to handle Project Apollo, if made with vacuum tubes, would be as big as a warehouse. All the power generated by Hoover Dam would be required just to cool it. Even at that, this imaginary computer would not perform to necessary standards.

For example, the speed of a computer is dependent mainly on the distance an electric impulse must travel through the circuitry. In our warehouse computer, with its miles and miles of wiring, facts stored in memory (second floor, northeast corner) would be out of date before they could be located and transferred to the central processing unit (ground floor, west annex) for use in real-time space monitoring.

Using Gemini's on-board computer as an example, the significance of progress in electronics becomes even more impressive. In the first place, only recently did the United States develop a rocket engine with thrust sufficient to orbit an object as heavy as a pre-semiconductor computer. And even these antiquated machines could never have done the job—their memory and speed were insufficient to handle the myriad calculations involved in a mid-course maneuver. Besides, the power supply and critical measuring and transmission equipment would have had to follow in another rocket.

Even the transistors of 1957, while suitable for portable radio and other limited applications, could not have been used in such NASA projects as Apollo and Surveyor. For germanium transistors, then in use, could not withstand high temperatures without danger of burn-out and at the same time allow the degree of exactitude and stability accepted as commonplace in all present space-age applications.

The extremes of temperature in outer space necessitate a much greater operating range. The solid-state devices in Surveyor I, for example, had to function in the extreme cold of the lunar night and continue without burning up during the lunar day. Similarly, while no industrial manufacturer expects to drop his product from a second-story window, equipment for space exploration or combat conditions must be able to withstand such an impact.

Data transmission in itself is another story. The development of semiconductor devices has led to miniaturization of almost all communications and other signal-processing equipment. The results are obvious with respect to U.S. space programs and equally significant are the ground-based accomplishments.

Solid-state reliability stands behind all these exceptional space-age advancements, and Fairchild reliability records are indeed impressive. They have led to the wide use of Fairchild devices in major missile and satellite programs where performance has proven the reliability expressed in test records. Major programs using Fairchild products include Poseidon, C-3 Aircraft, Polaris, LEM, Pioneer, Syncom, Surveyor, Lunar Orbiter, Advanced Minuteman, Apollo, Gemini, Saturn, Manned Orbiting Laboratory, Sprint, Loran-C, IHASS, and Nimbus.

On the horizon is a great unknown—the Micromatrix™ large-scale array. These future monolithic circuits, combining dozens of circuits and hundreds of transistors on a single chip of silicon, are currently under development in our R & D labs. How soon they will emerge and how they will be utilized remains to be seen. Their promise, however, is just short of fantastic, and they will surely outdate today's space-age accomplishments by a million light years.



Photo by Cliff Livermore (Applications, M.V.)



Another aspect of our international operations is SGS, or Societa Generale Semiconduttori SPA, owned equally by

Fairchild Semiconductor and two Italian firms (Olivetti and Teletra). The company is headquartered in Milan, Italy, and is the largest Italian manufacturer of semiconductor devices. Serving the European market, SGS subsidiaries operate factories in Scotland, England, France, Sweden, and West Germany. Field sales offices are located in London, Paris, Stockholm, Milan, and Stuttgart. The entire operation employs around 4000 people.

SGS periodically exchanges staff members with Fairchild Semiconductor to assist in the world marketing of both companies'

products. Newest SGS man on the U.S. scene is Guido Zargani, SGS Liaison. Eight years with SGS, Guido is replacing Colin Kidd at Mountain View. Colin's returning to Europe and new SGS responsibilities.

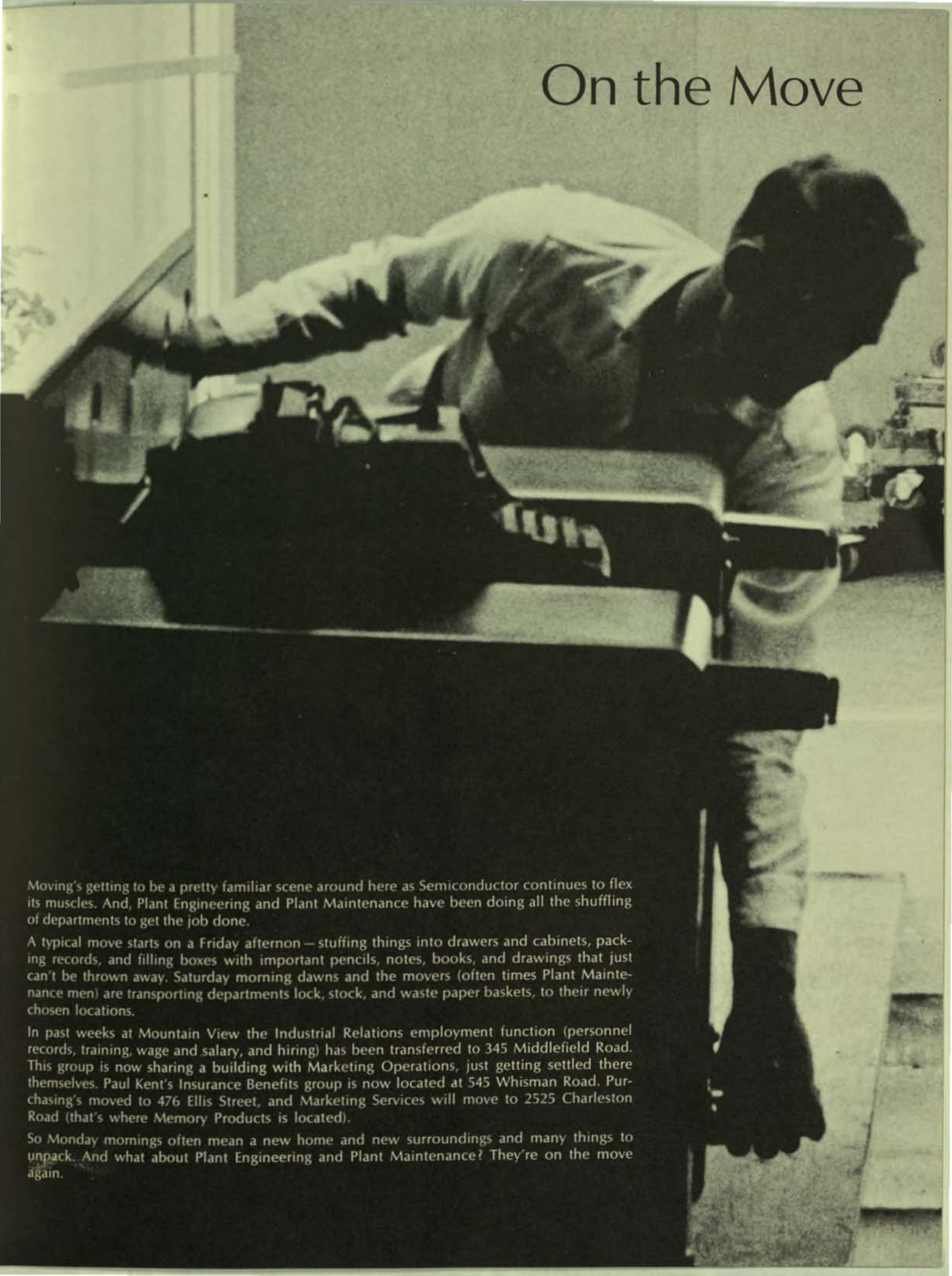
Guido hopes to continue the beneficial exchange of technical information that enables both companies to improve international production and marketing activities. Guido, himself, knows the benefits of this exchange concept. After several years as a process engineer with SGS he was sent to Mountain View in 1961 and trained on Planar\* techniques. He returned to Milan and set up the first Planar\* line there.

Just recently Plant Manager in England and then Group Plant Manager for all SGS operations, Guido returns to Mountain View hoping to promote similar exchanges of ideas. He also hopes to make each one of us more familiar with what's behind those letters, SGS.



\*Planar is a patented Fairchild process.

# On the Move



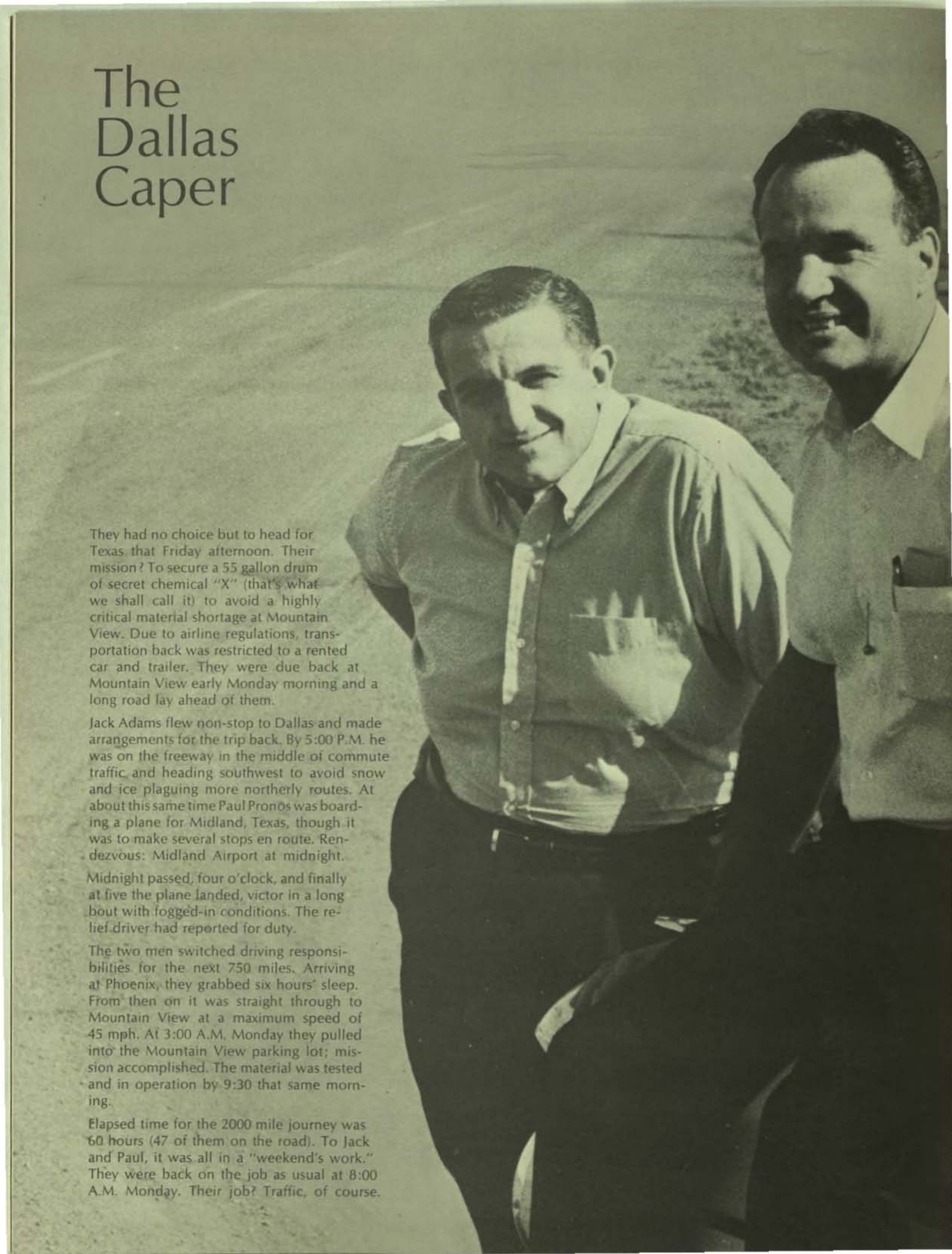
Moving's getting to be a pretty familiar scene around here as Semiconductor continues to flex its muscles. And, Plant Engineering and Plant Maintenance have been doing all the shuffling of departments to get the job done.

A typical move starts on a Friday afternoon — stuffing things into drawers and cabinets, packing records, and filling boxes with important pencils, notes, books, and drawings that just can't be thrown away. Saturday morning dawns and the movers (often times Plant Maintenance men) are transporting departments lock, stock, and waste paper baskets, to their newly chosen locations.

In past weeks at Mountain View the Industrial Relations employment function (personnel records, training, wage and salary, and hiring) has been transferred to 345 Middlefield Road. This group is now sharing a building with Marketing Operations, just getting settled there themselves. Paul Kent's Insurance Benefits group is now located at 545 Whisman Road. Purchasing's moved to 476 Ellis Street, and Marketing Services will move to 2525 Charleston Road (that's where Memory Products is located).

So Monday mornings often mean a new home and new surroundings and many things to unpack. And what about Plant Engineering and Plant Maintenance? They're on the move again.

# The Dallas Caper



They had no choice but to head for Texas that Friday afternoon. Their mission? To secure a 55 gallon drum of secret chemical "X" (that's what we shall call it) to avoid a highly critical material shortage at Mountain View. Due to airline regulations, transportation back was restricted to a rented car and trailer. They were due back at Mountain View early Monday morning and a long road lay ahead of them.

Jack Adams flew non-stop to Dallas and made arrangements for the trip back. By 5:00 P.M. he was on the freeway in the middle of commute traffic and heading southwest to avoid snow and ice plaguing more northerly routes. At about this same time Paul Pronos was boarding a plane for Midland, Texas, though it was to make several stops en route. Rendezvous: Midland Airport at midnight.

Midnight passed, four o'clock, and finally at five the plane landed, victor in a long bout with fogged-in conditions. The relief driver had reported for duty.

The two men switched driving responsibilities for the next 750 miles. Arriving at Phoenix, they grabbed six hours' sleep. From then on it was straight through to Mountain View at a maximum speed of 45 mph. At 3:00 A.M. Monday they pulled into the Mountain View parking lot; mission accomplished. The material was tested and in operation by 9:30 that same morning.

Elapsed time for the 2000 mile journey was 60 hours (47 of them on the road). To Jack and Paul, it was all in a "weekend's work." They were back on the job as usual at 8:00 A.M. Monday. Their job? Traffic, of course.



News from  
around the  
world of  
Fairchild

# Diode

Swing shift bowling is literally in full swing. Beginning at 1:30 every Friday night the league started the season with 30 bowlers forming 10 teams... Meanwhile the day people's bowling league started its second half with a newly formed team, the Misfits (George and Alice Parrish), taking a fast lead. Hot on their heels are the Spoilers (Karen Rich and Howard Chamberlain). More bowlers, especially men, are needed to fill up the league... Diode is entering a team in the Fairchild Corporate Bowling Contest and will be sending a team to the Marin County Bowling Association tourney... Skin divers should circle March 25th on their calendars. That's the date of the Skin Diving Club's first outing... 141 Diode employees and their families boarded four chartered busses at 4:00 A.M., January 14th for two days of skiing at Heavenly Valley. The busses arrived at Stateline at 10:00 A.M., but without Margaret Queen who missed the bus. After dropping luggage at the Holiday Inn, the skiers took to the slopes and the bunnies to the clubs. The trip was such a big success that another is planned for the weekend of March 18th... About 100 employees and their families took in a hockey game between the California Seals and the Seattle Totems at the Oakland Coliseum. In spite of poor hockey, the Fairchild group had a good time and some members found revenge by rooting the Seattle team on to victory... The Diode "round ball men" (that's basketball team) dribbled their way into the league cellar, losing every game this season. Team Captain Mike Feldtman cites lack of practice and lack of height in key positions as the two main reasons. What they wouldn't do for a Rick Barry... The sound of spring training is in the air as the softball team gets ready for the coming season... and, sports fans, that's it from Diode.



Under sunny skies and in powder snow, Ski Club members and families schussed their way through a great weekend of fun. 77 people made the trip to Alpine Meadows and Slide Mountain February 10-12. Nancy Griffith was chairman of a pot-luck dinner on Saturday night, just one highlight of a weekend that turned many a beginning skier into a dedicated enthusiast... Jane Morris was the first at R & D to receive the newly designed 5-year pin. But still another "first" awaited her before the day of February 10th was over. She became a grandmother for the first time, too... Ed Duffek and Ernie Armstrong recently had four chapters of their upcoming book published in *Printed Circuits Handbook*... Dr. W. S. Carter shared the "Babbage Award" for his paper, "Large Capacity Magnetic Film Stores," with co-author Dr. Peter Bonyhard. The paper, on the design and use of electronic computers, was considered the most outstanding contribution submitted to the Institution of Electronic and Radio Engineers Journal. The "Babbage Award" was named after Charles Babbage, a British mathematician who died in 1871 and who is often referred to as the "father of the computer"... Two members of the R & D technical staff recently had the opportunity to speak to the Electronic Engineering department of the University of California, Berkeley. Dr. Herb Kroemer spoke on "Gun Effect—Negative Conductivity in Semiconductors" and Dr. Bruce Deal in a later lecture explained "Service Properties of Passivated Silicon; Si-Si O<sub>2</sub>, Si-Si 3N<sub>4</sub>." Dr. Deal's talk consisted of material from all past seminars given at the R & D facilities... Art Engvall's 79 led all the golfers at February's outing at Fairway Glen. Ladies' low net went to Dana Goodrich (75). Bob Hewitt went around in the fewest putts (34). Next outing is scheduled for March 12th at Del Monte Golf Course in Monterey. Don Ramsey, Lynn Clark, and Sam Uyeda (retiring Rec Council members) gave new council members some good words of advice and lots of encouragement at a recent workshop luncheon. New members are Lil Peterson, Avis Cherry, George Steres, John Gundershaug, and Chet Gunter.

# Research & Development



# Instrumentation

The Spring Dance has been set for April 1st at the Plaza Bowling Lanes in San Jose. Bowling, buffet dinner, pool, bingo, dancing, and a wee bit of drinking in the Safari Room should please everyone. Cost to employees and one guest is \$4 per person. Other guests will have to pay \$5. April 1st is April Fools' Day, but the Rec Council says this is for real... What a way to spend a vacation. Ron Swartz had hoped to do lots of skiing at Lake Tahoe during his week's vacation. Turned back by the highway patrol because of icy roads, he waited it out only to find no electricity, no heat, no chairs working, and a blizzard forecast. As the final blow, rain washed out any hopes he still had left. Ron finally gave up and vacationed at home... B-League softball started spring training February 18th according to manager Dale Hill and assistant manager Don Atkins. This is the second year Instrumentation has fielded a team. Last year the team took third place honors in league play... Instrumentation's Recreation Council is serving up a busy schedule of events for the 1967 year. Year-round activities include ping-pong, hiking, scuba diving, an arts and crafts club, a cooking club, a sports car club, a fishing and hunting club, volleyball, billiards, and a bridge club provided enough employee interest is shown. Other activities begin in the following months:

- March Intramural Basketball
- April Intramural Softball
- May Women's Softball, Camping Club, Tennis Club, Bus Trip to Giants Baseball Game
- June Summer Bowling, Water Ski and Boating Club, Swimming Club, San Francisco Bay Cruise
- July Bus Trip to Reno
- October Winter Bowling, Golf Tournament
- November Bus Trip to Professional Football Game

That's not including the summer picnic and the Christmas Dance, so be prepared for a busy year.

# Mountain View



This man knows the way to a woman's heart. Jack Grant, QC Engineer and chef extraordinaire, had been threatening for months to treat his girls to a real, home-cooked meal. Honoring his promise, Jack also invited Paul Harwood, Military Products; Bruce Galbraith, QC Foreman; and Dan Parker, QC Section Head to join the girls at his Friday noon luncheon. (It was also Dan's birthday.) They all lived, and are pressing Jack for a repeat performance... Something new in five-year awards, a mother-daughter combination. Joyce and Betty Philyaw will both be sporting five-year pins by the end of March. Joyce, Die Attacher at the Transistor Plant, started to work shortly after her daughter, Betty, who works for Murray Siegel in Customer Applications. Joyce had never worked before she started at Fairchild. Mother of eight children (and that's work enough), she wanted something to do as all of her children were grown-up. Betty suggested she come to Fairchild, take some of the tests and see what would happen. It happened all right, and that was five years ago... Intramural Basketball begins March 29th and will continue every Wednesday evening until May 31st. Four games will be played every night. A seven game schedule is planned with an eight team round-robin tournament winding up the season. Participating teams are from R & D Applications, Materials, Transistor-Diode-Chemix, LIC, CIC, Instrumentation, and Materials Manufacturing.

# From the Field

Alan J. Mattal, sales engineer from the Elmwood Park office, spoke to the Central Illinois Section of the Institute of Electrical and Electronics Engineers. Military sales specialist for Semiconductor in the Chicago area, he spoke to IEEE members on "Microcircuits, Past, Present, and Future."

# Salesman of the Month



Jess Cunningham joined field sales in June 1964 and has been making a name for himself in the South Eastern Military Market ever since. In 1966 his bookings were in excess of \$1.5 million, shipments were in excess of 120% during all quarters, and distributor shipments to Westinghouse were continually rising.

Then came 1967. Jess's bookings this year to date totaled more than \$600,000. One order was for 75,000 DTL 930 series. In January alone Valley/Westinghouse distributor shipments exceeded \$100,000. This is the highest the College Park, Maryland, office has ever obtained.

It's no wonder Bob Valentine, Military Regional Sales Manager, feels "Jess has given us a swinging start in the new year." And no doubt Jess wouldn't mind delivering a year of January's to the College Park office.

## New Faces

**BERYL CATT** joined Semiconductor as Contract Coordinator in Government Contracts. Before coming to Fairchild she worked as a free-lance technical typist. Beryl was with the United States Navy for twelve years and now holds the rank of Lt. Commander, U.S.N. (Ret).

**ALLEN EDWARDS** recently joined the San Rafael group as a First Line Supervisor in the Module Department. He was previously Production Manager with the Fire Drum Corporation of San Francisco.

**CLIVE STEWART GOODWIN**, an honor student in Metallurgy from Nottingham University, England, is a new Line Supervisor at Diode.

**PETER GUEST**, previously employed by the Marconi Company in England, has joined R & D as a Development Engineer.

**WILLIAM H. HAYDL** is now working at R & D as a member of the technical staff. He was previously employed as a Research Assistant at the Stanford University Microwave Labs.

**WILLEM KOHLER** joined R & D as a Senior Engineer. A native of the Netherlands, he was with the Battelle Memorial Institute in Geneva, Switzerland.

**JEFFREY LANNIN** is a new Engineer with R & D. He recently received his Master's Degree in Physics from the University of Illinois.

**ANDREW ROBERT MOLOZZI** recently joined the R & D technical staff and will be studying the radiation effect on Linear Integrated Circuits. Before coming to Fairchild, he was with the Canadian Defense Research Board for ten years.

**ERWIN J. OSWALD** is working at R & D as an Engineer. He came to the United States from Switzerland where he most recently worked for Transistor AG Zurich Swiss.

**NICKOLAS VRIONIS**, who just recently received his Master's Degree from San Jose State, joined Semiconductor as an Applications Engineer. Before coming to Fairchild he was with the U. S. Naval Radiological Defense Lab as an Engineer.

## Moving Up

**PAUL COOKSON** has been named acting foreman in the Model Shop at Instrumentation. He was previously a Quality Control moderator.

**MARGE FISHER** is new secretary to the head of Operations Services, Dick Fouquet. Marge previously worked as secretary to Semiconductor's Licensee Manager.

**JACK FLOWERS** is the new Plant Controller at San Rafael. He formerly worked at Mountain View as a Senior Accountant, Finance Systems Specifications.

**VIRGINIA GRIGGS** was recently appointed Secretary to the General Manager of Fairchild Semiconductor, Tom Bay. Virginia first joined Semiconductor as secretary to the head of Marketing Services and after temporary retirement came back to Semiconductor as Executive Secretary to the Director of Industrial Relations.

**MARIE HOCHMAN** is now Executive Secretary to the Director of Industrial Relations, Harry Eser. She was formerly Secretary to the Personnel Administrator.

**MARGARET LEDFORD** moves up to become Secretary to the Personnel Administrator, Dave Powell. She was formerly working as Secretary to the Manager of Manufacturing Engineering.

**MANNY ROBLES** has been named Manager of Information Services of Marketing Services. Manny served as *Leadwire* Editor for several years, and most recently was Assistant Public Relations Manager.

**IRENE SCHULER** is now assisting Licensee Manager, Bob Skurko. She has worked in Personnel and Industrial Relations for seven and a half years. Her most recent job was as liaison between the Fairchild Camera and Instrument Insurance Department, various insurance companies, and Semiconductor and Instrumentation employees.

**ROBERT SOUTHWICK** has been promoted to Materials Manager for the Instrumentation Division. Bob will be coordinating purchases and inventories of materials. He was formerly developing and implementing a standardized drawing number system for the division.

# March 5-Year Service Awards

Jan Angotti MV  
 Eric Bergtraun MV  
 Eleanor Brown MV  
 John Bruning MV  
 Robert Caldwell INSTRUMENTATION  
 Mary Cedoline MV  
 Lois Cross MV  
 Gordon Duff MV  
 Hector Franco MV  
 Sabina Garcia MV  
 Betty Gregory MV  
 David Heck MV  
 William Irons DIODE  
 Suzuko Johansen R-D  
 Eileen Johnson MV  
 Marge Killian MV  
 John MacMurry DIODE  
 Guadalupe Martinez MV  
 Ellen Moisant MV  
 Kazuo Okazaki CONTROLS (MV)  
 Martin Oudewaal MV  
 Lois Overman MV  
 Helen Owens DIODE  
 Erna Pena MV  
 Joyce Philyaw MV  
 Inez Riley MV  
 Ruby Scott MV  
 James Strobel MV  
 June Strobel MV  
 Fortunata Talagtag MV  
 Mary Thibodeau MV  
 Elna Threatt MV  
 Olivia Tripp MV  
 Mary Warr MV  
 Norman Zinker CONTROLS (MV)

# Don't Wait, Donate


Mountain View and Palo Alto employees are asked once again to roll up their sleeves and give a pint of blood to replenish the Fairchild Blood Bank. The Bank, originally founded in 1960, benefits employees and their immediate families.

This year's blood drive is set for April 18th, from 8:00 A.M. until 12:30 P.M. in the cafeteria at the Transistor Plant on Whisman Road. Further details will be posted prior to the campaign.

Bonnie Page, R.N., will be handling the campaign. Assisting her at Instrumentation will be Ann Albert, R.N.; at R & D Dana Goodrich, R.N.; and at Mountain View locations Terri Fehn, R.N.; Elizabeth Hanses, R.N.; and Helen Hutson, R.N.

Others working on the campaign include Jonnie Tedrick (Microwave), Bea Custer (Memory), Marty Barcroft (Materials Slicing), Elizabeth Nicolai (Controls), Clare Condella (Military Products), Robert Van Antwerp (Plant Maintenance), Bill Melby (Equipment Design), Alice Washburn (Personnel), Una Brown (Assembly Area), Debbie Winding (Reproduction), Audrey Hoach (Application), and Lois Blalock (Management Information).

So...when the time comes to give; don't wait, donate. Let's make this year's drive a worthwhile effort.



**Will blood be available when you need it?**

Join the Fairchild blood donors drive now!

DATE: April 18th Tuesday  
 TIME: 8 am - 12 pm  
 PLACE: Transistor plant cafeteria  
 DEADLINE FOR SIGN UPS: Friday April 10th

No waiting time—appointments will be scheduled  
Refreshments will be served

The blood is made available to employees and members of their immediate families, free of charge, when needed.

## Leadwire

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# Leadwire 5



# Getting

# down to specifics



In the final analysis every dollar that Fairchild has to spend on wages, raw materials, plant and equipment comes from our customers. That, in a nutshell, is why we must be customer-oriented. And, if we are to continue our past successes, we must remain competitive by being superlative in our line of products.

Our competition is composed of most capable people working hard to win customer orders from us and other suppliers. If we are to remain strong and grow, we must understand our customer and offer the best products on time with competent service. We must come to understand his needs and fill them better than our competition can.

Whether you are in Operations, Marketing, R & D, Finance, Industrial Relations, or Management Information Systems, each of your jobs finally contributes to the service which we can perform for our customers. Our commitment to our customers is to serve them by delivering products to satisfy their needs when they need them, at a competitive price, and we should not lose sight of this objective.

Let's think about that word, commitment. What does it mean? It's a very personal word; it means, "I will accomplish, reply, comply, or perform a specific action by a specific date." It

does not mean, "If everything goes right," or "I'll try," or "If everyone else does their job." Our customers judge us on how well we meet our commitments to them. They judge us as people as well as a supplier, and they place their orders next week or next year in accordance with these judgements.

As we have grown, many of us have become more remote from our customers, and the part we play seems more remote from the actual product delivered to the customer. Yet, our company cannot give our customers the required level of service unless each part works together smoothly. **Thus it is, that in order to make and meet our commitments to our customers, we must first make and meet commitments to ourselves.** It is necessary to make commitments so that we can plan whether to advertise a new product or to deliver new assembly jigs to the assembly line. After the commitment is made, it is important that it be fully understood so the final commitment to the customer is met.

This, of course, is accomplished by people, which is the reason I dealt with that subject last month. But, we must remember that the customer pays the bills — our bills.

*Bob Noyce*

Group Vice President



# 464 Ellis Street

## Site of New Semiconductor Headquarters



It was just a field two months ago. Now it's a very busy construction site, site of Semiconductor's new headquarters to be completed in 1968.

The new building, one of the largest industrial structures on the San Francisco peninsula, will incorporate 342,000 square feet in two levels of office space and a full basement. A two-level garage of 100,000 square feet is also

planned to relieve parking problems. The garage will be located at the rear of the main building.

When completed the new building will house more than 2,000 people including most of the Division's administrative and support personnel. This will release a great amount of

space in present buildings for expansion of production and assembly activities.

Commenting on the new building, Tom Bay, general manager, cited the growth of the Division in recent years. "Our new Division headquarters illustrates vividly the dramatic growth of Fairchild Semiconductor, and it is a tribute to the men and women who have made this growth possible."

Construction of this new building is only one phase of expansion planned for the Division. A 35,000 square foot plating shop at 644 National Avenue in Mountain View is also under construction. Its completion is scheduled for August 1967. Other expansion includes the opening of a new assembly plant in Seoul, South Korea.

We've come a long way in 10 years!



# Planning Ahead

6:30 Saturday morning, a shipment of devices arrives from Hong Kong at San Francisco International Airport on their way to Mountain View for final testing by Commercial Test and Finish.

Operations Planning and Distribution is a newly formed department best described as a divisional production planning and control function. It's a new department, but one made up of many familiar faces. Heading up this group is Charlie Isherwood, formerly production control manager at Diode. Barry Banducci was previously production manager at Shiprock; now he heads up the Production Coordination section. Dave Culley used to be Packaging product manager at Mountain View; he just recently assumed the responsibility for Long-Range Planning. Charlie Arkebauer was formerly production control manager at South Portland; now he's supervising Inventory Control (short-range planning). Jim Stangl was previously epoxy group manager at Mountain View; now he's in charge of Commercial Test and Finish. And, Frank Durand, Reliability Manager for several months, used to be PNP supervising engineer.

These men and their staffs have been brought together to analyze what we are doing now and to plan ahead to what will be required of us next month, next year or five years from now. In addition, the supporting Test and Finish functions ship products to meet today's demand.

Perhaps a better explanation of this new department will be found in a brief look at each of its five sections:

## Reliability Department

Frank Durand's people are concerned with monitoring reliability for all Semiconductor products and running capability studies on new products to provide information on product reliability for product groups and management. They also work out reliability improvement programs, investigate new types of environmental tests, and run failure analyses to determine the causes of defective products. From this group come the actual answers to reliability product difficulties and the elimination of many problems before they happen.



Maxine Oltrogge, Frank Durand, Bruno Beverina, Liz Steadman, Gladys Newman, and André Shaari in Failure Analysis lab.



Charlie Isherwood, head of Operations Planning and Distribution, and distaff members who keep the department running smoothly, Donna Burt, Dorothy Lancaster, Merle Martin, Connie Scheu.

## Long-Range Planning

Dave Culley and his right-hand girl Barbara Barclay are the only members of this section right now. They are concerned with developing long-term production plans to insure that we have the capacity to meet the market requirements a year from now. Their tools are marketing forecasts, plant yield figures, process forecasts and the computer. By comparing present capabilities with expected demands, Long Range Planning also directs which products will be made and where they will be produced.



Barbara Barclay and Dave Culley of Long Range Planning use tab run from computer as one of their many forecasting tools.

## Inventory Control

Short-range plans are detailed by this group, for they handle 90-day plans. Charlie Arkebauer's group receives requests from marketing, schedules customer orders to meet customer needs, and allocates our inventories on a priority basis throughout the division. Transistor activities are directed by Bill Stansbury, Integrated Circuits by Gordon Morrison, and Stan Rothstein heads up an Operations Information group, supporting all departmental functions.



Toshi Sasaki, Olga Miller, Bert Marshall, and Dolores Cannon discuss a material transfer of wafers to be shipped to South Portland, part of Integrated Circuits Production Control responsibilities.



Al Nott, line foreman, Power Transistor Line, goes over some paperwork with Fred Irvine, planner, Transistor Production Control.



Al Sydnor, Dave Oliver, Dave Simpkins, and Phyllis Draper keep things moving in the Commercial Production Control section of Inventory Control.

## Commercial Test & Finish

Jim Stangl's group currently receives devices from Hong Kong and Tijuana. These sealed products are electrically tested, inventoried, marked and shipped according to schedules received from Inventory Control. In the future, all small orders will be packed and shipped by the more than 150 people working in Commercial Test and Finish.



An overall view of Marking and Electrical Test groups, all parts of Commercial Test and Finish.



Betty Horton and Thelma Watson check inventories for devices to fill orders that are shipped from Commercial Test and Finish.

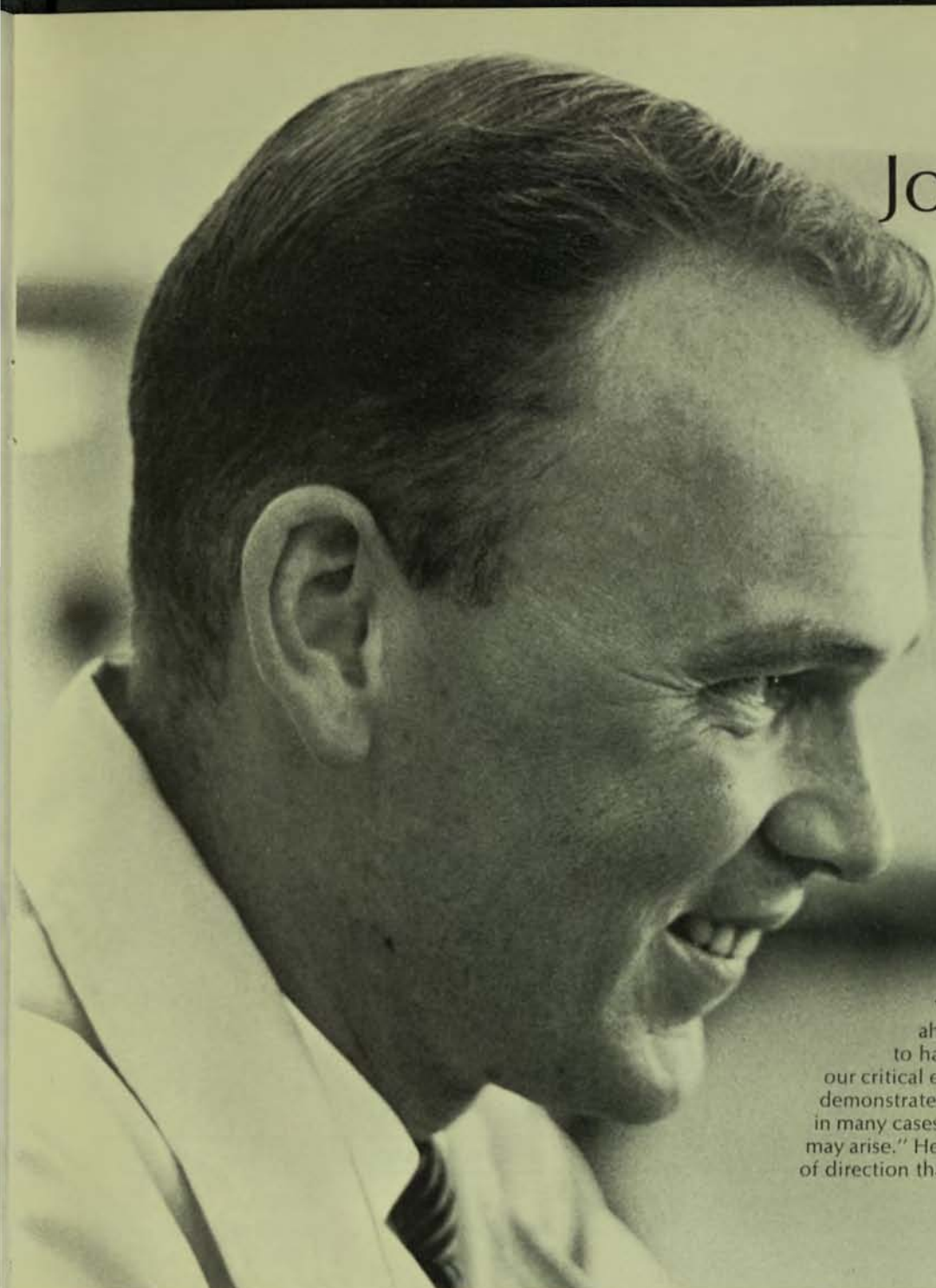
## Production Coordination

Barry Banducci's group has two main functions. The first is to see that critical elements of the long range plan take place as scheduled. This is the function of Project Coordination. The second responsibility is to provide follow up in support of critical customer orders. Order Liaison handles this. Both groups are available for follow up on special projects as directed by Operations management.



Fred Glynn III and Rodger Likens, both order liaison men; Barry Banducci, head of Production Coordination; and Bill Norman, project coordination.

# Meet John Sentous



John Sentous is now the Manager of Integrated Circuits in Mountain View. In his new capacity he is responsible for Integrated Circuits Manufacturing (which is composed of development of new products for Linear, Digital, and MOS I.C.'s and maintaining wafer fab production), Packaging, Process Development and Mask Making, Integrated Circuits Applications Engineering, Quality Assurance and Manufacturing Engineering.

Long days are the rule with him which makes it pretty difficult to keep up with one of his favorite pastimes, golf. Still, he manages to play enough to be a better-than-average golfer.

John graduated from Stanford University in 1955 and then entered the U.S. Marines. It was his collateral duty as avionics officer, while flying jet fighter-bombers, that directly influenced his interest in the electronics field as a possible career. In 1959, he joined Semiconductor working as an engineer. Since then, he's progressed right through the ranks to his present challenging responsibility.

When asked how he feels about the job ahead, John commented, "I am very pleased to have been given my new assignment during our critical expansion phase. The operation has already demonstrated to me that it is capable of meeting, and in many cases surpassing, any production challenge that may arise." He added, "I will attempt to provide the type of direction that will allow this group to fulfill its potential as the largest producer of Integrated Circuits in the world."





# Bowlers Wind Up...The Season

## TROPHY WINNERS

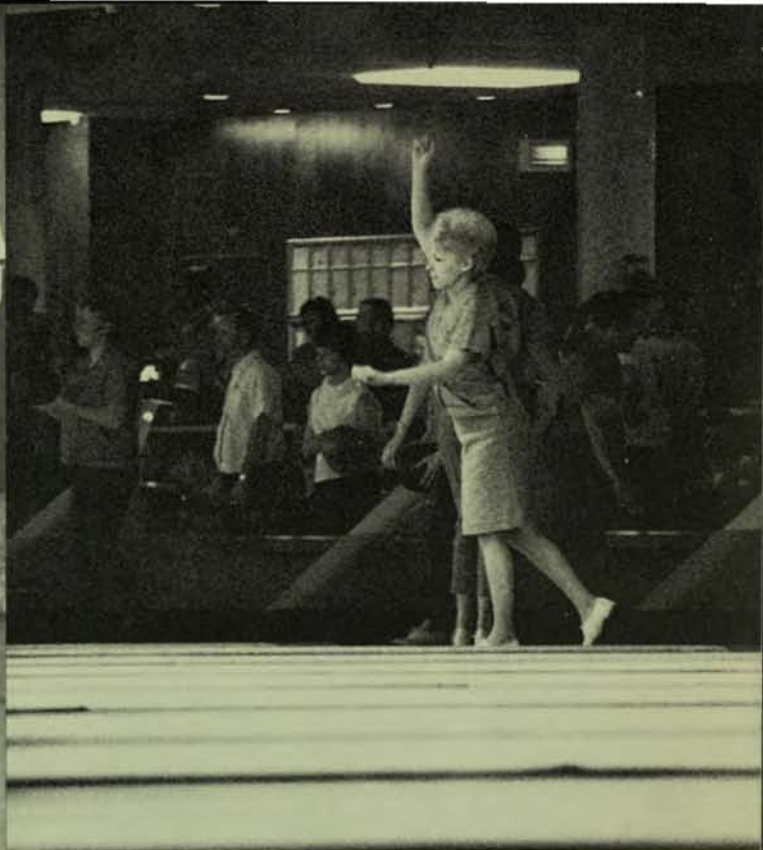
### at Diode

<b>1st place</b>	<b>2nd place</b>
<b>Diode Diddlers</b>	<b>The O'Shims</b>
Evelyn Koeble	Stephanie Mack
Anne Parfitt	Bruce Mack
Tom Graham	Hal Knopp
Rich McIntyre	Sharon Knopp
<b>High Series Handicap</b>	Men — Tony Manino .....660
	Women — Stephanie Mack .....608
<b>High Scratch</b>	Men — Mike Damico .....246
	Women — Anne Parfitt .....209
<b>Most Improved Bowler</b>	Men — Rich McIntyre
	Women — Stephanie Mack

### at Mountain View

<b>1st place</b>	<b>2nd place</b>
<b>Stockouts</b>	<b>The Lively Ones</b>
Aggie Myreholt	Evine Chariott
Joe Perez	Oleta McVeigh
Jim Pulliam	Joe Fulginiti
Ada Perez	John Walsh
Sam Hatfield	Jim Boyd
Bryce Herbst	Julie Howard
	Donna Mellick
<b>High Scratch Series</b>	Men — Gus Mellick .....637
	Women — Jo Trout .....564
<b>High Scratch Game</b>	Men — Jim Boyd .....256
	Women — Carolyn Delgadillo .233
<b>High Hdcp Series</b>	Men — Bob Bauer .....692
	Women — Pat Pape .....679
<b>High Hdcp Game</b>	Men — Bob Kozen .....275
	Women — Jean Warwick .....260
<b>Most Improved</b>	Men — Bob Kozen
	Women — Norma Lias
<b>Sweepstakes Winners</b>	Men — Jim Ballard
	Women — Val Knowles
	Carolyn Delgadillo

at R & D



In bowling it must be the follow-through that makes the difference, or so it would seem if you've ever watched bowlers in action. Facial expressions, body contortions, and jumping up and down are all legal, and almost every bowler has his own special tactic for bringing home a strike or picking up a spare.

Now, a few bowlers are going to be more successful, and that's just what's happened in league play at many Fairchild locations. Here are some of the results:

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at R & D

---

<b>1st place</b>	<b>2nd place</b>
<b>Kitty's Katz</b>	<b>The Wonders</b>
Kitty Christensen	Julie Mikaelian
Helen Ennor	Jo Noll
Sheila Bantillo	Jack Noll
Bill Shepherd	Al Hardin
Joe Ruiz	Chicko Decena
<b>High Series</b>	Men — John Wasowski . . . .732
	Women — Toni Dragmire . . . .576
<b>High Game</b>	Men — Mike Dragmire . . . .284
	Women — Kitty Christensen . . .273
<b>Most Improved Bowler</b>	Men — Jose Rios
	Women — Rose McNair

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at Instrumentation

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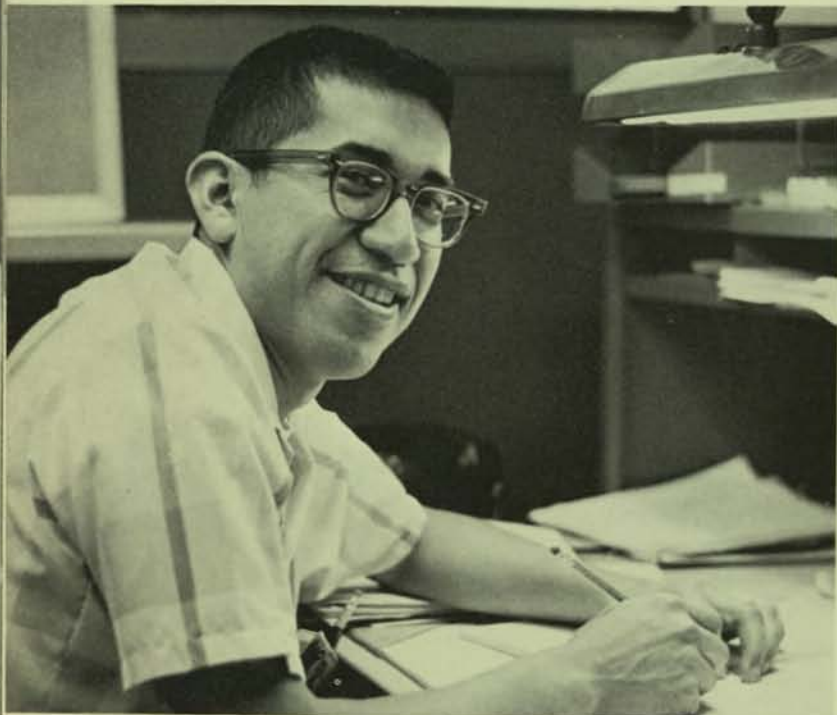
<b>1st place</b>	<b>2nd place</b>
<b>Who Knows</b>	<b>Alley Oops</b>
Sharon Lerek	Carolyn Tinker
Doris Lerek	Gordon Tinker
Phil Schmuck	Ken Howser
Norm Bouchard	Gerrie Daughtry
George Metz	Don Daughtry
<b>High Scratch Game</b>	Men — Dave Morin . . . . .246
	Women — Michelle Jorgensen 214
<b>High Scratch Series</b>	Men — Ralph Colbacchini . .627
	Women — Laverne Bly . . . . .564
<b>High Handicap Game</b>	Men — Steve Sutton . . . . .289
	Women — Virginia Sutton . . . .256
<b>High Handicap Series</b>	Men — Jeff Seevers . . . . .722
	Women — Sharon Lerek . . . . .705
<b>Most Improved</b>	Men — Norm Bouchard
	Women — Barbara Dutra

# Learning Made Easy

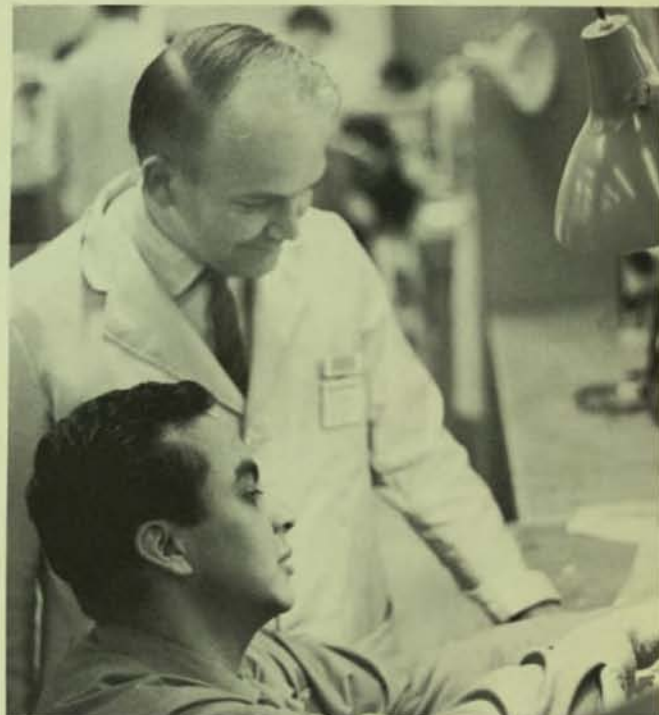
Jose Mora, Custom Microcircuits Applications (MV), had the idea. And, with the help of Ray Creswell, co-ordinator of industrial technology at San Jose City College, a work-study program was designed for third and fourth semester students at the junior college. They are learning electronics first hand as part-time technicians in Mountain View's applications labs. The electronics majors, once they are hired, work a minimum of four hours a day. Generally, they put in quite a few more

hours than that. According to Jose, "Fairchild needed people, and on-the-job training is one of the best ways for students to learn. It was a natural combination."

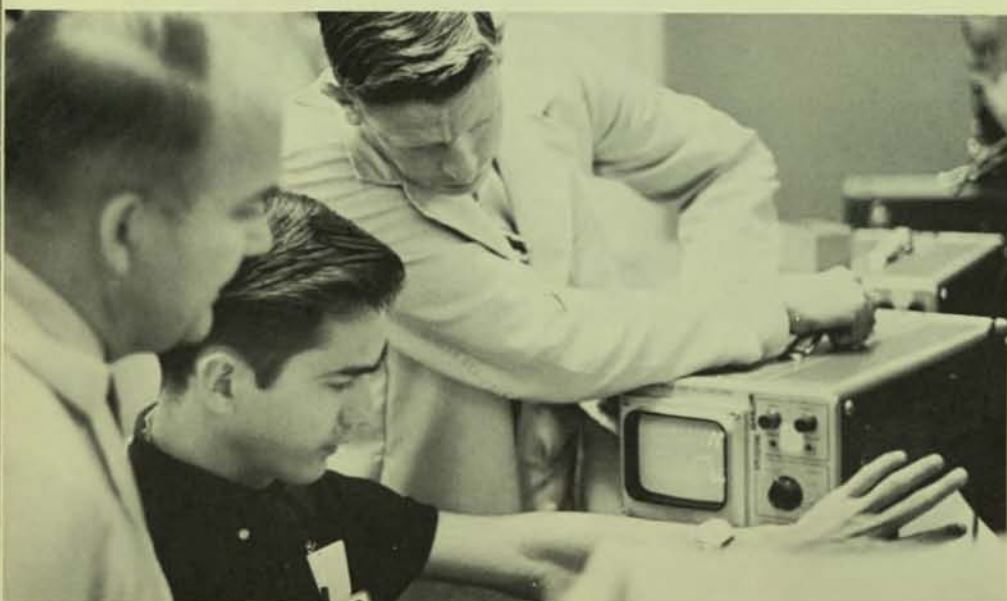
Seven students are currently participating in the program. They are: Robert Olivo, Donald Dvorak, Gary Kunsman, Alphonso Anaya, Robert Mathews, Robert Andrade, and Jesse Musquez.



Jose Mora can take lots of credit for the Semiconductor work-study program at San Jose City College.



Kenneth Muchow, instructor, electronics department at San Jose City College takes a look at a problem facing student Bob Olivo.



Don Dvorak demonstrates the progress he's making to Kenneth Muchow and Owen Williams, Section Manager, Custom Microcircuits Engineering.



Gary Kunsman and Ray Creswell, co-ordinator of industrial technology at San Jose City College, discuss Gary's work in the applications lab.



# A Five-Year Anniversary On Bor- rowed Time



In 1945 when the Americans dropped the second atomic bomb near Nagasaki, Japan, Hendrik Rijnhout was a Japanese prisoner in a camp located only 17 miles from the point of the bomb's impact. At that time a Dutch doctor gave him only five years to live because of radiation poisoning.

Today, as far as he knows, Henry is one of two men so diagnosed who is still living. Initially there were 58 men who were to receive treatment.

Very much alive and energetic today, Henry is leadman in

shipping and receiving for Instrumentation. He's also attending Stanford University in the evening and hopes to receive his degree in civil engineering within two years. He is currently studying for his citizenship, and as if that weren't enough, Henry helps his wife run her small dress shop in San Jose.

In April, Henry received his five year service award. And, amazingly, during this time he has never missed a day of work because of illness. He's defied the odds, and along the way he's built a very good life in his adopted country.

## May/5yr. Service Awards

Virginia Aranda	MV	Helen Dougherty	DIODE	Arzine Manuel	DIODE	Glen Pollard	CONTROLS
Mercy Armer	INSTR	Marjorie Downey	MV	Herman Martin	MV	Margaret Queen	DIODE
Becky Azevedo	MV	Cleatus Dunkley	DIODE	Jim McAllister	MV	Rosario Rodriguez	MV
Barry Banducci	MV	Rudy Dyck	RD	Katherine McCullough	DIODE	Margaret Schulte	DIODE
Leroy Beers	MV	Alan Farnham	DIODE	Shirley McKinney	DIODE	Susie Sibilla	INSTR
Elizabeth Bergau	MV	Gloria Fugere	DIODE	Alice Metzinger	MV	Dora Singleton	DIODE
Iris Boccaleoni	DIODE	Emike Fumoto	MV	Ed Minsky	INSTR	Pearl Storvold	DIODE
Billie Bowens	DIODE	Cleva Goodman	MV	Willie Moore	DIODE	John Sussenberger	MV
Lois Brown	DIODE	Mary Green	MV	Ray Myers	INSTR	Betty Swiggart	MV
Alejandro Catli	MV	Jessie Johnson	DIODE	Jerald Oberly	MV	Barbara Thomas	MV
Carmen Ceja	MV	Archie Jones	DIODE	Gertrude Ornellas	DIODE	Sotia Torres	MV
Suzanne Cox	MV	Anna Larson	MV	Bonnie Pascale	MV	Jo Trout	MV
Gwendolyn Daniels	DIODE	Ralph Lee	MV	Madeline Perez	MV	Flora Vowiell	INSTR
Herold Doerschler	DIODE	Adeline Line	DIODE	Felice Phipps	MV	John Westhoff	DIODE
Art Dorf	MV	Don Lynam	CONTROLS	William Phy	RD	Sumiye Yamauchi	MV
Kathryn Doss	MV	Russell Maggio	DIODE	Marcell Pillus	DIODE	Doris Young	DIODE

## In General

### Take Me Out To The Ball Park

The Fairchild Falcons have begun the 1967 season in quest of another Nor Cal League championship. Manager Pat Campagna would like to see lots of fans at the ballgames this year, for the team has a rugged 11-game schedule ahead of it. Pat's also sponsoring a San Francisco Bay Cruise to benefit the Falcons. The cost is \$5 a person. The cruise leaves Pier 43 at Fisherman's Wharf at 8:30 p.m., June 24th.



# falcons

This year's schedule:

- April 22 Santa Cruz Merchants (McKelvy Park, Mountain View) — rained out
- April 29 Pyramid Homes of San Jose (Granshirt Field, San Jose)
- May 6 Mayfair Merchants of Stockton (McKelvy Park)
- May 13 Hayward Lifters (Hayward)
- May 20 Salas Brothers of Modesto (McKelvy Park)
- June 3 Peninsula Paint (Pacific Grove)
- June 10 Manteca Ford (McKelvy Park)
- June 17 LeBlanc Engineering (Sunnyvale)
- July 8 Martin Madsen of Oakland (McKelvy Park)
- July 15 Muzio Bakery (Sacramento)
- July 22 Village Green of Santa Clara (Lafayette Park, Sunnyvale)

## Mountain View



A baby shower for a fella? Jon Scadden, newly appointed supervisor in the Materials Mechanical Polish area was really surprised when his girls honored him with a baby shower. His wife's expecting their first baby soon.



Bonnie Page, R.N., thanks everyone for their help in making the blood drive successful. This year's drive collected 160 units.

Hitting the speaker's circuit, Richard Winn, Personnel Administrator, participated in a Nursing Home Forum sponsored all-day seminar dealing with various phases of personnel administration and recruitment.

Production Control's Integrated Circuits group overwhelmed Charlotte Thatcher with a surprise baby shower. Almost 40 persons chipped in to "shower her" with baby clothes, a baby clothes hamper, and a stroller. In addition, all the girls gave Charlotte individual gifts.



Recently "Slicin' Susie" was discovered during a clean-up inspection tour. How she got into the Slicing area no one knows. But that makes no difference. Donna Urban created a smock for her, and foreman Mike Walton put a pair of safety glasses on her. Now she stands at her post reminding all who enter the Slicing area to wear their safety glasses.



Materials' basketball team stopped just long enough to pose for this candid shot. Team members (though not all are from Materials) are Larry Phillips, Rodger Likens, John Strinic, Milt Garfield, Ted Salazar (all in the front row), and Paul Murphy, Dave Culley, Mike Walton, and Don Taylor (back row). Games were played every Wednesday night at Awalt High School, and Materials was just one of eight teams participating in the Fairchild league.

## Diode



It was good skiing, good weather, and plenty good times for the 33 persons attending Diode's second ski trip of the season. The Heavenly Valley outing provided lots of thrills and spills, just ask Ed Broder. Ed met with a mishap Saturday, but like the pro he is, he was up early Sunday morning, finally mastering slope #4. Pros never give up and neither did the group determined to see Bill Cosby's dinner show Saturday evening. They got tickets to see his "sold-out" show. All in all, Jack Brewer and Mel Snyder can take the credit for a great ski trip.



Lu Lujan, general manager of Coca Cola Company and Roy Bischoff, supervisor of food services with Coca Cola, prepared a luncheon for the attitude survey committees at San Rafael so that committee members could sample a new entrée being prepared for the menu in the plant's cafeteria. Members discussed the current cafeteria operation with Coca Cola representatives who operate the cafeteria.



Diode's annual fishing trip cast off early in the morning of March 26th for the Farallons. Thirty-three had signed up for the trip, and the catch that day made the early hours of the trip well worthwhile. Bill Irons (Line Maintenance) caught the largest fish for the second straight year. Pictured are Don Maroski and Tony Schiavo, who are proud of their catches too.



Ken Rinaldo and Jim Williams were elected President and State Director of Petaluma's Junior Chamber of Commerce. Ken's an electronic engineer and Jim's production controller for special assembly. Other active Diode members are Ed Reed and Jim Wonneberger.

## Research & Development

They're beginning to think about Christmas at R&D. A Christmas Committee has been formed and another Christmas dinner dance is planned for this year. The date is December 9th, and it's to be at the Elks Club in Sunnyvale. Committee members are Terri Mead, Chairman; Dianne Cotton, Secretary; Betty Lawler and Leanne Marsh, Decorations; John Wasowski, Alan Mills and John Gundershaug.

Weather permitting, baseball practice will begin very shortly. Any interested employee should contact Ray Fagan. The R&D team will participate in the Palo Alto Recreation League. Games are scheduled at El Camino Park in Palo Alto from May 29th to August 28th.

You've heard of book-of-the-month club and record-of-the-month; well, now there's a new sport-of-the-month club. Sam Uyeda and Adrienne Juliano are already planning a co-ed softball game, a swimming party, and who knows what else. Any suggestions for sports will be welcomed by them.

The Bridge Club is still meeting every second and fourth Tuesday of each month in the Instrumentation cafeteria at 7:45 p.m. Everyone's welcome; just call Felix Rosengarten or Art Kitkowski for additional information.

Results of April's games are:

April 11	1st place	Louise and Larry White
	2nd place	Tom Regul and Bill Schoenemann
	3rd place	Frank Durand and Charlie Ellenberger
April 25th	1st place	Tom Mills and John Rushton
	2nd place	Mike Scott and Alan Ankerbrand
	3rd place	Tom Regul and Bill Schoenemann

## Shiprock



Employees at Shiprock just elected members to their first Recreation Council. New members are Ruth Encinias, Secretary; Ruby Antonio, Jesse Henderson; Andy Tohtsoni, Vice President; Treva Tony, Emma Joe, Nelson Blackgoat, Alice Simms; Louise Goldtooth, Treasurer; and Larry Sells, President. Not pictured is George Higgins. Council members also volunteered to be *Leadwire* reporters for the plant.

## Instrumentation

Coming up on your calendar should be some pretty exciting Rec Council events.

- June 7th Women's Fashion Show
- June 18th Giants vs. St. Louis at Candlestick Park (discount tickets available)
- June 24th San Francisco Bay Cruise to benefit the Fairchild Falcons
- June 29th Summer Picnic at Frontier Village



Just over, the Spring Dance and the Falstaff Brewery trip.

Writing pays. Russ Walton, Senior Electronics Engineer, received a \$100 check for a recently published article he had written from Instrumentation's general manager, Dr. Victor Grinich. The award is part of Fairchild Camera and Instrument's Inventions Incentive Program which recognizes employees for their creative achievements.



Instrumentation's Test Systems assembly girls arranged for a double celebration. Bill Walker, production planner for cable and sub-assembly, is leaving for six months of basic training with his reserve group. That was reason for one party, but two birthdays, Lucy Strang, secretary in Systems Production and Len Lowe, Systems supervisor, added to the fun. A buffet and birthday cake topped the celebration.

Bowling Sweepstakes winners at the Spring Dance were DeWayne Christofferson (673) and Ann Humphry (679). Runners up for the women were Berla Martin (620), Pam Ott (609), Maria Humphrey (597), and Nancy Hughes (586), and for the men, Ken Howser (672), Tom Edel (631), John Whitmore (615)a, and Art Whiteside (606).

## Giving Credit Where Credit's Due

Instrumentation introduced three new test systems, five new test and measurement instruments, and 20 new components at this year's IEEE show. These new products were the result of sustained efforts from many members of the division, and to them goes a debt of thanks. One form those thanks took was a dinner to honor those who made Instrumentation's new product effort successful.

Guiding the overall development of these totally new products was Mel Norby, engineering manager. Concentrating on the development of the division's test systems was Jim Bryson, systems development manager. Frank Parlette, transistor test systems section manager, was responsible for the development of the Series 600 Transistor Test System. He was assisted by Don Campbell, project engineer. Development of the Series 5000 Test System was handled by Rolf Kohle, integrated circuit test systems section manager. The Series 8000 Test System was developed under the direction of Floyd Nordeen, complex array test systems section manager.

Directing the development of the new test and measurement instruments was George Metz, instrument development manager. Research for the dual slope measurement technique (patent issued) was headed by Steve Ammann, section manager, research department. Ed Cooper, DVM group leader and inventor of the digital time base memory (patent pending) was instrumental in the development of the Model 7200 and supervised work on the Models 7000 and 7050. Project engineer for the development of the Models 7000 and 7050 was Tak Mori, and Cameron Reid was project engineer on the Model 7200. Recent development of the Model 7100A was under the direction of Jim Barber, project engineer.

Two totally new curve tracer systems, the Model 6200 B/P Programable Curve Tracer System and Model 6200 BD Digital Readout Curve Tracer System, were developed by Hugh McManus, project engineer.

Instrumentation moved into the components market with the introduction of 20 new components, 16 of which were operational amplifiers. Project engineer for these was Bob Hall, and Walt Kaelin was responsible for the development of the hybrid-FET and compensated integrated circuit lines.

Early application of integrated circuits paved the way for Instrumentation's ability to introduce these new instruments, but people with ideas and people working long hours made it possible. Proven design practices by the division's engineers and accurate marketing information would have meant nothing without competent people to put it all together.

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## New Faces

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**BILL WHELCHER** has been named sales liaison engineer for Fairchild Instrumentation. Before joining Instrumentation, Welch worked for four years as an engineer with the Instrumentation Division of Ampex Corp.

**GARY BLAKELY**, previously employed with Hexcel Products, Inc. has joined Fairchild as a Senior Financial Analyst. He received his Master's Degree from the Harvard Graduate School of Business.

**PETER NIEMAN**, who worked for S&W Foods for four years, has joined Fairchild Semiconductor as a Senior Financial Analyst. He received his MBA from Dartmouth College.

**BOB DITTMAN** joined the material planning group from General Electric in Phoenix, Arizona. Bob has several years' experience in this area.

**TOM CIOCHETTI** will head Fairchild Semiconductor's marketing group for UHF/VHF and microwave transistors. He is a graduate in engineering from the University of Arizona and has over seven years' experience in industry.

**TONY DePHILLIPS** is the new customer liaison man for the military market. Tony attended the University of Pittsburgh and has had sales and marketing experience with Westinghouse and Melabs, in Palo Alto.

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## Moving Up

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**BETTE CAMERON** has moved up to join the Mountain View Industrial Engineering department. She will be assisting Robin Jeffs in the Labor Standards Section. She previously worked with Sandy Santoriello in the Training Section.

**SANDY D'ARCY** is the new Industrial Product Marketing Engineer for PNP's, FET's and MOST's. Sandy has been with Fairchild since August, serving as the Customer Liaison man for the military market. He graduated from the University of Missouri in 1964 with a BBA and is currently working towards his MBA.

**LINDA JULIAN** is the new secretary to the Manager of Manufacturing Engineering. Linda previously worked as a senior clerk in Military Products.

**NORMA LIAS** is now working with Robin Jeffs in the Labor Standards Section of Industrial Engineering at Mountain View. She was formerly in the Training Section.

**JIM MCKALIP**, who previously was a member of the technical staff, has been appointed to manage the Engineering function and will report directly to the Acting Manager of Memory Products.

**KEN O'CONNOR** has been appointed employment coordinator servicing Transistor/Diode and Integrated Circuit facilities. His primary function will be in the area of technical and professional employment. Ken was formerly a Quality Control Engineer.

**PHIL PERRY** has been appointed the Manufacturing Manager for the South Portland Plant. The major functions of Production, Product Engineering and Testing will report directly to Perry in this new position.

**BOB PETTIT** assumed the position of Special Account Rep for the RCA Military Complex in the Philadelphia area. Bob's past record of success at RCA makes him an excellent choice to manage Fairchild's largest military account.

**JACK SCHMIDT** has been appointed Manager of a new department, Advanced Projects. He was previously a Manager of Engineering in Memory Products.

**BILL SEIFERT** will replace Bob Pettit as Military Mid-Atlantic Regional Sales Manager.

### Editor's error

Arnold Gordon has been named the Western Regional Sales Manager for Fairchild Memory Products, not the Semiconductor Division as erroneously reported last month.

## Leadwire

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**COVER PHOTO:** Line resolution of  
photo taken by Steve Allen at con-  
struction site of new headquarters  
building. In a line resolution, all  
gray areas in a photo are eliminated  
leaving just solid blacks and solid  
whites.

Leadwire 7



# Subject: REORGANIZATION

We're a large company, growing by leaps and bounds, but the fact still remains--we must continue to do a better job than our competitors if we are to keep growing. To accomplish this, I have organized the Semiconductor division into three separate and distinct Product Groups--each with responsibility for all aspects of manufacturing, engineering and product support for its product lines.

Three capable men head these Product Groups. Don Yost is Director of Discrete Devices, John Sentous heads Integrated Circuits, and John Ready is in charge of Aerospace and Defense (including the Hybrid Circuits group and Special Products).

The ultimate goal of this change, then, is to improve our ability to recognize our customers needs and to increase our flexibility to better meet our commitments to customers. These smaller, more effective Product Groups will do just that; each will have more easily defined goals and its management will have what I call "straight through" responsibility. That is, the three groups will function as the independent businesses they really are, solving problems relating to the products.

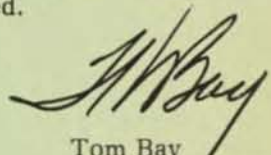
In time, separate facilities will be provided for each product group. Toward this end, South Portland has been designated as an Integrated Circuit facility reporting to John Sentous.

In another change, Jerry Sanders has been named

Marketing Director. In addition to managing the overall Marketing organization, he will be working with these Product Group Directors to provide the product support personnel for their groups. Just recently Jerry announced the creation of four new department managers coinciding with the new organizational plan. Ben Anixter now heads the Integrated Circuit Product Marketing Group; Ward Gebhardt, Discrete Devices Marketing; Chaz Haba, Aerospace and Defense Marketing; and Bill Welling is Headquarters Marketing Manager.

The Central Services group under Dick Fouquet will now report directly to me. Their responsibilities in the areas of manufacturing support for all product groups is unchanged.

In looking at the division as a whole, I am certain that we will all benefit from this new organizational structure. We can't help but have a smoother working organization and our capabilities will be increased immensely. You can be sure this plan has been carefully thought out with these goals in mind, but the true test of any change is that it must make use of all the knowledge and talent available, and that means you, the people involved.



Tom Bay  
General Manager



TOM BAY



JOHN READY



JERRY SANDERS



DON YOST



JOHN SENTOUS





## P · R · O · F · I · L · E · S

EVERY PERSON IS A VOLUME IF YOU KNOW HOW TO READ HIM.

Pinkie MacLean refutes the claim that nurses are grim, sober people--especially Diode nurses. She and her husband Neil and their 15-year old son Lance don greasepaint and combine talents to form a talented team of roust-about musical clowns. Both Neil (known as Jester) and Lance (Joker) are the greatest banjo players this side of Dixie, and Pinkie steals the show with her "gut bucket" (a combination wash tub, broom handle and heavy cord instrument). The musical clowns perform at charitable functions and service clubs, and they just recently won a trophy in the Pt. Reyes parade for street entertainment. They've performed from Hawaii to the Eastern seaboard; so it's no wonder Pinkie is such a natural spreading good cheer as swing-shift nurse at Diode.

Don Patchell, South Portland, is the World Champion Candlepin Bowler. It all started eight years ago when he was the assistant manager of a bowling alley in Portland. In 1962 Don won the Western Maine Championship and in 1967 the New England Candlepin Championship. With the New England victory tucked in his bowling bag, he participated in the world tourney and broke two records while capturing his championship title. To be a champion requires lots of practice, and Don bowls an average of 30 to 50 strings per week. He often travels more than 100 miles to tournaments, but it all paid off. It pays monetarily, too, for he has won more than \$2500 in prizes this last year.

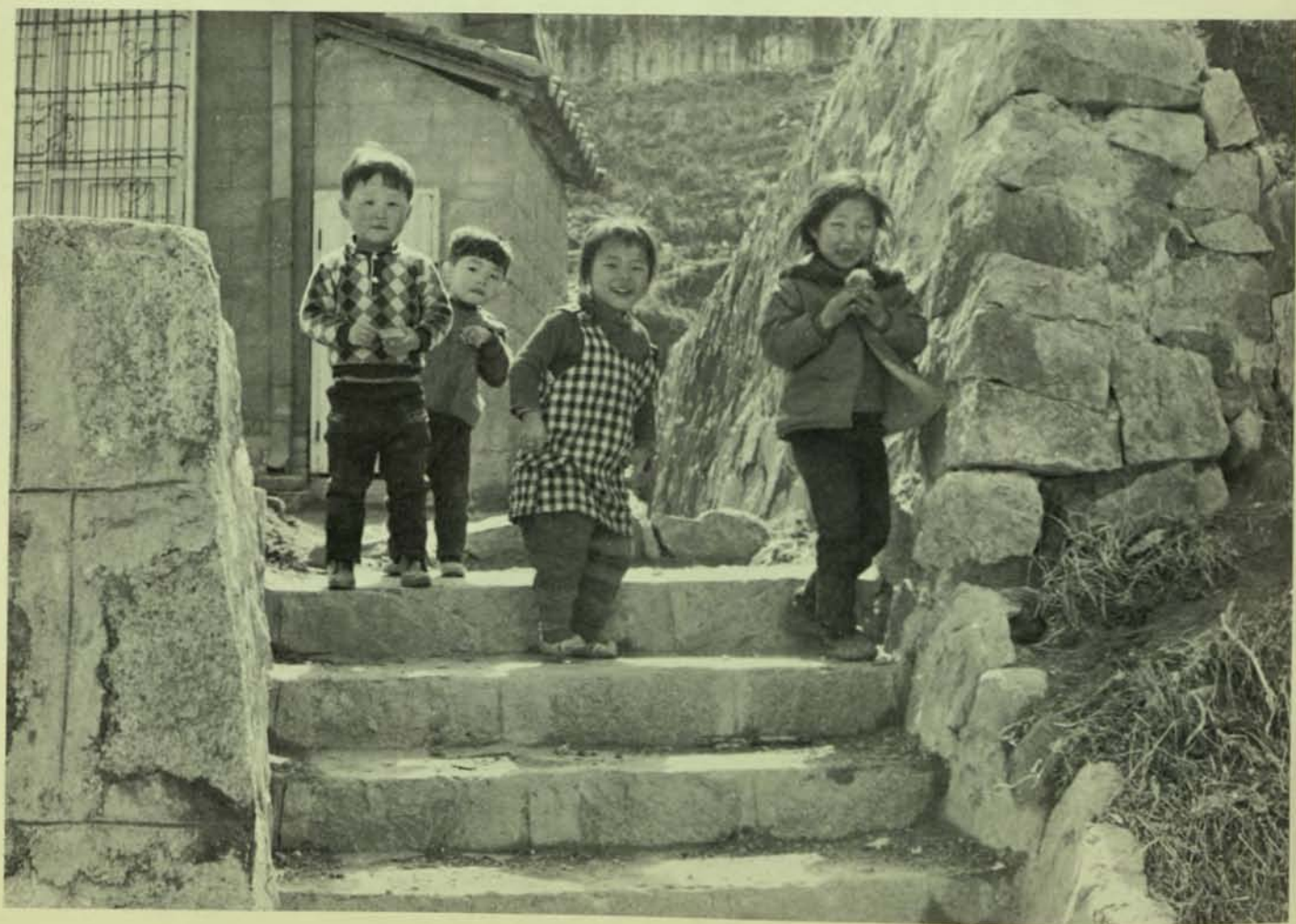
Noel Montagnon is section head of Systems Research at Instrumentation. On May of this year he gave up his Canadian and British citizenships to become an

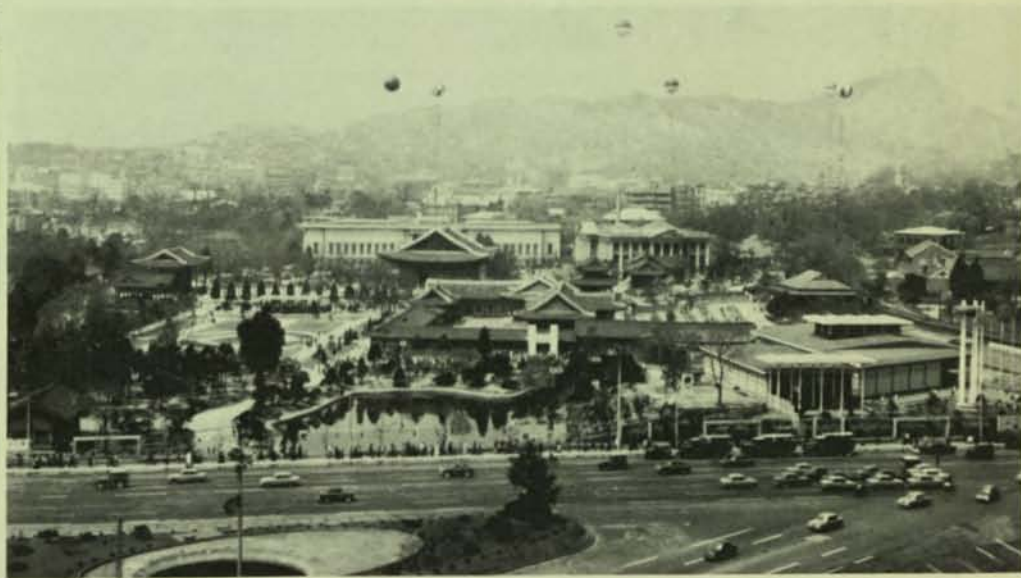
American citizen. Born in England right after World War I, Noel moved with his family to British Columbia when he was three. While growing up, he worked at a variety of occupations including sheep herding and prospecting. During World War II he became one of the first radarmen to be trained by the Canadian Army, and this was his introduction to electronics. He studied and worked both in Canada and England after the war. He participated in a Canadian-American exchange engineering program and joined Fairchild Semiconductor in 1960 as an engineer. He climbed the ladder of success rapidly and is well versed on Instrumentation's history. His other interests include photography, raising roses, singing in a choir and serving on a local Concert committee in the Mountain View-Cupertino area.

The people at Diode don't know it, but as Wayne Snodgrass drives to work each day, he's busily selling their cars or their furniture, and sometimes auctioning off the entire Diode plant. Wayne's just practicing his auctioneer's chant, for almost every weekend he's helping some church or charity raise money by donating his services as an auctioneer. Wayne, a recent graduate of Riesch American School of Auctioneering, spent his vacation attending the school and eight months before that he completed a correspondence course to learn the tools of the trade: salesmanship, pricing merchandise, crowd and individual psychology, and auctioneers' chants. Though he specializes in church and charity auctions, Wayne has sold animals, farm machinery, construction equipment, and entire businesses.

# korea

The Republic of Korea, located on the southern area of the Korean peninsula, is home to more than 26 million people. Though it is one of the most densely populated countries in the world, nearly 80% of the population is still found in small farming villages. Heir to a cultural heritage dating back some 30 centuries, the ROK is staking its future in the development of cities like Seoul, its capital.





## Focus: Seoul and Semikor, Ltd.

The countryside around Seoul remains little affected by the forces of modernization, but the city, itself, reflects the industrialization process that is taking place in most major cities of the Far East. A thriving, bustling city, but one in which ox cart still vies with automobile for the right of way, Seoul is home to three million people. It also serves as home of Semikor, Ltd., a wholly owned subsidiary of Fairchild Semiconductor.



Behind the doors of Semikor, plant manager Lyle Clevenger and his more than 200 employees perform assembly operations for epoxy transistors. Their finished products help to serve the Far Eastern markets.

Setting up the new plant meant literally starting from scratch, and much of this task fell to Lew Silverstein and Dick McScheffrey of the Semiconductor International Operations group. In November 1966 a site had to be selected and a building found or constructed. Supervisors and engineers had to be hired and trained in Fairchild methods of production. Many had never seen a transistor assembly line before their training began. Early in January equipment was installed, materials processed through government regulations, and then in mid-January the first girls were hired.

Everyone learned their skills well for on February 4th the first transistor was completed. The millionth unit came off the line by the end of March, and production hasn't slowed down since then.

In many ways Semikor reflects the traditions of the Korean people. For instance, when work first began, some of the girls asked if they might remove their shoes when entering the facility as the custom when one enters a Korean home. As a result, they leave their shoes by the doorway and wear slippers while at work.

It is in this way that the forces of industrialization and tradition are blending to give the best of both worlds, and Semikor is proving this every day.

# EVERYTHING'S UNDER CONTROL at FAIRCHILD CONTROLS

On June 12, 1967 the Fairchild Controls Transducer Plant was presented with a Zero Defects Participation Award from the Department of Defense. The award was accepted by Don Lynam, Plant Manager, from Commander G. F. Gobbel representing the DOD.

The Transducer Plant has the distinction of being the first Fairchild plant to receive the Zero Defects award on the West Coast and the third over-all company to receive this award in the Western United States.

The Transducer Plant inaugurated its ZD program

August 2, 1967 under the direction of Brian Duncan, Q. C. Manager, and the DOD award was presented in recognition of the sustained effort and effectiveness of the program and the effort of all the employees to improve and control product quality.

The Transducer Plant manufactures high reliability pressure transducers, accelerometers, amplifiers and signal conditioning equipment for space, aircraft and industrial applications. The Plant was recently awarded a major contract for the pressure instruments on the Air Force's newest and biggest transport aircraft, the Lockheed C5-A.





## Record Breakers

R & D's Chrome Mask Making group recently completed more than 2500 accepted chrome masks in one month. A year ago only 200 plates were being fabricated at most in a month's time. The credit goes to a great bunch of girls (Fran McDonough, Eleanor Gruenberg, Jean Parry, Edna Baker, Dolores King, Mary Durst, Bette Rhodes, Pamela Dennis, and Mary Melanson); Ron Ivancich, their foreman; Gene Blome, project engineer; and teamwork of the whole Mask Making Department.

## Five Year Celebrations



These four are the first from South Portland to receive Five Year Service Awards. Dave Symons transferred from Mountain View in June 1966. He started as a production engineer and is now test engineer supervisor. Raymond Malatesta began his career with Semiconductor at South Portland as an electronic technician. He's now a test engineer. Marty Tiernan transferred from Mountain View beginning as an engineer. He's now a supervising engineer. Marcel Morrissette started at South Portland as a leadman mechanic. He is currently an industrial engineer. July adds a few South Portland women to the five-year list.

Other celebrations throughout Fairchild include those for:



Rosie Christiansen and Esther Iverson, Production Control, Mountain View.



Micky Armer, Small Instruments at Instrumentation, receiving her necklace from Ed Moore.

Zeta Moen of Commercial Test and Finish (MV)



Dick Steinheimer, Photography, Marketing Services (MV) receiving his award from Don Cruzen.



Ardith Webber of PIC at Mountain View.



Virginia Pace, QA Materials (MV), accepting her pin from Stan Brehm.

## July Five Year Service Awards

Alan Mattal	MV	Charlotte Kachinsky	Diode
Dalia Aldana	MV	Phillip Noyes	Instr
John Baldwin	MV	Georgia Coleman	Diode
Angie Garcia	MV	Ken Taylor	SP
Nettie Sartain	Diode	Angelina Antonio	MV
Maybel Chatman	MV	Thomas Hart	MV
Archie Bryson	Diode	Mae Munson	MV
George Staudacher	MV	Ruby Smith	MV
Jovita Avalos	MV	Gene LeGall	R-D
Ruby Evans	MV	Robert Meyer	SP
Donald Blanchard	SP	Donna Dixon	MV
Gene Leduc	SP	George Jelich	MV
Dolora Stevens	MV	Stella Seratte	MV
Vincent Schommer	Instr	Helen Howard	MV
Bonnie Knox	MV	Octavia Bazile	Diode
Carolyn Thomas	Diode	JoAnn Lyons	Diode
Franciose Daugaard	MV	James Whitworth	Shiprock
Alma Caughy	MV	Angie Gonzales	MV
Felix Rosengarten	R-D	Donald Carson	Instr
Teresa Garcia	MV	Joan Major	MV
Betty Daniels	MV	Maria Humphrey	Instr
Konrad Herman	MV	Josie Ware	Diode
Marilyn Moore	Diode	Marjorie Build	SP
Elmer North	MV	Lilly Takiguchi	MV
Howard Alvord	Instr	Ed Tappan	MV
Paula Nyburg	MV	Ethel Cody	MV
Regina Lau	MV	Dora Davila	MV
Henry Mahler	MV	John Schmidt	MV
Tillie Paredes	MV	Edwin Barrett	Instr
Gladys Patterson	MV	Angela Abad	MV
Bonnie Page	MV	Hilaria Tomacder	MV
Gene Vaatveit	MV	Richard Staffieri	MV
Delores Riboli	Diode	Rose Stephenson	SP
Ann Hagan		John Thompson	SP

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## R & D

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The Koshare Indians invaded R & D during their recent Bay Area tour. This tribe of Indians is an Explorer Boy Scout group from La Junta, Colorado, and the boys are renowned for their authentic Indian ceremonials and dances. Bob Rockwell, R & D Transducer, is from La Junta, and he knew the Koshare group needed sponsors for a trip west. So, he enlisted the Stanford Alumni Club to sponsor part or their trip and their performances in the Bay Area. He also arranged for them to tour the R & D facilities and to have lunch compliments of Coca Cola catering service.

Mixed softball is the game of the season, and R & D's mixed team opened the season June 14th against the Inventory Control team from Mountain View. They're not talking about the score, nor their second loss to Mountain View's Applications #2 team. Of the ten players on the team, eight were from DIED (does "DIED" fortell the team's destiny?), one from Materials and Processes, and one from Management. The R & D lineup: Donna Gaines, Catcher; Adrienne Juliano, Pitcher; Gordon McNeil, 1st Base; Tom Menzies, 2nd Base; Bob Robinson, 3rd Base; Felix Rosengarten, Right Field; Linda Angell, Shortstop; Ben Curiel, Short Field; Ben Reichardt, Center Field; and Rudy Dorilag, Left Field. While the team could use some playing support, rooters would be much appreciated, too.

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## Instrumentation

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Pat Campagna's Moonlite Cruise to benefit the Fairchild Falcons was a big success. Nearly 200 Falcon fans sailed around San Francisco Bay from nine o'clock until midnight. Highlight of the trip: dance contests and champagne prizes to the winners.

And speaking of the Falcons, they're really clipping along this season. They just won the Hayward Fourth of July Tournament, coming in ahead of

twelve other teams. They placed second in the Memorial Day Tourney at Santa Cruz, took first in the Hayward League with a 7-2 record, and were second in the Fresno Pre-Season Tournament with more than 50 teams competing. Right now they are tied for first place in the NorCal League with a 9-3 record. Coming up in August is the AAA Regional Tournament at Napa. As defending champs, the Falcons will be fighting for a chance to go to the World Championship Tourney again. Falcon team member Ray Phillips is getting a taste of championship play with the AAA Allstars in a game against last year's world champs, Clearwater, Florida.



Ed Cooper received a \$100 check from Dr. Victor Grinich, Instrumentation's general manager. The reason? It's part of Fairchild Camera and Instrument's inventions incentive program which recognizes employees for their creative achievements. Ed invented the digital time base memory technique used in Instrumentation's most sophisticated digital voltmeter, the Model 7200, also shown here.



Another success story at Instrumentation was the Fashion show held in June. Mimi Assante directed the affair and received lots of assistance from Barbara Sleeth. Models included Barbara Fey, Madeline Hoover, Barbara Brown, Anita Cook, Micki Grapp, Irma Stengel, Karen Lewis, Rose Downey, and Darlene Stevens who double during the day as some of Instrumentation's prettiest employees.





Manny Lopez, Rod Schwartz, and Dave Delane, all of the Metal Production Control group, have accumulated the highest academic record for any group at Instrumentation whose members are attending school to advance them in their jobs. These guys are straight A students and that's hard to beat in anybody's grade book.

The Rec Council has quite a few activities going during the summer: a recent trip to the Giants-St. Louis ball game at Candlestick Park, B-League Softball, Summer Bowling, a newly organized Tennis Club, several Lob-ball teams, and summer picnic July 29th.



It was wedding bells for one of Instrumentation's favorites, Louis Kloeth, technician at Palo Alto. Louis and Shanna braved icy highways enroute to Reno June 1st.

## SHIPROCK

Take 1000 people, a chicken and beef barbecue, lots of prizes, horeshoe pitching, volleyball, softball, and bingo; place them all on King's Ranch in Farmington, New Mexico; top it off with authentic, costumed Navajo dances performed by the Draper family; and you have one of the best summer picnics held this year. Of course, much of the credit for Shiprock's fun-filled employee picnic goes to Recreation Council members, spearheaded by Larry Sells, Council President.



Shiprock was selected as one of five companies throughout the United States to receive the 1967 Top Hat Award from the National Federation of Business and Professional Women's Clubs. The awards are presented annually to individuals and organizations who have made significant contributions toward advancing the status of employed women. Shiprock's award was given in recognition of the establishment of a plant to utilize the talents of Indian women on the Navajo reservation. The BPW citation notes that Shiprock is the largest non-governmental employer of Indians in the United States. "In addition to increasing the overall number of women employees," the citation says, "the division conducts on-the-job training, has established educational facilities in the plant and outside training to better prepare women for work, has encouraged educational courses for employees, and has raised pay scales for women by supporting legislation for equal pay." Hats off to Shiprock and Fairchild!

## South Portland

Once again South Portland's back in newsprint, thanks to the concerted efforts of reporter Linda Allen; photographer, Bob Tetrault; and idea man Terry McCollister who also heads the Rec Council.



Cast your eyes on this. Though she fractured her wrist, Earleen Blake returned to work a week later. A broken wrist is no obstacle to her! Before the accident, she had completed three and one-half years of service without missing a day's work. No wonder she was back on the job so soon.



Paul Ross was the 1000th member of South Portland's Credit Union. As a result, he received an extra \$5 share, compliments of the Credit Union. The Credit Union began operation last September, and it now has assets of \$125,000 and more than 500 loans. It is the fastest growing Credit Union in Maine, mainly due to the hard work of manager William Bank and secretary Sandra Pombriant.



The seldom seen, but often heard PBX operators at South Portland are Paula Deasey, Marge Ford, and Dottie Kinny. The reason for the picture? A big thank you to some of South Portland's unsung heroes, or rather heroines in this case.



The girls at South Portland really know how to throw baby showers. Recently, on a typical "shower" day, nearly 200 gifts were piled high on three tables in the cafeteria. The lucky recipients were Geraldine Dennison and Linda Britton of the DIP line; Doris Sears, Die Fab; and Ellen Johnsen, Die Fab.



If you walk through the lines and think things seem brighter than usual, it's probably the result of Walter Perry's big, broad grin. Walter was promoted to line mechanic from his job on the ultrasonic bonding line. A native of Maine, he is a graduate of the Maine School for the Deaf in Portland.

## Mountain View



Pat Chalmer and Marilyn Bertuccio are the winners. They grew the most perfect crystals in Crystal Growing. Both crystals are two inches plus or minus a tenth and are well within the specifications requirement of two inches plus or minus an eighth. Herb Henderson and Buzz Sawyer make one last measure as the two girls proudly display the two prize crystals.



The Slicing area of Silicon Materials held a summer picnic for employees and their families June 17th at Vascona Park. Everyone brought his own food and drinks, and softball was the game of the day. Swing shift topped day shifters in a close game, 7-6.

Golfers! The Mountain View tournament is August 13th (not August 20th as previously reported) at Spring Valley. The first swingers go off the tee at 10:30, so get your entries in early for an early tee time. Applications should be returned to George Reh or Dave Culley and must be in to them by August 2nd.

Bowlers! Watch the buttetin boards in August for sign-up sheets for the Fall-Winter Mixed Bowling League beginning in September. You can sign up individually or sign up with friends to form your own team. Marion Oswald reports that the number

of available alleys at Futurama Bowl is limited, so be one of the first to sign up.



Taking advantage of good weather and good home-cooked food was the PNP group.



It's Fairchild's own "Old Faithful" and here with the story behind the picture is Madhu Desai, Senior Product Marketing Engineer in Hybrid Marketing, who was accidentally involved in this "happening". "My car was parked in front of the Fairchild Drive building at the end next to the employee parking lot. A car going north on Fairchild Drive swerved left to avoid hitting a jeep truck that pulled out from the parking lot and in front of it. In swerving he hit the fire hydrant, jumped the sage brush area, and hit my car broadside. The gush from the fire hydrant was more than 40 feet high. Both cars had to be towed away and the damage to my car was \$900."



Marking ARA's first anniversary serving Mountain View's cafeterias was a special occasion. Joycelyn Cartillar and Carol Yeager helped cut the cake and ARA's Ron Todd and Semiconductor's Eric Bertraun assisted passing out the free coffee and cake to employees.



Robert LaVigne was surprised by a "bridal shower" thrown by his swing shift gals in Mechanical Polishing the day before his wedding. Gloria Walker, April Yoshikawa, and Lucy Kennedy organized the pot-luck.



Val Knowles and Missy Streb, Charity Committee members, were on hand for the opening of the Whisman School District's brand new Children's Center at San Ramon School in Mountain View. The \$15,000 mobile classroom was constructed entirely with funds from Fairchild Semiconductor and its employees as administered by the Charity Committee. The classroom relieves the backlog of nursery school children the school district was faced with just two years ago.



Cupid paid a visit to Equipment Fabrication and Design in May. Judy McDonald and Steve Kutay surprised their fellow employees by eloping to Reno. On their return, the surprise was on them--a kitchen shower and reception.



## Mountain View Rec Council Appoints Administrative Advisor

Coordinating the picnics, dances, and the myriad of sports for more than 5,000 employees located in some 18 different buildings in the Mountain View area is a difficult task for the best of Rec Councils.

The answer? A Rec Council director; an advisor; or better yet, an administrative advisor--someone who can devote most of his working day to coordinating all the activities, starting new ones, and locating additional recreational benefits for employees. Not a bad idea, and that's just what Fred Pieper will be doing. He'll be working closely with the Rec Council and its president, Bryce Herbst, to broaden the scope of recreational activities at Mountain View. Not a bad idea at all.

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## Diode

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"Hey! Let's have the cleanest, sharpest plant in all of Fairchild", and that's just what Diode's doing. They figured the best way to do it was to set up a house keeping contest and each month the winning department gets the "Good Housekeeping Award". The worst department gets the "Pig Pen" banner. Inspections are conducted by the hourly employees safety committee, and so far the effort is paying off. Nobody's anxious to have their department tagged with the "Pig Pen" banner. First month's winner

was Fab II, and since the "Pig Pen" award had to be given, the good sports in P.C. Finish said they'd take it, but only for one month.



The fifth annual Diode golf tourney will be held at the San Geronimo course August 6th. 30 contestants will be matching strokes for the winners prize.

After being down by a score of 5-0, the Diode softball team scored 7 runs to win their first game in five outings. Two more games complete the spring warm-up, before the team enters the tough summer league. A game with San Quentin is also planned. Leading sluggers are Jim Smith with a .500 average; Al Danks, .477; and Bruce Mack, .467. New team members include Mike Feldtman, second baseman; Frank Ellis, right fielder; Al Stone, center fielder; and Ron Randall, short center fielder.

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## New Faces

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Warren Atwood is a new Engineer in QA at Diode. He just recently graduated from Carnegie Institute of Technology.

Yu Tang Wang joined San Rafael as Product Engineer in Special products. A graduate of the National Taiwan University, he just completed studies at Oregon State University.

Laszlo Farago joined South Portland as a Production Supervisor in the Test Area. He just recently graduated from Newark College of Engineering.

Leon Davis is a new Production Supervisor in the Assembly Area at South Portland. Leon retired from the U.S. Marine Corps last December.

James Hood came to South Portland from Transiron Electronic Corporation. He is now a Production Supervisor in the assembly area.

Gwido Swistun joined the South Portland group as Manager of Design Engineering. He formerly worked for General Instrument.

William Lonergan comes to Fairchild's South Portland facility as Test and Finish Supervisor. He most recently worked for Components Incorporated.

Edward Sheehan comes to Fairchild as a Production Controller. Before joining South Portland, Ed was with Spectrol Electronics.

Leo Paquin joined South Portland as a Production Supervisor. Most recently he was with Sherwin Williams.

Dr. Robert Sugarman has been appointed Manager of Research and Development for Instrumentation's Clifton facility. He holds the patent in the United States for the original sampling oscilloscope. Prior to joining Instrumentation, Dr. Sugarman was a senior research associate at Columbia University.

Michael Bottini joined the module group at Mountain View as a Manufacturing Engineer. He recently completed his MBA at the University of California, Berkeley.

Robert Powell joined Mountain View as a Foreman on the swing shift of HIC. He worked previously for Union Carbide.

Frank Yamada is a new Senior Electronic Engineer at Microwave. Before joining Fairchild he was with the Pearl Harbor Naval Shipyard as a nuclear power engineer.

Joern Eriksen joined the R & D group as an Engineer. He most recently was a Lieutenant in the Danish Navy.

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# Moving Up

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Laurence Luckock recently became an Applications Engineer. He was formerly IBM project coordinator and Product Marketing Engineer at Mountain View.

Peter Noto moved up from Senior Engineer to Section Head in Microwave device and Hybrid Circuit sections at Microwave.

Tom Anthony was appointed to the new position of Marketing Development Manager for Special Accounts. He will be responsible for Canadian sales and marketing, SGS European sales liaison and licensee and private brand sales. He was formerly Far East Marketing Manager for Semiconductor.

James Whitworth was promoted to Manager Engineering Services in South Portland. He was Manager Engineering Services at Shiprock.

Errol Golsan transferred to the position of Production Supervisor at South Portland. He was Production Supervisor at Toronto for the Canadian facility before moving to South Portland.

John Vennard was promoted from Product Engineer to Supervising Engineer of Hybrid Circuits at Mountain View.

Mikio Suzuki was promoted to Supervising Engineer from Senior Engineer at Diode.

Dave Powell was promoted to Employee Relations Supervisor for the Mountain View complex. He was formerly Senior Area Personnel Administrator for the IC and Discrete Device groups.

John Walsh was promoted to Personnel Administrator. He previously held the title of General Employment Supervisor at Mountain View.

Ken McCammon was promoted to EDP and Spec Control Coordinating Supervisor in Order Processing. Before that, Ken was a Production Planner and was temporarily Sales Liaison Engineer at Diode.

William Schoenemann joined Memory Products as Production Manager-Systems Manufacturing. He transferred from the Instrumentation division where he was Production Manager-Instruments.

Larry Frankfurt has assumed the Distributor Product Marketing title. He most recently was with the Mountain View Distributor Sales group.

Frank Paone advanced to Foreman in the Slicing, Evaluation and Chemetch area at Mountain View. He was a Lab Tech before his promotion.

Steve Zelencik is the first member of Semiconductor's sales team to be named to the newly-created post of Account Executive-Burroughs.

Bob Chamberlain was promoted to Field Sales (midwest industrial) from his job as Product Marketing Engineer.

John Arthur advanced to Senior Personnel Administrator at Mountain View. He was previously Mountain View Safety Engineer.

Mike Noble was promoted to General Employment Supervisor at Mountain View. He had worked as Personnel Assistant in the General Employment section.

Stan Goobich was appointed Assistant Advertising Manager in Marketing Services. He had previously been working as Military Account Manager and will continue to service the Military marketing group, but he will no longer handle any product oriented service work.

Dick Beck advanced to Senior Quality Control Engineer from QC supervisor at South Portland.

Ed Kruger was promoted from Technical Supervisor to Supervising Engineer at South Portland.

Fred Hopkins advanced from Production Supervisor to General Foreman at South Portland.

Fred Arehart is now Production Supervisor at South Portland. He was formerly Mechanic A.

Will Willis was promoted from Systems Analyst in the finance systems section of Management Information at South Portland to South Portland Resident Systems Analyst in Manufacturing Systems.

Philip Downing moved up to Engineer in the Physical Device Research group at R & D. He was previously a Product Engineer.

Richard Kors was appointed Product Marketing Manager for Proprietary Integrated Circuits. He was recently Regional Sales Manager for military sales in the Southwest.

**LEADWIRE 7** Published by and for  
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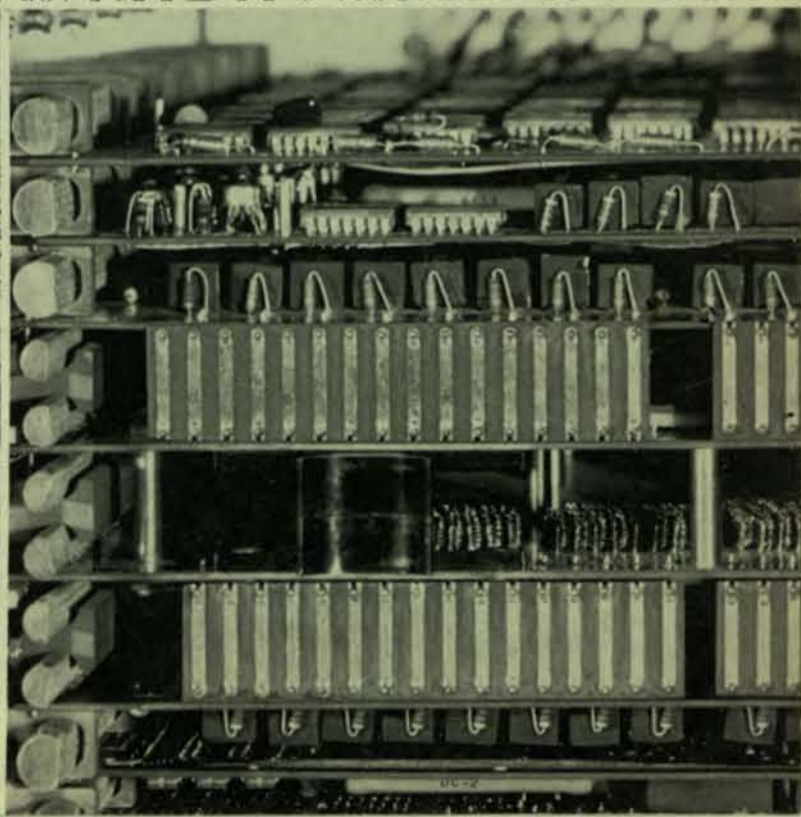
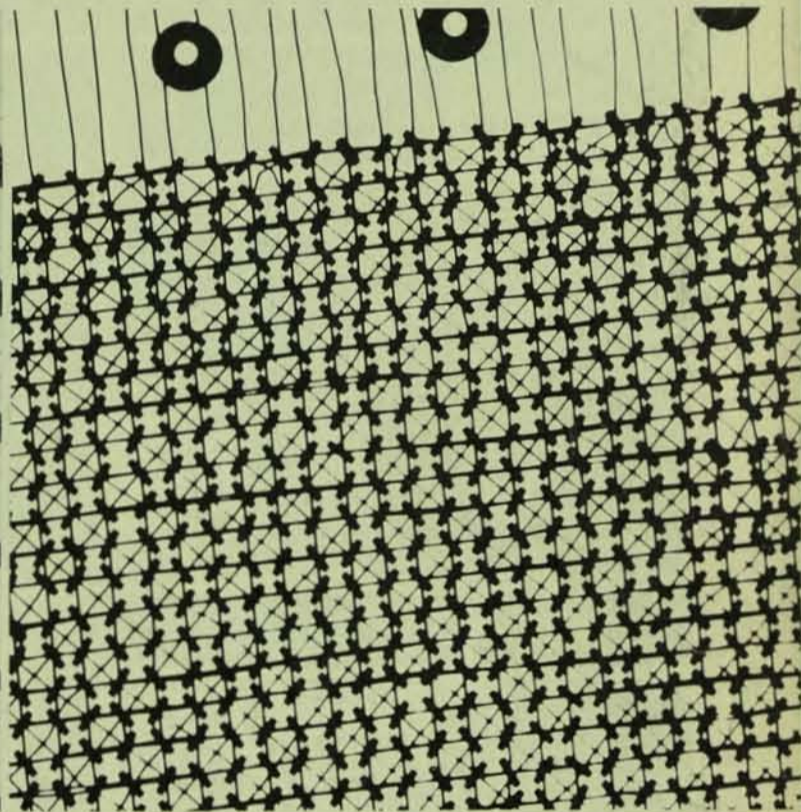
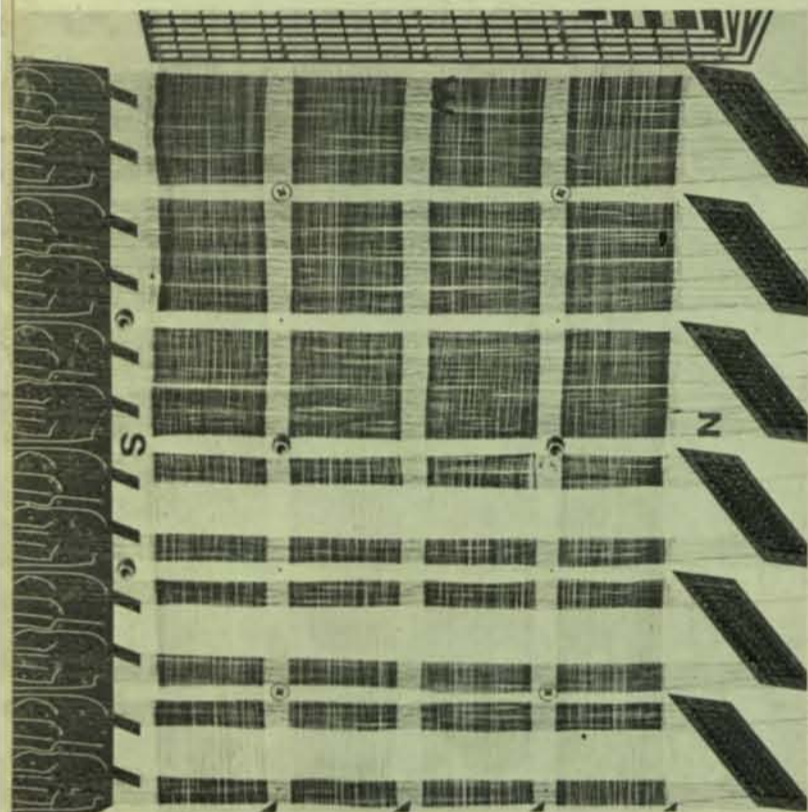
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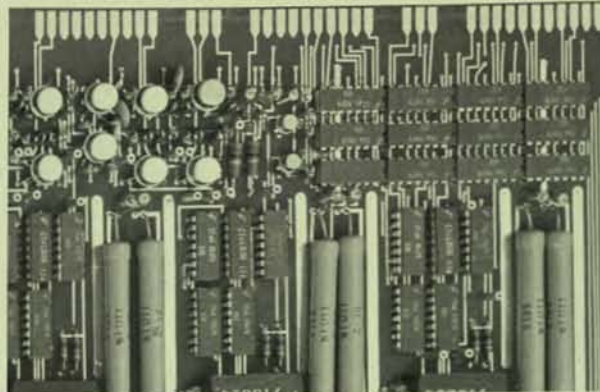
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# LEADWIRE 9

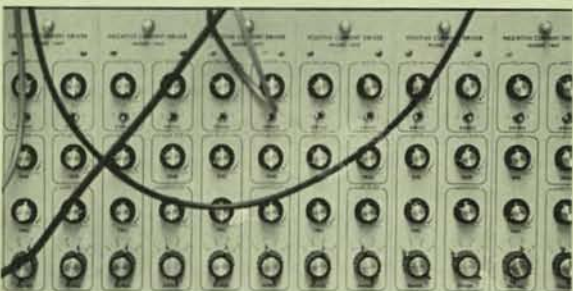




The human brain can store the inputs of a sixty-year lifetime, or  $2.8 \times 10^{20}$  "bits" of information.



Memory banks in the future will probably far exceed man's memory capacity.



The chief advantages of electronic memory systems are speed, high accuracy, and virtually unlimited capacities.





# Fairchild Memory Products

Fairchild Memory Products might be a mere infant in the memory field, but no other newcomer has experienced such phenomenal success in so short a time.

Since November 1965, Fairchild Memory Products has emerged from a 13-member research and development staff to a top-notch production and marketing group of more than 350 people. Manufacturing activities are centered at Mountain View with additional support from a highly skilled staff in Hong Kong devoted to core-stringing activities.

Memory Products sales are expected to total more than \$2 million, doubling last year's record performance, and a five-year plan calls for an excess of \$20 million in sales during the fifth year of operation. This means Memory Product's marketing operation, both at home and abroad, will have to pile up sales records more impressive than ever before. And, part of their success rests on the advances being made in integrated circuit memory systems. IC memory systems (all semiconductor) were pioneered by Memory Products and promise to be the wave of the future. Another product line, core systems, uses ferrite cores and integrated circuits.

Memory Products manufactures cores for its own use and to meet customer specifications. Fully tested cores are strung and assembled into planes, and planes are further tested before assembly into stacks and memory systems. That, simply, is how it's done, but to look at the systems there's nothing more complicated than the maze of wiring and electronic components assembled into one of Memory Products' systems.

Three complete systems have been developed by Memory Products for the main memory, scratchpad memory, and buffer system applications. They are known as the MicroPACER, MicroCELL, and MISER memories. Each is a state-of-the-art product employing Fairchild integrated circuits and advanced packaging features.

Additionally, Fairchild Memory Products produces the best memory component parts in the industry. These include a line of core driver modules, BD and 2.5D core planes and stacks, and even IC board arrays of memory cells complete with drivers and memory circuits.

Customers today include those in commercial, industrial, and military markets, and their numbers are expected to increase rapidly. In fact, the memory market is expected to grow at an even faster rate than the computer market due to the increased need for memory storage per computer. Both the nature and the amount of storage is expected to change considerably over the next ten years. And, Fairchild expects to be the forerunner in the new technologies of the future. To this end Memory Products is making heavy research and development expenditures.

Early in 1967, a formal research group was started. This staff is presently working on advanced techniques which may be considered unconventional by today's standards. The first of such developments is scheduled for showing at the Spring Joint Computer Conference in 1968. The second will probably miss this decade as it is a much more complex undertaking.

Yes, Memory Products is very much a part of this burgeoning industry, and it plans to be a much bigger part each year.



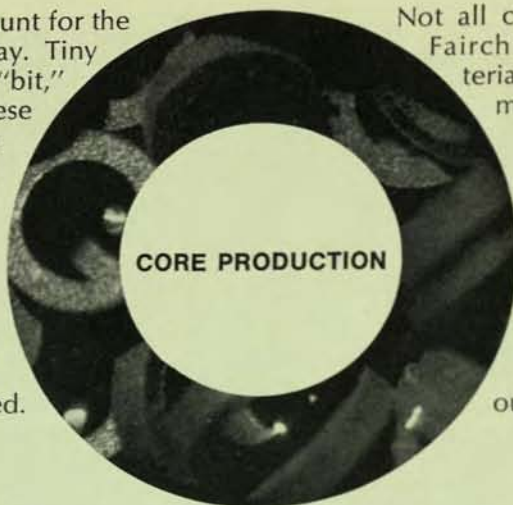
Memory Products serves customers throughout the world with the fastest memory systems available on the commercial market... and all of this has happened in just two short years of operation.



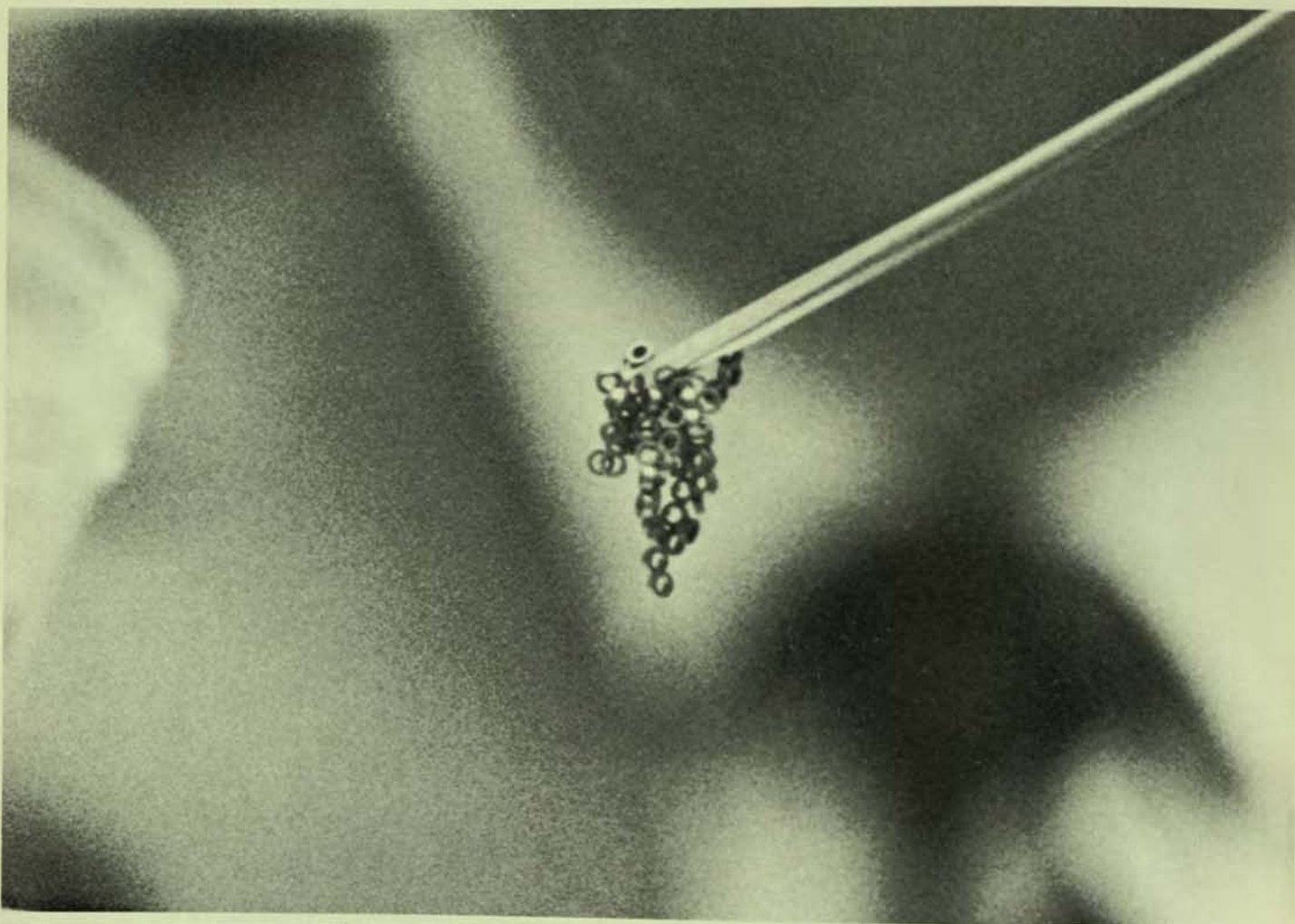
Fairchild Memory Products develops and produces magnetic memory components and electronic storage systems for use in a variety of information processing systems.



Core memory stacks and systems account for the majority of those manufactured today. Tiny ferrite cores (each of which stores one "bit," of information) are the very heart of these systems. Cores are doughnut-like in shape and are strung and assembled into planes, stacks, and eventually memory systems. To make cores, special materials are precisely weighed, compounded and mixed. Then they are pressed into round shapes measuring 22 to 80 mil. After a visual check, they are fired in automated ovens, and finally 100% tested.



Not all companies make their own cores, but Fairchild Memory Products' Magnetic Materials Department manufactures about a million cores a day. In operation for more than a year, the Magnetic Materials force numbers more than 50 people, and its operation provides Memory Products with a source of cores whenever cores are needed and at the high quality required. It is this dependable source that enables Memory Products to meet customer demands and continue to outpace its competitors.





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## You can make good things happen

It may be called the United Fund or the United Crusade, but whichever it is, it's time to give again this year. Your donations are needed now more than ever. You and your United Fund are a team — a team working for the betterment of your community through helping thousands of people in need. Your "fair share" contribution

(the equivalent of one hour's pay per month) will aid the ill, the young, the bedridden, the disaster stricken, and the aged in your area. Many people are counting on you. Won't you pledge your "fair share" when it's time to give?

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# PROGRESS REPORT

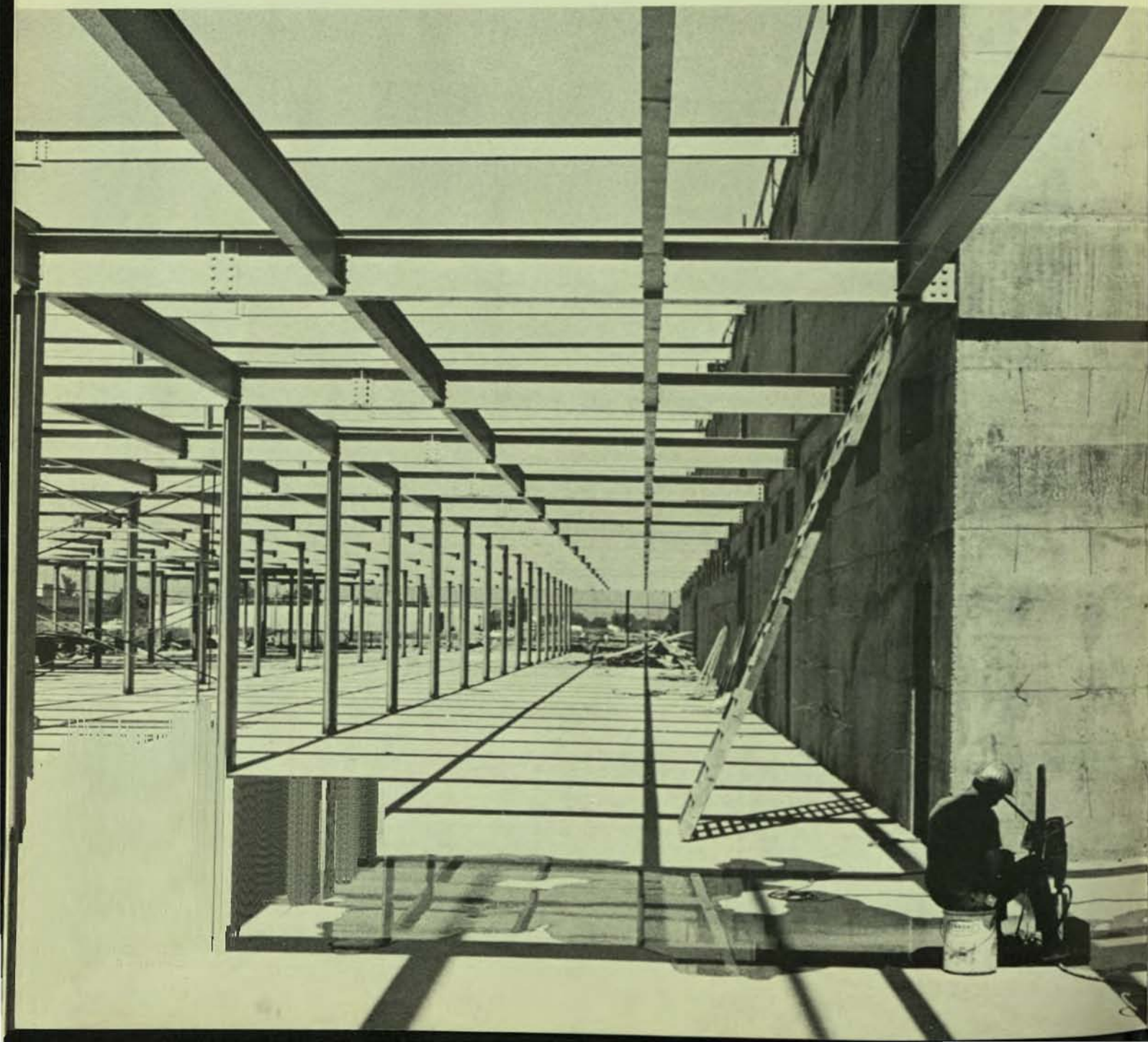
How do you build a giant 342,000 square foot headquarters building? To begin with, it requires:

33,845 tons of concrete (that's enough for the building, parking garage, and sidewalks),

324 steel columns that stretch 4,536 linear feet,

5.9 miles of steel beams and minor beams, and someone with a plan.

And, at 464 Ellis Street, site of Semiconductor Headquarters, everything's going according to plan. The site was first stripped of existing top soil; then excavation was begun. Concrete footings (large chunks of concrete that support the entire weight of the building) were poured, and concrete walls and columns below the first floor were poured. The first floor concrete slab (called



a waffle slab) was added, and a building began to emerge from what had been a big, gaping hole.


Progress is easy to watch now. The steel frame, the second floor and the roof surround a center structure called the core. The core is a bracing structure and will house the unchangeable facilities like the elevators, restrooms, and stairways. All other walls in the building will be non-bearing; that is, they will serve strictly as space dividers.


After the exterior framework is attached to the building, workmen will start completing the interior — ceilings, flooring, air conditioning, doorways, and painting. With these finishing touches, the building will be ready for occupancy.

And . . . . . Instrumentation's just at that stage now. Its 156,000 square foot new headquarters in Sunnyvale will more than double Instrumentation's present facilities. Features include ample parking, lush landscaping, textured concrete exterior, wall panels with cast cut stone highlight panels at both lobby entrances and in the enclosed patio, concrete planter boxes at the front and side window areas, a spacious hot lunch cafeteria with meals prepared in the cafeteria, and cheerful interior color schemes throughout.

Moving begins for Instrumentation in late September. Semiconductor must wait until 1968, but that's right around the corner.



Semiconductor Headquarters 

Instrumentation Headquarters 



# PICNICS 1967

(continued)

From Maine to Hong Kong, from gigantic picnics like South Portland's for 3500 people to those of department size at Mountain View or the boat-picnic for forty members of Hong Kong's Applications and Marketing staff, the 1967 Picnic season is slowly drawing to a close. The following photos attest to the variety of activities and the fun had at each picnic.

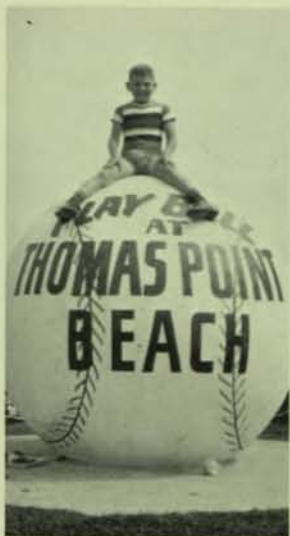
## packaging



## planning and distribution



## south portland



**instrumentation**



**applications/marketing Hong Kong**



**manufacturing engineering**



**aerospace and defense**



## Mountain View

Something new at Mountain View during August—a fashion show sponsored by the Rec Council. Two showings gave all shifts an opportunity to view a collection from Macy's of California modeled by employees. Day shift models included Jimi Ussey, Reba Clinkenbeard, Connie Evans, Sue Hofenfeld, Caroline Hughes, Joycelyn Cortilla, Ruth Carlson, Bonnie Bough, Sharon Spanelli, Beverly Fierro, Betty Childers, Nancy Jo Weaver, Janice White, Sandy Simpson, Merle Martin, Bobbie Kirlin, Don Massey, Doug Usher, and Bob Fox. Swing Shift models were Nancy Swann, Shani Pere, Sandra Garald, Lois Berthaiune, Carol Downs, Joyce Gordon, Val Nelson, Rosalie Hernandez, Gloria Robinson, Fernell Tyler, Pauline Smith, Dee Tharp, Mike Walton, Frank Paone, and Dennis Key.



Another Rec Council event to keep an eye out for is the First Annual Art Show and Contest. Details will be posted later.



Fairchild Semiconductor's Golf Tourney at Spring Valley drew employees from San Rafael, R & D, and Mountain View. In fact, Jim Daniel of San Rafael won the prize for the longest drive. Low gross winner was Lee Henderson (69); the booby prize went to George Lao (132). Closest to the pin on the four par-3's were Pete Solly, Rudy Gutierrez, Ben Anixter, and Ken Dieker.



Dick Hoffman and Dale Edgar of Memory Products Manufacturing Engineering treated Ellen Chew to a steak dinner recently. The reason? A job well done! Ellen, who's just been with the department since February, completed two perfect chassis wire boards for one of Memory's prime customers.



Many visitors tour the Mountain View facilities to get a first hand look at Semiconductor operations. Many are customers or financial analysts, and many are officials from governments throughout the world. Such was the case when Bob Chalom, Manager of Public Affairs, hosted Sun Ki Lee and Man Hee Lee from the Bureau of Heavy Industry, Ministry of Commerce and Industry of the Republic of Korea.



Gail Herbach, Junior Specialist Tester in Power Device Engineering, has been with Semiconductor since January 1959. Brother Mike was hired as a technician in Transistor/Diode Engineering in September 1966. Pam Bishop worked in the same department as Mike and had been there since October 1963. She met Mike and soon she was a Herbach, too. Now there's to be a little Herbach, so just before leaving her present job as secretary to Brent Knudsen, friends throughout the plant (with the help of Gail and Mike) surprised Pam with a baby shower.

## From the Field

Four men were named Salesmen of the Month for June. From the Industrial Market, Bert Piaser was selected. According to Eastern Industrial Regional Sales Manager Vince Sabella, "It is very difficult to pinpoint a particular month that Bert excelled in salesmanship since he constantly shows tenacity in this area. Many of Bert's design efforts are either shot-gunned throughout the nation or directly routed to another state causing a sole source situation for Fairchild at the buyer's level. Bert's design efforts will contribute to a fair percent of Fairchild's 1968 sales dollars."



HERB CRISCITO

Herb Criscito was named Computer Salesman of the Month for recent successful negotiations with Univac for three million circuits at a total worth of approximately \$7 million. This is the largest single order ever released by Univac. His sales efforts, authorship of a number of technical papers, and previous work on the development of high frequency planar and planar epitaxial silicon transistors as well as the design and development of digital integrated circuits make him one of Fairchild's most outstanding salesmen.

Consumer Salesman of the Month was Paul Bartlett. Paul booked the first order ever received from Kodak Apparatus and Optical Division. The order was for three million epoxy units. Through Paul's efforts, Fairchild also received an order from Mowhawk Data Sciences for

over three million epoxy transistors and 80,000 integrated circuits.

Rounding out the Salesmen of the Month for June in the Military Market was Dan Hauer of the Los Angeles office.



PAUL BARTLETT



BERT PIASER

## Instrumentation

Instrumentation's Rec Council continues to keep up the great work. Coming events include:

September	Bowling begins
September 23	Golf Tournament
September 30	Fall Dance, Plaza Lanes
October 7	Octoberfest Fall Picnic, Paul Masson Mountain Vineyards
October 14	Tennis Tournament
October	Falstaff Brewery Trip scheduled
November	Christmas Gift Sale begins
December 23	Christmas Dance, Cabaña
December	Children's Christmas Party



The new Tennis Club is getting in the swing of things. Officers are Vic Marquez, President; Donna Naton, Secretary/Treasurer; and Ralph Rassmussen, Vice President.



Ken Lowe, Systems SubAssembly Foreman, doubles as Marshall at Frontier Village, or at least he was roped into it at this year's picnic.

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## Canada

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The Fairchild name was given a publicity boost each time the "Charlie Brown All-Stars" took the field. These "all-stars" were the Northern Electric Company team, and decked out in their "Charlie Brown" T-shirts provided by one of the team's sponsors, the Fairchild Canada marketing group, they competed in a Canadian Softball League. Northern Electric is a large OEM Fairchild customer.

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## Shiprock

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Paul Driscoll, Shiprock Plant Manager, received one of ten Top Hat Awards for Fairchild Semiconductor from Sarah Jane Cunningham, President of the National Federation of Business and Professional Women's Clubs. The award was presented to Fairchild Semiconductor for its significant contribution toward advancing the status of employed women. In the past year and a half,

the Shiprock facility has expanded from fifty employees to roughly 550, and approximately 470 of these are Navajo women employed in clerical and administrative positions and as electronic assemblers. In addition to increasing overall numbers of women employees, the division's training and educational facilities were cited for better preparing women for work. Credit was also given Fairchild for raising the pay scales for women and for supporting legislation for equal pay. Other recipients of the award were Joseph A. Boyd, Jr., Dade County Commissioner (Fla.); Doyle Dane Bernbach (advertising firm); Margaret Hickey, Public Affairs Editor, *Ladies Home Journal*; John Hancock Mutual Life Insurance Company; Dr. William Edgar Park, President of Simmons College; Sylvia Porter, syndicated columnist; Jayne Baker Spain, President of Alvey-Ferguson Operations of Litton Industries; Valley National Bank, Phoenix; Woodward & Lothrop, Washington, D.C.



Paul Driscoll is on the other end of the award ceremony this time as he presents a letter of commendation to Jessie M. Lee for her one year of perfect attendance at work. Jessie is a second shift material handler in the Die Fab area.

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## San Rafael

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San Rafael's Good Housekeeping Safety Committee has struck again, and August's winner is Standard Products. August's loser was Modules. Members of the committee which select the cleanest and messiest areas in the plant are Jack Higgins, chairman; Clara Penders, Marietta Bowman, Cleatus Dunkley, Nadia Post, and Evelyn Kim. Previous winners were Fab II (June) and Special Products (July), and winners of the "Pig Pen" award were P. C. Finish (June) and Scheduling (July).





Winners in this year's Golf Tournament played at San Geronimo were Dave Marriott (low net), Bruce Mack (2nd low gross), George Miller (2nd low net), and Buck Snyder (low gross).

After 20 of 35 scheduled games, San Rafael's softball team has five ballplayers with averages well over the .400 mark. Bruce Mack is batting .475; Hal Knopp, .471; Herm Martin, .464; Jim Smith, .457; and Al Danks, .410. This strong hitting is reflected in some scoring records the team set against the San Rafael Jaycees. The team scored 24 runs in a seven inning game and 10 runs in a single inning while limiting the Jaycees to only 6 runs for the whole game. Added to the list of recent injuries was Karel Svoboda. He received a broken collarbone in a game at San Quentin when a 300-pound inmate collided with him at home plate. The team is scheduled to play in a double elimination tourney beginning September 23rd.

The Kelp Explorers, San Rafael's skin diving club, elected Karel Svoboda its new President. Karel replaces outgoing President Jack Brewer. Jean Annis consented to serve a second term as Secretary/Treasurer. The next event planned by the club is an overnight weekend in Monterey.



Karel Svoboda's skin diving exploits have been written and told before. His latest with Bill Irons, Bert McNamara, George Parrish, and ex-Fairchilder Cliff Heberlein was to Santa Catalina . . . the island of "abalone and octopus." The most popular activity this time was shark hunting. Underwater shotguns designed by Bill and Karel caught several large Blue sharks. George Parrish created some excitement when he discovered some

mysterious bones and a rusty old rifle which was fully loaded. The rifle apparently had been uncovered by wild boars which had been digging around the camp during the night. The divers surmised the bones may have been those of a hunter who had fallen from a nearby cliff, or they might have belonged to a victim of foul play. Needless to say, the "rifle and bone" mystery must wait until next year when the group expects to return and uncover more clues.

## South Portland



South Portland employees danced the night away on their second annual bay cruise. Nearly 250 persons attended each of two cruises held July 17th and 23rd.



South Portland held a double celebration marking the facility's fifth year of operation and the opening of the plant's new cafeteria. A free buffet-style luncheon was provided for all three shifts. Dignitaries visiting the plant that day were Richard Wolf and George Garrett of the Chamber of Commerce; Samuel Hinds, President of South Portland's City Council; Carlton Lane, Chairman of the Area Development Commission; and Bernal Allen, South Portland's City Manager.



tendance record in her five years. Plant Manager Jack Magarian (far left) made the presentations as he did to another five-year man, Gene LeDuc. All of those receiving the awards are employees hired when the plant located in South Portland five years ago.



## Sept./5yr. Service Awards

Dan Martin	MV	Dave Myers	MV
Jean Vance	SR	Sylvia Durham	SR
Alvestine Magee	SR	Harold Grant	SP
Thomas Peardon	MV	Edmond Beaman	MV
Bobby Sudduth	INSTR	Patricia Decker	MV
Thomas Mills	MV	Jean Balzan	SR
Joseph Madjerac	SP	Patricia Henckel	SP
Edith Beem	MV	Bobbie Coleman	MV
Donna Hughes	MV	Morey Martin	R&D
Katherine Conley	SP	Steve Fierro	MV
Zenaida De Vera	MV	Shirley Hockstaff	MV
Nell Gainer	SR	Flavio Valiente	INSTR
Jim Reynolds	MV	Marshall Cox	MV
Len Ornik	MV	Ross Tucker	R&D
Heinz Eggers	SR	Barbara Hunt	SP
Norma Guidry	MV	Madeline Burke	MV
Desmond Fitzgerald	R&D	Adriaan Melger	R&D
Geneva Smith	SP	Billie Jinter	SR
Ruby Oliver	MV		



### FIVE-YEAR CELEBRATIONS



Plant Manager Paul Driscoll congratulates Rich Cornelier and Joe Hulboy as both men receive their five-year service awards. These were the first five-year awards ever presented at Shiprock, though others on the staff have received five-year awards before coming to Shiprock.

James Wentworth, Marjorie Build, Anne Hagan, Rose Stephenson, David Symons, Michael Morrisette, Kenneth Taylor, Ray Malatesta, John Thompson, Donald Blanchard, and Robert Meyer are among the first employees at South Portland to receive their five-year service awards. Rose Stephenson also sports a perfect at-



Polly Mulligan was surprised by cake, coffee, and corsage the day she received her five-year service award. Polly is a member of the Small Instruments group at Instrumentation.



Dolores Cannon of IC Production Control at Mountain View cut the cake at her five-year celebration and also enjoyed her anniversary day at the luncheon given by friends.

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## New Faces

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Jack Ayre joined Fairchild Semiconductor as Information Services Writer for Marketing Services at Mountain View. He formerly was Publications Editor at California State College.

Ken Dieker was named Administrator for the Marketing Department. He was with Air Products as Western Regional Manager before joining Fairchild Semiconductor.

Sam Fajardo joins the Aerospace and Defense group as Production Supervisor. He previously worked for Signetics.

Ed Ferrell, formerly the Director of Marketing for Stewart Warner Semiconductor, joins Fairchild as Product Marketing Manager for NPN Transistors.

Jim Kemp joined Instrumentation as Production Scheduling Supervisor. He was previously with Bourns Incorporated of Riverside, California.

Hank Moniz joined the Systems Division at Instrumentation as Industrial Engineering Manager. He previously worked as a Senior Industrial Engineer at Lenkurt Electric.

Tom Popek is a new Operations Control Analyst in the Planning and Distribution group at Mountain View. He received his Masters degree from Sloan's School of Management at M.I.T.

Jerry Prawl joined the Semiconductor Division as Sales Liaison Engineer. He was formerly with Crocker Citizens National Bank.

Doug Seitz, formerly with Bourns Incorporated as an Assistant Foreman and Production Planner, is now Material Planner at Instrumentation.

Norman Steinbach joined Instrumentation as an Industrial Engineer. Before coming to Fairchild, Norm worked for Lenkurt Electric.

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## Moving Up

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Frank Burge has been promoted to National Sales Manager for Systems Marketing at Instrumentation.

Vince DeLellis was Senior Engineer in Microwave Manufacturing before his recent promotion to Section Head for the Microwave Prototype Section.

Larry Gildea is now the Supervisor of Systems Planning at Instrumentation. He was previously Supervisor of Material Distribution Control.

Len Gilmore, formerly National Sales Manager, has been appointed Inter-Divisional Marketing Manager for Instrumentation.

Stan Goobich has been promoted to Sales Promotion Manager for Marketing Services at Mountain View. He was formerly Assistant Advertising Manager.

Pete Hepburn moved up from Production Control Engineer at Instrumentation to Supervisor of Systems Production and Material Control.

Jim Kennedy was named the newest member of the Central Computer Sales team. He will be directing Fairchild's sales efforts at the Univac complex in Roseville, Minnesota. Most recently, Jim was a Product Marketing Engineer in PNP Marketing.

Dick Martin has been promoted from Product Marketing Manager for NPN Transistors to Manager, Product Support Department, Discrete Devices.

Larry Phillips moved up to Production Supervisor at Aerospace and Defense Products at Mountain View. He was previously a technician in the Materials Section.

Lu Ross was appointed Manager of Manufacturing for Memory Products.

E. C. Watson was appointed Manager of Planning and Services for the New Products Group at Mountain View.



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## LEADWIRE'S PHOTO CONTEST

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## Leadwire

Vol. 9, No. 9

Published by and for  
Employees of Fairchild  
Semiconductor/Instrumentation

Mountain View - Palo Alto -  
San Rafael - Hong Kong -  
South Portland, Maine -  
Shiprock, N.M. - Croydon,  
Australia - Ontario, Canada -  
Tijuana, Mexico - Seoul, Korea

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SAN RAFAEL—Cleatus Dunkley, Audrie Graxiola, Janet Marz, Margaret Queen, Hal Knopp, Cary Barford, Bobbie Talley, Anne Parfitt, Hilda Kaliczak.

RESEARCH & DEVELOPMENT—Dianne Cotton, Janet Jones, Terri Mead, Adrienne Juliano.

INSTRUMENTATION — Jack Ramon, Pat Campagna, Anna Ackerson, Walt Skruch, Jeanne Meyers.

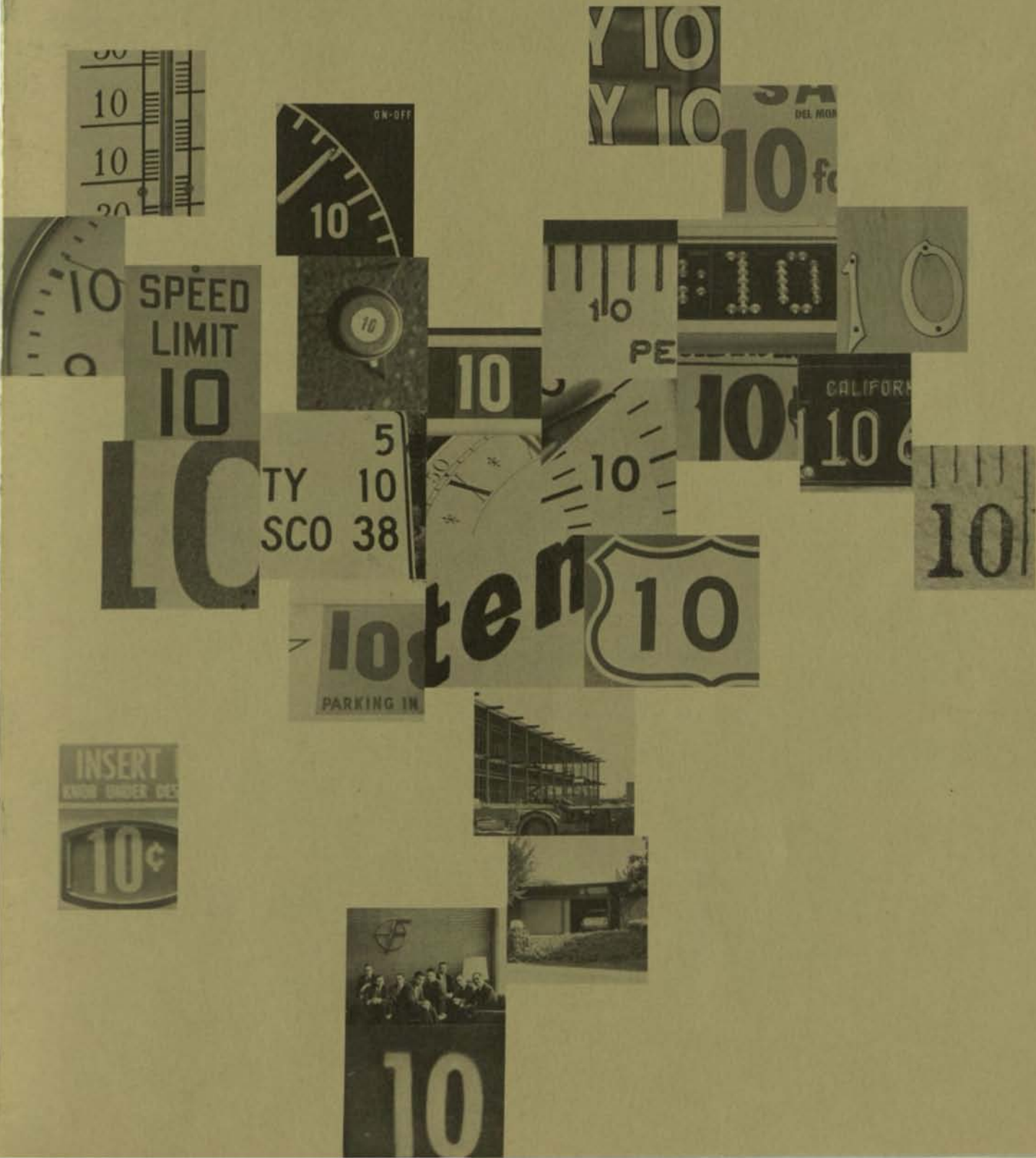
SOUTH PORTLAND — Linda Allen, Bob Tetrault.

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The Cover: This month's cover represents the essential ingredients of Fairchild Memory Products—core production, memory component parts, completed systems (the fastest available on the commercial market), and the more than 350 people located in Hong Kong and Mountain View producing quality memory products.

LEADWIRE 10  
10th Anniversary  
Issue



# IN 10 YEARS





Fairchild Semiconductor waded into the semiconductor business ten years ago. The official date was October 16, 1957, though a research effort had been launched long before that by eight scientists and engineers working in a Palo Alto garage attached to Vic Grinich's house. Their discovery of the Planar\* process would permit economic volume manufacturing of transistors, diodes, and microcircuits of unequalled reliability. But that's jumping ahead of the story. First they needed financial backing, and Fairchild Camera and Instrument was willing to make the investment. Backed by FCI, they moved into larger facilities at 844 Charleston Road (until just recently it has served as one of Instrumentation's locations). Though a fledgling operation, the company got its first big boost in January 1958 when IBM placed the first order for silicon transistors—100 of them. Production hasn't

stopped since, and of course, today, Fairchild Semiconductor is one of the world's largest suppliers of silicon semiconductor devices.

Today, four of those first eight men are still hard at work for Fairchild. The initial group included Dr. Robert Noyce, group vice president of FCI; Dr. Grinich, general manager of Instrumentation; Dr. Gordon Moore, director of Research and Development; Julie Blank, facilities manager. Additionally their first employee, a technician named Murray Siegel, is now head of Industrial Applications.

Today, also, the Semiconductor division numbers more than 13,000 people located in Hong Kong, Australia, the Republic of Korea, Mexico, Canada, Europe and the United States . . . a reality that has far surpassed the wildest imaginations of eight young men working in a converted garage.

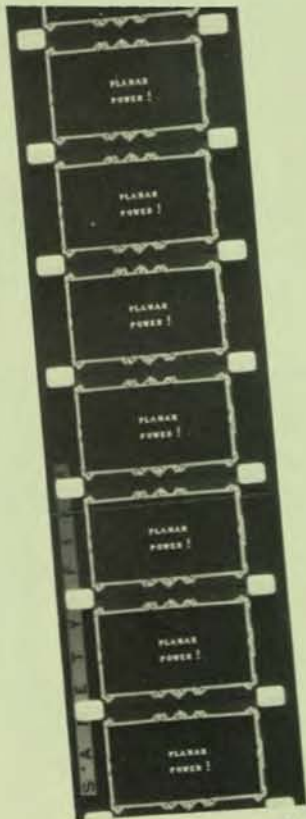


# Fairchild Power

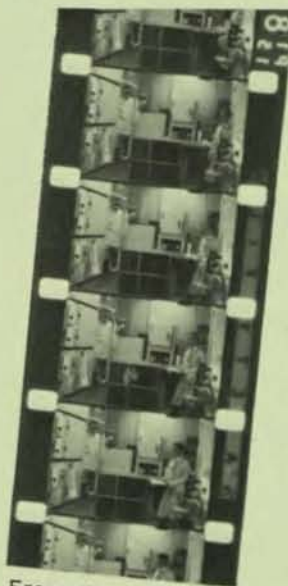
Arab Power? Peanut Butter Power? Flower Power? No! FAIRCHILD POWER! And to explain it to Fairchild's salesforce Jan Black and Tom Ciochetti designed a sight and sound spectacular on Fairchild Power—facilities, technology, capabilities and new power products. □ Jan and Tom, Product Marketing Managers for Conventional and RF/Microwave Power devices, and the rest of their traveling squad (Bob Reber, Manufacturing Manager—Large Geometry Power; Dick Gifford, Senior Product Engineer; Herb Sosnick, Marketing Services) presented fast-moving four-hour seminars in six cities across the U.S. The road show opened in Palo Alto August 14th, then moved to Los Angeles, Fort Lauderdale, New York, Wakefield, and closed in Chicago on August 24th. □ More than 275 field sales engineers, Fairchild distributor personnel, and regional managers attended this new approach in creating marketing awareness. Each meeting was designed as a refresher course on the power devices Fairchild Semiconductor currently manufactures and applications using these devices. The traveling group was aided by some 125 slides, a five-minute 16mm movie, samples, and brochures on conventional power transistors (both amplifier and switching types) and RF power and microwave transistors. □ Each seminar started with a written quiz to test the sales group's current awareness of power devices and applications. High scorers were Hank Carbajal-Military (Palo Alto); Dave Okamoto-Military (Los Angeles); Harry Neil-Military (Fort Lauderdale); Scott Brown-Industrial (Wakefield); John Alfieri-Military (Los Angeles); Tom Murph-Government Agency Sales and Hal Piper-Canadian Sales (Chicago) □ Following the initial quiz was a five-minute movie, "The Birth of a Technology," created by Dick Steinheimer and Ron Turner, Marketing Services photographers. Starring in the old-time melodrama were some of Mountain View's Power personalities like Gary Parker, John Barnes, Janice Chapman, Gary Richter, William Bryan, Tom Ciochetti and the ever-popular Max Chancellor. □ The traveling team then wound up the seminar with a detailed discussion of the Power market, customers, new products, applications, and manufacturing. All sales engineers were given Power Transistor Sample Kits designed for their specific markets, samples to use for customer demonstrations, manuals, sales aids and a pocket-size V-switch tester designed and manufactured by the RF power applications group spearheaded by Murlin Vellequette, Bill Bechtold, and Will Alexander.



ROAAAAR

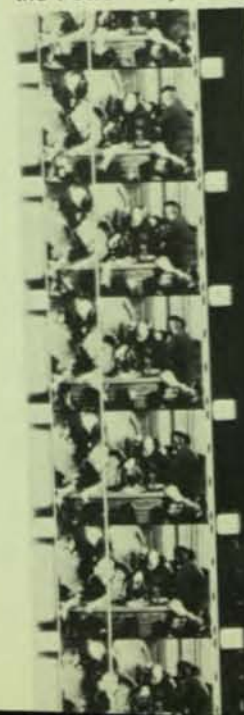


(The haunting refrain "Ain't She Sweet" played on an old-time rickety piano.)



From these humble surroundings a new technology is born.

Management's decision to go ahead with the Power Project.



Now to develop reliability statistics. Ee-gads! This device has passed the S. P. test! (The train flattened it, but it still works.) Let's rush it to the market.

One of the highlights of the promotion was the distribution of a 26-page Power Transistor Training Manual, the first of its kind. It included a four-part quiz to be mailed to the Jan with-in a week after the meetings in order to qualify for cash prizes. First prize winner was Pete Onstad (Military-Minneapolis); second prize winners were Bob Fockelmann (Military-Dallas) and Dan Hauer (Military-Los Angeles); and third prize winners were Barry Fidelman (Consumer-Chicago), Jack McIntosh (Consumer-Chicago), and Bert Piaser (Industrial-Wakefield).

Credit for putting this promotional package together also goes to Tom Moutoux, Power Applications; Rich Wills, Distribution Services; Scott Bryan, Fred Irvine, and Gunther Hal-ler, all of Production Control, for supplying the sample units.

9000 miles of travel and all the plan-ning and preparation are beginning to pay off. People are beginning to talk about Fairchild Power. Herb Wallak of the Jericho sales office will vouch for that.



But, what's this? Our fearless salesman is in mortal danger!



It's the ¼\*!½?%® Mo-torola Bandits!



They've tied our sales-man to the railroad tracks, skipped with the loot, and left him to the S. P. Will he pass the test?



Dare we think about his fate? Tune in tomorrow when Dick Steinheimer, ace movie maker, unravels the second reel.

# Fairchild Semiconductor as part of Fairchild Camera and Instrument

In 1957 the group of scientists led by Dr. Robert Noyce developed a method of mass producing transistors using a chemical-etch system called the "mesa process." Enormous business potential existed, but financial backing was needed to proceed. Fairchild Camera and Instrument Corporation of Syosset, Long Island, was willing to invest, and Fairchild Semiconductor was born.

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## CABLE

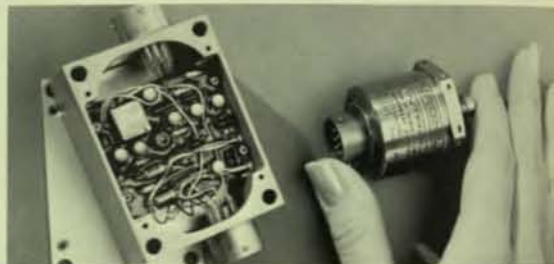
is headquartered in Joplin, Missouri, and produces a variety of precision cables and sophisticated wiring systems for space and defense applications. Recently added to its product line is a series of flexible printed, or etched, circuits.



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## CONTROLS

is located in Hicksville, Long Island. This division produces a line of precision components primarily for military and space programs—potentiometers, pressure sensors, and transducers.



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## DAVIDSON

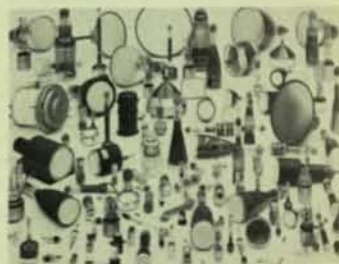
is located in Commack, Long Island, and is primarily concerned with producing a full line of offset duplicators, presses and attachments for inplant printing departments, reproduction departments, office and commercial printers.



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## ELECTRON TUBES & INSTRUMENT

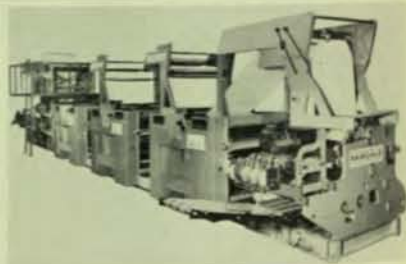
is headquartered in Clifton, New Jersey. This division is the leader in the design and production of a variety of cathode-ray, storage, photomultiplier and power tubes.



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## GRAPHIC EQUIPMENT

operations are centered in Plainview, Long Island. Products include a line of automated printing equipment, phototypesetting machines, web offset presses, electronic color scanning and correction devices, and electronic engravers.



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## INDUSTRIAL PRODUCTS

produces probably the world's best 8mm sound movie camera. Located in Plainview, Long Island, this group manufactures aircraft and audio visual products including Flight Data Recorders, Cockpit Voice Recorders, and automatic cartridge film projectors for use in schools, sales promotion or public relations.



a subsidiary of FCI. In 1961 Semiconductor became a division of Fairchild Camera. Today there are ten distinct companies in the FCI family. When combined with two subsidiaries, they produce a variety of industrial products which produced sales of more than \$227 million in 1966. This, then, is Fairchild Camera and Instrument.



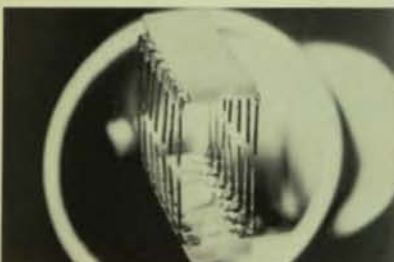
#### **INSTRUMENTATION**

located in Mountain View, California, manufactures semiconductor test systems, integrated circuit digital voltmeters, and amplifiers for the test and measurement market.



#### **PRECISION METAL PRODUCTS**

can be found in El Cajon, California. Its prime product is the sale and lease of a high velocity forming machine known as CEFF (controlled energy flow forming). This division also makes custom hardware items for aerospace projects like vacuum jacketed fuel lines for the first and second stages of the Saturn V Lunar launch vehicles.



#### **SEMICONDUCTOR**

operations are centered in Mountain View, California, and are concerned mainly with the development and production of discrete devices (transistors and diodes) and integrated circuits.



#### **SPACE AND DEFENSE**

is located at Syosset, Long Island. Within this division are concentrated the Corporation's major military and aerospace systems programs. These cover advanced photographic and electronic systems for aerospace reconnaissance and mapping, visual data annotation, correlation, processing, display, interpretation, reduction, storage and retrieval.



#### **ELECTRO-METRICS**

(a subsidiary) is headquartered in Amsterdam, New York. A functional entity of the Instrumentation Division, this group manufactures radio frequency interference equipment and microwave components.



#### **WINSTON RESEARCH CORPORATION**

(a subsidiary) is located in Los Angeles, and is part of the instrumentation video tape recorder industry. Products include a variety of recorder/reproducers and new developments in magnetic recording heads.



**SGS-FAIRCHILD IN EUROPE**  
● COMPANY OF THE GROUP  
■ FACTORY

# The World of SGS



(Above MILANO, below FALKIRK)



The growing world of SGS-Fairchild is centered in Agrate (Milan), Italy, but it encompasses the whole of Europe and such countries as Israel, Finland, and South Africa. In fact, the growth and decisions of SGS affect even such far away places as Mountain View, California, center of the Fairchild Semiconductor world.

SGS (or Societa Generale Semiconduttori, SPA) is owned equally by Fairchild Semiconductor and two Italian firms (Olivetti and Teletra). It is the second largest semiconductor firm in Europe, accounting for about 10% of European semiconductor sales, and in 1966 SGS was our second largest customer. More than 4500 people work for SGS, and if the "Avis" adage is true, they will be "trying even harder" now that they are No. 2.

SGS serves five main marketing areas. SGS-Fairchild Ltd., a British company, is one of five SGS companies located in Europe. Headquartered in Aylesbury, Buckingham-

shire, and staffed by British personnel, the company is concerned with the development, production, application and marketing of Planar\* semiconductor devices for the United Kingdom. Its newly completed factory in Falkirk, Scotland, operates much the same as any Fairchild Semiconductor facility, manufacturing the entire spectrum of Planar\* devices.

In addition to the United Kingdom market, the North Eastern Region is served by SGS Fairchild AB of Stockholm which just completed its own factory at Marsta. This company serves Finland, Denmark and Norway.

Western Europe is covered by SGS-Fairchild SA of Paris which built a large factory in Rennes (Brittany). The company has sales offices and distributors in Belgium and Holland.

SGS-Fairchild GmbH of Stuttgart operates in Central Europe and is building a factory at Wasserburg (Bavaria)

\*Planar is a patented Fairchild process.



(Above RENNES)



(Below SGS MOUNTAIN VIEW STAFF)



(Above MÄRSTA)



(Below FALKIRK)



(Above MILANO)

to meet the increasing demand of the German market. Distributors are based in Switzerland and Austria.

Southern Europe is covered by SGS of Milan which houses one of the largest SGS factories and laboratories at Agrate, Brianza, just outside Milan. Sales offices and distributors operate in Italy, Spain, Portugal, Greece, Israel and South Africa.

Although SGS companies are completely autonomous operations, they benefit by their link with each other and with Fairchild Semiconductor. Technological advances, application developments, and marketing innovations are shared jointly. SGS personnel at Mountain View work with Semiconductor's production people ironing out manufacturing problems and with marketing people on pricing, purchases, and deliveries.

This, then, is the world of SGS-Fairchild today, and though Europe seems far away, the relationship of SGS and Fairchild Semiconductor makes it a very small world.





# POTPOURRI

VOLUME 1 NO. 1

FAIRCHILD SEMICONDUCTOR

10 YEAR REPORT

## 1957

Fairchild Semiconductor Corporation begins in October.

First employees hired.

Operation locates at 844 Charleston Road.

## 1958

First product, the NPN double-diffused silicon mesa transistor, is introduced.

First big break comes when IBM places first order for silicon transistors—100 of them.

\$1 million plant is planned for Mountain View.

## 1959

First **Leadwire** appears on the newsstands in July, though it was nameless. Circulation: almost 500.

Maurine Christensen of Production Control wins contest to name company newspaper. **Leadwire** chosen from 110 entries.

\$750,000 addition is planned for Mountain View facility, doubling its size.

New \$1 million plant is announced to be located in San Rafael.

Fairchild Camera and Instrument purchases Fairchild Semiconductor.

### EDITORIAL

by R. N. Noyce

One Year Ago -

Usually comparisons are made on a five or ten year basis to show progress. At FSC, one short year has shown enormous changes!

One year ago, FSC had only 67 employees. The NPN transistor was moving from R & D to Pre-production, and manufacturing as such was just a gleam in the eye of our fledgling Manufacturing Department. Sales people were out convincing customers that we could make a transistor which was superior to anything available. We had

given 125 samples to customers to help convince them, and we had sold a grand total of 42 transistors. Our first advertisements were not to appear for another month. Still, plans were being drawn for a new plant, since everyone was confident that when potential users saw our transistors, we would need more space. And as you all have been keenly aware, we've been crowded for space even as the new plant has been built and equipped.

Everyone here has contributed to the tremendous changes of the past year. For those of you who have been here only a short time, as well as the "old-timers," there is plenty of opportunity to make important contributions to the future of our young company. Thus far the record is one of phenomenal success; even though we have set very high goals, each in turn has been exceeded. This is an achievement in which you should all take pride and satisfaction.

## 1960

First Fairchild planar transistor is introduced in January.

FSC announces it will market a full line of micrologic units.

Employee Credit Union opens, and Myra Landolfi elected to be its president.

Noon-time swims for employees are scheduled on Wednesdays from 12:15-12:45 at Mountain View's Union High School pool.

Fairchild Semiconductor acquires interest in SGS.

Loretta Hayes wins the Miss Semiconductor Contest.

Fairchild's family picnic at Adobe Creek Lodge draws nearly 2200 people. San Rafael's headcount shows almost 300 employees.

San Rafael holds first company picnic. Turnout numbers more than 600.

Several new items of test equipment are developed by the Instrumentation group and put into operation during the

summer—the Diode Tester for San Rafael, the Automatic Tester and Data Logger for the Autonetics Program, and the Type 4 Automatic Tester and Vibration Noise Monitor for the Autonetics Reliability Test Program.

## 1961

FSC transistors play an important role in the successful firing of the Minute Man ICBM fired from Cape Canaveral February 1st. Autonetics' contract manager praises the 30 girls on the Autonetics board assembly line for their contributions to the success of the firing. Approximately 1000 Fairchild transistors were in the guidance system of the missile.

Latest addition to the R&D library is "Analysis of Water" by F. H. Rainwater.

Fairchild introduces micrologic flip-flop in sample quantities at the International Radio and Electronics convention in New York.

The Final Seal girls on the Small Geometry line set a new record in yield quality for the week of February 13-19. The rate of loss is only one transistor for every 11,000 sealed. The girls include Aggie Myreholt, Maxine Oltrogge, Beverly De Los Santos, and Alice Long.

The Fairchild cafeteria in the new addition to the Whisman Road building is the most streamlined in the Bay Area.



Fairchild announces a series of high-frequency silicon industrial transistors, marking the company's official entry into the commercial and industrial markets.

It was the transistor plant's Accounting Department's men against the women in a baseball game that saw the women slaughter the men 19-14 (of course the fellas had to bat left-handed and could only count every other run).

Fairchild Semiconductor becomes a full-fledged division of Fairchild Camera and Instrument on May 31st.

San Rafael's women's softball team trounces the transistor team 14-2, but the gals on the transistor team recoup their loss by beating the San Rafael team 12-6.

SGS is set to manufacture and market Semiconductor products for the European market by virtue of Fairchild's 1/3 ownership of the Italian firm.

Instrumentation transfers out of the transistor plant as a separate, operating department.

The R&D Grinch team captures the interdepartmental volleyball tournament at this year's picnic. Stars are Rich Wills, Gary Mickleson, and Lloyd Perrier.

Construction begins on R&D's new home.

## 1962

When Col. John Glenn rocketed into orbit aboard his Friendship VII Mercury space capsule February 20th, he took with him a liberal sampling of Fairchild transistors and diodes. Fairchild devices were used in both the Atlas missile that hoisted him aloft and the Mercury capsule. In addition, many of the devices were used in the complex ground-support equipment.



Semiconductor punctuates its fifth anniversary with the announcement of a new 170,000 square foot, \$2 million building in Mountain View to house manufacturing and administrative facilities.

A totally new concept in TV is demonstrated at R & D's openhouse. It's Fairchild's all-silicon transistor TV, a product of the Applications Circuit group.

South Portland operation opens for business in July.

Fairchild Camera and Instrument sales top \$1 million in 1962.

## 1963

First transistors roll off South Portland's lines in January.

New 15-man fire brigade formed at San Rafael enlists help of Bill Irons, Earl Head, Vic Watson, and Pete Chiapetta.

"Semiconductor is now our largest division," John Carter, President of FCI, tells a meeting of Fairchild Semiconductor management.

Mountain View's women's bowling team bests 22 other teams in the National Industrial Recreation Association's February tournament. A star member of the team was Aggie Myreholt.

San Rafael schedules first employee art show.

Swing shift start-up is scheduled to begin in April for South Portland.

Fairchild picnics number four this year (Palo Alto-R & D, Mountain View, South Portland, and San Rafael), and some 6000 persons attended. It was R & D's first.

Hong Kong operation begins.

NPN Production wins the Intramural Softball League with a 10-1 record.

San Rafael's first birthday is feted at a celebration. Employees include more than 100 who were present three years ago when Diode moved into its Redwood Highway plant. The ceremony also honored nine women for outstanding performance. Included were Marilyn Buttke, operator of body paint machine, who recently set record for number of diodes processed in one shift; Marrieta Bowman, leading ten checker on the FD-6 line; Maxine Hamilton, final sealer on the standard product line holding the record for highest production in three-month period; Betty McDonald (now Luck), final sealer on FD-6 line for most production in three-month period; Lu Duer, die loader for most production in three-month's time.

## 1964

Fairchild introduces low-power microcircuits with reliability proven in over 29 million hours of operation.

The peninsula's basketball team tops Diode's.

John and Emilie Westhoff, San Rafael employees, are feted at a party to celebrate their becoming U. S. citizens on March 9th.

FSC wins near-million dollar order from Sperry Gyroscope for epitaxial micrologic elements in flat package. Size and weight reductions achieved through the use of microcircuits open the possibility of using the LORAN navigational system with a variety of tactical aircraft.

Semiconductor introduces three new NPN transistors for use in television sets.

More than 300 Semiconductor employees and guests are on hand for the Maine plant's first talent show and dance.



South Portland's open house draws some 2000 persons. Stay-at-homes also received an unexpected tour of the facility via WCAN-TV in Portland.

John Sentous is elected president of the Employee Recreation Council at Mountain View.

Fairchild Semiconductor makes a strong bid this May for an early share of the huge potential market for IC's in the commercial and industrial markets, introducing a line of IC's, specially designed for use in commercial computers, industrial control equipment, instrumentation, and test equipment at drastically lower prices than those currently charged for IC's in the military market.

A complete new family of reference and zener diodes manufactured by the planar process is introduced by Fairchild Semiconductor.

Fairchild Semiconductor opens new plant in South Yarra, Australia, to serve Australian markets. The present staff is less than 50, but it is expected to reach 100 by the end of 1964.

Frontage Road becomes Fairchild Drive as the result of a six-month campaign by Marketing Services personnel.

South Portland employees celebrate their second anniversary with traditional ice cream and cake on July 19th.

1500 attended South Portland's second family picnic.

FSC will have 302 five-year employees by the end of this year. 256 of them were hired in 1959. Dolly Rule will be the first woman at Diode to get her five-year pin, and Ann Bernardo of the Jericho sales office will be the first in field sales to receive her five-year award.

The Palo Alto facilities of Fairchild Space and Defense Systems become part of the Semiconductor division this October. The group will be located at 430 Fabian Way, across from the Instrumentation plant and will be attached to the Instrumentation department.

Instrumentation's IPS-1 Power Supply captures an award of excellence in the annual Industrial Design competition at Wescon.

R & D acquires its own recreation council.

Jack Ramon, Instrumentation, becomes the only great grandfather in the division with the birth of Loretta Anne Frydenlund on November 13th.

Steve Amman receives a \$100 check for gaining a patent disclosure on a Fairchild solid state digital voltmeter. His is Instrumentation's first patent disclosure.

The U. S. Patent Office declares Fairchild to be the owner of the "planar process" for manufacture of semiconductor devices. FCI is now the owner of 16 of the 17 claims contained in two patents covering the process.

Instrumentation ships record 7000 IC's in equipment during November. This and other figures of recent months makes Instrumentation the world's largest user of true integrated circuits in commercial equipment.

San Rafael celebrates five years of operation December 15th, paying tribute to employees completing five years of service in '64. Included were Dolly Rule, Bob Champagne, Al Desmond, George Compton, and Jack Larsen.

## 1965

South Portland is Semiconductor's second largest operation, now employing about 1000 people.

Concentrated Microwave production and marketing is established and Fairchild's first microwave transistor goes on display at the 1965 IEEE convention. The MT1038 represents Fairchild's entry into the very high performance microwave transistor market.

The Grissom-Young triumphant three-orbit Gemini flight was a source of pride to all America, but Fairchilders everywhere can take a special bow. Though it's impossible to know how

many Fairchild products were in the last space shot, more than 25,000 FSC devices were supplied to the Gemini program.



Assemblers at San Rafael are taking part in a unique training program on the use of test and measuring instruments. The program is conducted by Bob Busch and Jack Brewer.

Instrumentation becomes a separate division of Fairchild Camera and Instrument, and Tom Bay is named to be its general manager.

A new renegade club has been formed at Mountain View—the Fairchild Road Running Club started by Phil Lenihan, Dick Bader, Bob Skurko, and Mel Snyder in anticipation of running the "Fairchild Mile" July 3rd at Sunnyvale's Fremont High School. This is all part of the national "Run for Your Life" fitness program.

Shirley Johnstone is named first lady technician at Palo Alto Instrumentation.

The Navajo Indian Tribal Council ratifies a proposal by Fairchild Semiconductor to set up an operation on the northeast corner of the Navajo reservation. Temporary quarters supplied by the tribe are providing a limited operation, and 50 employees are learning assembly skills. Gregg Harrison is sent down the Shiprock to manage Semiconductor's newest operation.

Mariner 4, the space ship which transmitted the first closeups of the surface of Mars during its historic fly-by on July 15th carries 544 FSC "representatives." These were silicon transistors of an ultra-high reliability design.

Every American Gemini space shot has carried Fairchild devices.

The Communications department scores a real coup sending a message to affiliate SGS via the "Early Bird" communications satellite. The message was sent to the French office.

South Portland's 2300 employees and guests consume two tons of chicken, 5000 hotdogs, and 9000 cans of beer at this year's picnic.

## 1966

R&D plans to double its facilities by year-end with a 100,000 square foot addition.

San Rafael announces a new 12,000 square foot addition to its operation.

Instrumentation moves to 475 Ellis Street and celebrates with an anniversary open house.

The Hong Kong plant officially opens March 9th; 3500 employees are on hand for celebration.

Toronto group begins work in temporary quarters.

Dr. Noyce and Fairchild dignitaries fly to Croyden, Australia, to officiate at grand opening of the new Australian plant May 10th. There are approximately 100 employees in the Australian operation.

Shiprock employment nears 400 mark on its first anniversary.

Memory Products makes its debut to public at Spring Joint Computer Conference.

Tijuana operation, Electro-Mex, begins.

Fairchild Falcons sweep regionals, but have to settle for fourth place in world championship softball tourney.

Hong Kong's Epoxy Entertainment section completes the largest shipment ever made to a customer in a day—3,355,000 units.

Instrumentation establishes its own Recreation Council.

Howie Sharek is named top salesman of the year for 1966.

Shiprock float wins first place in the 43rd annual Northern Navajo Fair.

South Portland wins the 1966 Industrial Achievement Award given by the Maine State Chamber of Commerce.

South Portland establishes an employee credit union.



Marilyn Buttke continues to break records at San Rafael, marking 100,000 glass micro-diodes on the micro marker in just 6.7 hours. Shortly after that, she broke that record by 16,000 units.

New wafer fabrication area is added to South Portland operation.

Betty Little of San Rafael celebrates her fifth anniversary with the plant, gaining special recognition for her perfect attendance record during those five years.

# 1967

Tom Bay takes over the Semiconductor Division, and Vic Grinich will head the Instrumentation Division.

Instrumentation breaks ground for new 155,000 square foot plant to be located at 974 E. Arques in Sunnyvale.

Semiconductor branches out in the Far East with its new South Korean operation, Semikor, Ltd. More than 200 people are currently employed there.

Semiconductor breaks ground for new 342,000 square foot headquarters scheduled for completion in 1968. The site is 464 Ellis Street in Mountain View.

Toronto breaks ground for new facility.

Shiprock receives national Top Hat Award for its significant contribution toward advancing the status of employed women.

South Portland celebrates its fifth anniversary with gala party for employees. Rose Stephenson is honored for 5 year perfect attendance record.



Mountain View Recreation Council appoints an administrative advisor to supervise all recreational activities.

Eight final seal operators at Shiprock sealed 120,800 devices in one shift, a new divisional record.

Dr. Noyce named to board of directors of Fairchild Camera and Instrument.

Instrumentation holds fashion show for its employees, and Mountain View Rec Council follows with one of its own.

Semiconductor reorganizes along product lines. John Ready, Don Yost, and John Sentous are named Managers of Aerospace and Defense, Discrete Devices, and Integrated Circuits.

Fairchild Controls awarded a Zero Defects Participation Award from the Department of Defense in recognition of employee effort to improve and control product quality.

R & D's Chrome Masking group sets new record completing more than 2500 accepted chrome masks in one month's time.

Semiconductor contributions help construct a mobile Children's Center classroom for the Whisman School District in Mountain View.

## Do You Remember...

When there were only two lappers and two slicers in Materials (MV).

When the place to go after work on Friday nights was Rupes.

When one of the pagers announced, "Anybody knowing anything about LIC, please call..."

When Dr. Noyce took all the employees into the cafeteria to tell them Fairchild had just sold its first dozen transistors.

Dr. Noyce's Christmas speeches over the intercom.

When Jack Magarian and Dr. Noyce brought their children to the plant on Saturday mornings while their wives did the week's shopping.

When Systems Checkout (Instrumentation) worked all day Thanksgiving day to get out an order, only to have the delivery truck turn over as it was pulling in to make the delivery.

When the Shiprock float was only a car with four girls sitting on the back of it.

When the girls at San Rafael hand tinned 1500 units a day.

When there was just Fab 1.

When Christmas parties were just for employees.

When FSC made only two devices.

When you could find a parking place.

When John Sentous was an ordinary engineer.

When Roger Crosby got hit by a train while riding his bicycle to work.

When the goat ate through the main telephone line at Shiprock.

The day the girls burned their hairnets.

When the Mountain View cafeteria was where Fab 3 is now.

Stierlin Road.

When badge numbers were a status symbol.

When operators at San Rafael checked every unit coming off the line.

Paul Driscoll's first attempt at temperature cycling at San Rafatel, when the temperature was so high that all the units stuck together.

When Dave Heck auctioned his VW to the highest bidder in front of the Whisman Road building prior to leaving for his new assignment in Hong Kong.

Two girls made up the entire graveyard shift in Materials.

When a certain Materials foreman used to ride a Honda through the Sterlin Road plant.

When many of the Mountain View girls wore maternity dresses on April Fools day.

When there were only two crystal growers.

When Perry Holst dropped a Beta Ratio on the line in the testing area.

When Don Hart, Chuck Smith, Bill Stansberry, and several others dressed up as elves at the Christmas party.

When Don Yost tried to die attach.

When San Rafael marked 8-10,000 units a day on just two machines.

When everybody's coffee mug hung on the lunchroom wall, and every mug had its owner's name on it thanks to Dick Parker.

When the lead bonder held a small hand torch to cut the wire.

When Alice Murphy and Ida Price did all of the paging.

When everyone knew everyone else's name.

When Alice Washburn die attached.

When the guards would forget to shut off the intercom.

The "whistling bandit" of Stierlin Road.

When South Portland operated from a converted garage on Ocean Street.

When the Toronto group was split into two operations working on opposite sides of the city.

When Paul Hwoshinsky blew his bagpipes up and down the halls of Stierlin Road.

When girls working with chemicals on the line used to take showers at work before leaving for home.

When the lights used to go out at least twice a day while the cafeteria was being added to the Mountain View building.

When the test area at San Rafael held only two machines (a Booton Bridge and a Pinball machine).

When a lady hit a power pole knocking out all the electricity at Mountain View and everyone went home.

When many of the executives would help pack units to get a shipment out on time.

Yes, those were the good old days!



# Questions

# and Answers

*What is a security analyst? These are the men and women who are responsible for analyzing the economics of a particular company or group of companies within a given industry. Their findings influence the shareholders and potential buyers of stock whether they are individuals, mutual funds, or large financial institutions such as insurance companies and banks. Quite often the financial house represented by the security analyst has "positions" in the stock market; in other words, it is a shareholder.*

*Any corporation which is publicly owned must present a good image to the stockholders who are the real owners of the company and to the people in the financial community who trade the stock. For this reason, a meeting with financial analysts, such as the one held at Semiconductor headquarters last month, is a very important part of a company's continuing financial relations program.*

On September 11th, Fairchild Semiconductor hosted a group of sixty-two security analysts. These men and women represented many of the major investment firms, banks, and other financial organizations throughout the country. They flew in from New York, Boston, Chicago, and major financial centers, and assembled for a tour of Fairchild's Mountain View operation. Following the tour, they heard key members of the Division's management discuss the recently announced reorganization of Fairchild Semiconductor.

Leading off, General Manager Tom Bay outlined the theory behind the reorganization which he said was designed to provide better service for our customers by dividing the Division into three logical operating groups—integrated circuits, discrete components, and aerospace and defense products. He stressed the Division's wish to become more customer

service oriented and illustrated how "straight-through responsibility" would aid this goal.

John Sentous, recently appointed Director of Integrated Circuits, followed with a discussion of how the IC operation fits into the over-all reorganization. He pointed out that the objectives of his department are the same as for the Division as a whole. These are: customer satisfaction, competitive pricing, quality product, and technological leadership. He emphasized the dedication of the IC operation toward total customer satisfaction for both new products and for standard parts.



Don Yost, Director of Discrete Devices, discussed the role his department has in the reorganization. He noted that the consumer market output has increased for each of the last four months. He introduced a "merchandising" philosophy, and predicted that in 1968 discrete device

dollar volume would be up 10-15% and unit volume output would be up 100%. He stated that there would be a reduction in price, but manufacturing costs in diode and small signal devices will also be reduced. Objectives for his department were to establish integrated cost centers, create better control, more dynamic reaction to changes in demand, and spread decision making to the lowest possible levels.

John Ready, Director of Aerospace and Defense Products, discussed the evolution of his department. He explained that most of the devices manufactured by his people are "job-shop items"; that is, those that require specialized testing or special build for a customer requiring two or more chips in one package. Generally the volume is small. He explained that in the new organization hybrid devices have been transferred to the Aerospace group and that plans have been made to add an additional 100,000 square feet for the manufacture of A & D items by the end of 1969, bringing the total area to 170,000 square feet. He predicted that in 1968 Aerospace and Defense Products department sales will increase 31% over 1967.

Following the talks Group Vice President Dr. Robert Noyce moderated an informal question and answer period. Questions were answered either by Dr. Noyce, the speakers, or other members of the Division's management in the audience. Present from Fairchild Camera and Instrument were Richard Hodgson, President, and James More, Director of Information.

On their flights back to the financial centers of the nation, many of the analysts reviewed their notes and from them formed opinions on the investment potential of FCI. Back at their offices, information was channeled into reports aimed at prospective buyers of stock

Perhaps you received one



## Fairchild Falcons are NO. 2 in The World

Fairchild's flyin' Falcons had to settle for second place in the recent World Championship Fast-Pitch Softball tournament held in Springfield, Missouri. The team lost the final game and the championship to the Aurora, Illinois, team 0-4.

The Falcons scored an easy 8-0 victory over the Canton, North Carolina, team and whipped Oxnard, California, 5-1 before settling an old score against last year's champs, Clearwater, Florida. The Falcons took that game 1-0, but dropped their first game of the double elimination tournament to Aurora 2-9. The Falcons came back, taking Clearwater 2-1 to earn a spot in the championship game but Aurora was too much for the team and clipped them 0-4 to end the contest.

Nevertheless, the Falcons placed pitcher Rich Balswick on the "All-Star" team, and manager Pat Campagna was named "Manager of the Year." Rich was also named "Most Valuable Player" of the tournament. Chuck Caldera (third baseman) and John Noce (catcher) were named to the second "All-Star" team. All three players will represent Fairchild in the upcoming "All-Star" game against the world champs, and Pat will manage the "All-Stars."

The Falcons had a great season, winning the Hayward League Championship, the Hayward Fourth of July tournament, and taking third place in the NorCal League and second in the Fresno tourney. Pat attributes their fine play this season to their "never-say-die" attitude. "The whole team played tremendous ball. Ray Phillips, last year's "All-American" star, kept the team alive, and our entire infield was just a few hits away from being "All-Americans." I said it last year and I'll say it again this year, 'we improved this year, but just wait 'til next year'."



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## Of Interest

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### A Fairchild Pin-up



Fairchild's "Special Forces" girl really rates with the armed forces in Vietnam. This is just one of several letters received:

*I hope you will not mind my wasting a little of your time for some of us in Vietnam, but I have been reading the International edition of the Armed Forces Management magazine and was really taken with the photograph of the "Special Forces" girl in your advertisement in the July edition.*

*My request is that the men and myself assigned to the Staff, Commander Task Force 77/Commander Carrier Division FIVE would like to know who the model was and how we could go about corresponding with her so that we could obtain additional photographs. We have selected her as the "Girl of our Dreams."*

*We have gone so far as to throw away our "Playmate" pictures and earnestly seek your support in obtaining some photos of our "Dream Girl."*

### It's Nation-wide TV for FSC

A basic educational seminar on integrated circuit development and technology was presented on nationwide television October 11th. Produced by Fairchild Semiconductor, the 30-minute program was viewed on 33 stations at either 6:30 or 7:00 a.m. Titled, "A Briefing on Integrated Circuits," the film featured Dr. Harry Sello, Manager of Materials and Process Department of R&D, and Dr. James Angell, professor of electrical engineering at Stanford University and head of the university's solid-state electronics laboratory. The program was designed for business executives, engineers, and the average housewife who decided to have breakfast with Fairchild that morning with the hope that each could see the new vistas opened by integrated circuits.

### Boeing Tests DT $\mu$ L

Independent life tests performed on Fairchild Semiconductor DT $\mu$ L microcircuits by Boeing have confirmed that the unit will function even under extreme temperature conditions. The test, part of Boeing's work with the Lunar Orbiter Flight Program, was started in December 1964 and to date has run over a million and a half device hours. Involved in the special Boeing tests were twenty-four 930 units, twenty-four 931 units, sixteen 932 units, and four 933 units. There have been no known failures.

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## Instrumentation

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Instrumentation's B-League Softball team captured the

Mountain View League championship this year, smashing WSC, a division of Hewlett Packard, 12-0. The team also placed second in the Sunnyvale League.



The sport of soccer is being introduced to millions in the United States, but Flavio Valiente of Systems Production has claimed it as his favorite sport since he was seven. A native of El Salvador, Central America, he migrated to the United States in 1948 and has been an active player since his high school days in San Francisco where he was named "All-City." "All-Conference" for San Francisco City College, Flavio has to be content with managing due to an accident on the Bayshore Freeway. But he does that as well as he plays, for the "El Salvador Club" returned to the first division in 1966 after having won the second division championship. As vice president of the San Francisco Junior Soccer League, Flavio plans to work hard to see that his favorite sport becomes one of America's favorites.



Samantha Sullivan's birthday is becoming an annual celebration for all of Instrumentation's girls. Samantha, who is matron at Instrumentation, received a lovely pink sweater from the girls and was guest of honor at a huge party held in the cafeteria.

Olivia Martinez was surprised by a kitchen shower given by Tom Hayes' harness chassis line group. Helen Henard and Shirley Parker planned the affair. Olivia now has a plentiful supply of pot holders, dish towels, glasses, and many other kitchen items she's now putting to good use as the wife of Semiconductor's Bob Gray.

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## From the Field

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Tony Macaluso



Bill Fockelmann



Warren Potter



Mel Marchbanks

Salesmen of the Month for July were Tony Macaluso (Industrial), Bill Fockelmann (Aerospace and Defense), Warren Potter (Consumer) and Mel Marchbanks (Computer).

Tony Macaluso of the Los Altos sales office typifies the ideal Fairchild professional salesman. He is responsible for more than 60 accounts and is booking business at a rate of more than \$1.3 million a year. Tony is constantly trying to broaden our product base with each of his customers, and as a result his sales represent virtually the entire Fairchild Semiconductor line. Additionally, many of Tony's good customers of today were at the relay and tube level just a year ago, which, according to regional sales manager John Richardson, dramatically emphasizes his ability to "make things happen."

Bill Fockelmann covers the Dallas, Texas, area for Aerospace and Defense. He's done an excellent job, booking more than \$1 million in 1967 already. This is really remarkable for being right in the back yard of Fairchild Semiconductor's largest competitor. Bill also teamed

with Ken Norvell of Norvell Associates to make Fairchild the top outside supplier of semiconductors at TI Apparatus.

Warren Potter, of the Elmwood Park office, known to customers and Fairchild people as "Buzz" rightfully earned his nickname as a man who hovers over his accounts like a buzzard. Buzz obtained an order for \$110,000 in VHF TV Tuner kits for shipment over a 60-day period. In addition he obtained an order to ship the new electron diode at a rate of 8,000 pieces a week. Having devoured his prey at that account he winged his way over to Zenith where he obtained an order for 100,000 Ua703 circuits, all of which have been shipped. He just booked an additional 150,000 Ua703's and has several other product programs going at his major accounts which will yield Fairchild very profitable dollars in 1968.

Mel Marchbanks received his "Salesman of the Month" plaque from regional manager, Ed Turney. He has been with Fairchild for about a year, and during this time has been responsible for such accounts as National Cash Register, Standard Computer, Raytheon Computer, and Electronic Memories. Mel was selected Computer Salesman of the Month for his continued strong sales effort, and more specifically for booking a CTL order in excess of \$1 million at Standard Computer, an up-and-coming company successfully taking nibbles at IBM's 7090 business.

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## Canada

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The PGA had its Masters Tournament, Toronto had its Curling World Championship, and just recently Fairchild Semiconductor Canada Ltd. held its first annual Open Golf Tournament at the beautiful Trafalgar Golf and Country Club. Low gross honors went to Rick Woods who shot a blistering 82. Bill Simone was second low gross with an 85. Jim Cameron won low net honors with a 73, and Al Vindasius was second with a 76. Longest drive (290 yards) was hit by Hugh Kellock, and Gary Waddell placed his tee shot on the par 3 fourth hole three feet from the pin to win the "closest to the hole" contest. At the awards dinner following the tournament, a unique presentation was made to Dr. Roy Sennett. He was named "most honest golfer." Would you believe a 139?



## Mountain View

Marilyn Westlake walked into the cafeteria expecting just an ordinary coffee break, but fellow-employees had much more in store for her... a "money tree" loaded with dollar bills to help her purchase the finishing touches for her new home. Quite a housewarming gift!



And speaking of coffee breaks, Caleta McCleery and Ann Mattos picked up their free doughnut and coffee tickets (as did all Materials employees) from Materials Plant Manager Dr. J. Trevor Law as a result of their 100th day without a lost-time accident. Materials' previous safety record was 59 days.



Power line technician Tad Taguchi was feted by girls on that line for his transfer to Power Engineering.

And, at the next table, Dale Reynolds, LIC classification, was guest of honor at a party celebrating his switch from days to swing.



Giovanna Franco came from Guatemala to the United States recently to work, and work she has. Her very first job, ever, is with the Aerospace and Defense group as an IC lead bonder for Joe Perez. After a month and a half on the job she broke standard, completing 708 Cerpak units on the ultrasonic bonding machine. 456 is standard.



Another sport getting underway is Soccer, and the Fairchild United Soccer team kicked off its second season October 8. Robin Jeffs is manager this year; Jan Visser, treasurer; and Mike Herbach, secretary. Team members are Carlos Medrano, Dick Gamble, Mike Herbach, Robin Jeffs, Mike Lesminster, Colin Berry (front row); Dennis Ferraz, Claude Boissicat, Jan Visser, Leo Amhdei, Tim Mann, and Bill Boyd (back row). Not pictured are George Robsin, George Peter, Maurice Chidlow, Kevin Harris, Phil Calvin, and Warren Moorman. Scheduled games are: October 8 Half Moon Bay

October 15 Norwalk  
 October 22 Hercules (Home Game)  
 October 29 South San Francisco (HG)  
 November 12 Fortuna  
 November 19 Germanea (HG)  
 November 26 Mexico (HG)  
 December 3 Fort Ord

Check with Mike Herbach for confirmation of game or location of field on Sunday mornings at 732-0723. They need rooters.

Bob Ricks is the first Fairchilder to be named "hot circuit maker of the month." He was selected by EEE readers to receive the award for circuit design for July.



Turnaround trips to Reno and Tahoe are sponsored by the Rec Council, and almost a plane-load of employees and guests has winged its way in that direction every weekend. The planes leave San Jose airport on Friday evening and return the next day. The cost of the flight is returned, but usually lost at the gambling tables. Nobody seems to mind, though.

Bowling is underway and the "Gutter Dusters" are off to a fast start with a 14-2 record. Team members are Gene Fetters, Marion Oswald, John Fryer, Timmie Porrez, and Bill Greene.

## Research & Development

Sam Uyeda and his group of "River Rats" plans to head for the Stanislaus River for their second overnight raft trip. The R & D group of hardy swimmers and paddlers fought the Klamath River over the Labor Day weekend.

R & D wound up the summer with a family picnic at Frontier Village . . . what a way to go.



R & D golfers took to the fairways Sunday, October 8th, the opening day of the Winter golf league. Jack Jones, league president, is expecting about 40 golfers to participate again in the traveling league. Opening day was held at Tilden Park in Berkeley, and matches are scheduled for such courses as Pasatiempo, Oak Ridge, and Hayward.

## San Rafael



Tom Graham is not an ordinary commuter. He feels that flying is much safer than the California freeways, and commutes about twice a week to Palo Alto on Fairchild

business in his two-place Luscombe 8E. In addition to being a great time-saver, he finds flying to be about as inexpensive as driving. He uses only about four gallons of fuel for the round trip. Tom also uses the plane for fishing trips and vacations. He also enjoys aerial photography. He's been with San Rafael for about a year as a Process Engineer.



Susie Elu flies only on vacations and this year's jaunt was quite a trip. Susie and a cousin spent three weeks touring South America. After a brief stop-over in Guatemala and Panama, first stop on their agenda was Machu Picchu, Lost City of the Inca's in Lima, Peru. In Chile, they stopped off in Santiago and Valparaiso. Next they took a boat ride up the Tigre River in Buenos Aires and continued on to Sao Paulo, one of South America's most modern cities. They visited Brazilia, the new capital of Brazil, and the Copa-Cabana Beach was the setting for their stay in Rio. There they visited the tremendous statue of Christ the Savior Monument atop Sugar Loaf Mountain. As impressive as each sight was, Susie maintains the Machu Picchu was the most majestic of them all, and she'll be glad to be tour guide for anyone who'd like to see South America.



Lights, camera, action! The lights she's used to, the camera turns her on, and Carol Vencius, herself, is the action. Carol's building a stand-up comedienne night club act, bringing to it experience with the Improvisation Theater of the Backstage Cabaret and study with "The Committee" theater, both of San Francisco. She's also studied in New York with Herbert Berghoff and Uta Hagen. During the day she doubles as an employee at San Rafael in the Metalization department.

San Rafael employees enjoyed the last days of summer at their annual family picnic at Marin Town and Country Club.



## Shiprock



Governor David Cargo of New Mexico, Representative Wilbert Begay, and other dignitaries toured the Shiprock plant to get a first-hand look at the successful operation. Paul Driscoll, plant manager; Elvin Jonas, Shiprock agency superintendent; and Carl Todacheene, Shiprock tribal councilman were on hand, anxious to show off "their" plant. Governor Cargo stopped to chat with many of the employees and remarked that he was very pleased with

the efficient operation. "You have demonstrated the capabilities and potential of this untapped labor force, and here, Navajo men and women have built a reputation for mastery of precision work—a result of native ability and an excellent and continued training program. It is a sound foundation on which the development of the Four Corners area can build."



The Governor's visit came just prior to Shiprock's celebration of two years of operation. On September 7th, the whole Shiprock plant celebrated with ice cream and cake, coffee, and pop. Plant manager Paul Driscoll did the honors slicing the cake. Twenty-four Navajo employees have been with the plant since it opened two years ago, and in all thirty-one employees have been with Fairchild two years or more.



## Tijuana

At the request of the management of Electro-Mex, the San Rafael Training department helped set up a training program for the Tijuana group. This initial program is designed to instruct employees in the newly formed Component Fabrication department. Jack Brewer and his San Rafael training staff are currently working on similar training programs for other aspects of production for the Power Transistor department at Electro-Mex.

## Oct. /5 yr. Service Awards

Justine F. Goodell	MV	Frances E. Perry	SP
Nadine Thompson	SR	Patricia P. Johnson	MV
Peter E. Huber	INSTR	Grace E. Marquardt	R&D
Joseph J. Trompeter	R&D	Lorenza Armenta	MV

Bernice O. Dennis	MV	V. Gopala K. Reddi	R&D
Rochelle Ferrell	MV	Aquilla R. Dudley	MV
Robert R. Hewitt	R&D	Fred B. Hopkins	SP
Dorothy Beasley	SR	Annie E. Strong	MV
Bruce T. Dyer	SP	Floyd D. Maxwell	MV
Arthur T. Croes	MV	Walter C. Howe	SP
Josephine L. Grover	SP	Thelma G. Hicks	R&D
Bobbie J. Talley	SR	Donald O. Murphy	MV
Betty J. Lax	MV	Herbert Lewis	MV
Geo. E. Higgins	SHIPROCK	Phyllis M. Andrews	SP

Edie Beem, Mask Manufacturing, was awarded her five-year pin by Hazen Dughman, General Foreman, and Joel Sorem, Section Head. She also received news that she was promoted to Mask Making Specialist.



## Moving Up

Bob Bylin was promoted to the position of Staff Assistant from his position as Mountain View Integrated Circuit Plant Accounting Manager.

Jack Flowers will fill the position of Mountain View IC Plant Controller. Jack was formerly San Rafael's Plant Controller.

John La Porte is the new Instruments Plant Manager at Instrumentation. He was formerly Product Engineering and Manufacturing Manager.

Cloyd Marvin assumed the position of Marketing Programs Manager for the Aerospace and Defense Department. He was formerly Group Product Manager for Digital Integrated Circuits.

Al Schecter was appointed Government Agency Manager and will handle all sales and marketing activity within the agencies. He was formerly Missiles Program Manager for Marketing.

Dick Thornton is Instrumentation's new Instrument Development Engineering Manager. He formerly held the position of Manufacturing Engineering Manager, Amplifiers.

Rich Willis will be in charge of Marketing Service's product support for Aerospace and Defense. He was Supervisor of the Distribution Services group before his promotion.

## New Faces

Dean Gallinatti has been appointed Personnel Manager at Instrumentation, responsible for professional and technical recruitment and such employee relation functions as safety, wage and salary, and training. Dean was formerly with Friden, Incorporated.

Charles Hornisher will be handling product support activities for the Discrete Product Marketing Department as a new member of the Marketing Services team. He comes to Fairchild having just completed his military service obligation.

Craig Jorgensen joins Fairchild as Production Controller at Mountain View. He was previously with General Motors.

Hanjoo Kim was named Senior Product Engineer at South Portland. A native of Korea, Hanjoo most recently worked for Transiron Electric Corporation.


Ib Larsen joins Instrumentation's Marketing Services group in Public Relations. He was formerly with Grinnell Company of the Pacific.

Walter Long joined the Cost Accounting staff at San Rafael as Cost and Budget Manager. He was previous employed by the Glidden Company.

Bruce Mackay is a new Production Foreman in PIC Assembly at Mountain View. Bruce was with Northern Electric before joining Fairchild Semiconductor.

Carl Morig rejoined Fairchild as a Product Engineer at Mountain View, after completing his Master's in Chemical Engineering at the University of Washington. He was formerly an Engineer with Semiconductor.

Doyle Soudels is a new Power Transistor Product Engineer at Mountain View. He just recently completed Electrical Engineering studies at Oregon State University.



## People

### Dolly Rule

Eight years with San Rafael, and she only planned to work for two months! Dolly Rule has been with the San Rafael group since the operation officially opened for business. She began as an assembler; then became a lead girl in assembly. She moved on to lead girl in test and finish, transferred to production scheduling, and today is a spec designer working with Muni Aggarwall in Spec Control. □ She and her husband Bill are both originally from Amherst, Massachusetts. Today they live in Novato, and are the very proud parents of three boys. Bill, 17, is a tennis player at Novato High School and on the Novato swim team; Craig, 13, is an eighth grader and a basketball player; and Mark, 10, is a judo expert and also on the Novato swim team. □ "My family's my whole life," and well they must be, for just catching all the basketball games, tennis matches, swimming meets and judo classes must really keep Dolly hopping. But the boys come by their athletic interests honestly, for Dolly and her husband are avid basketball fans and follow the San Francisco Warriors pretty closely. If you ask them, though, the Celtics are their favorites. Isn't that the way with all Easterners? □

## 10-YEAR ANNIVERSARIES

This year nine men will have completed ten years of outstanding service with Fairchild. Four are original founders, and the others were among Semiconductor's first 25 employees.



Julius Blank  
Facilities Manager  
Mountain View  
Date of Hire: 10/1/57  
Employee No.: 1



Dr. Victor Grinich  
General Manager,  
Instrumentation  
Mountain View  
Date of Hire: 10/1/57  
Employee No.: 2



Dr. Gordon Moore  
Director of Research and  
Development  
R & D  
Date of Hire: 10/1/57  
Employee No.: 6



Dr. Robert Noyce  
Group Vice President, FCI  
Mountain View  
Date of Hire: 10/1/57  
Employee No.: 8



Murray Siegel  
Manager Industrial  
Applications  
Mountain View  
Date of Hire: 10/1/57  
Employee No.: 9



Richard Parker  
General Foreman,  
Device Development  
R & D  
Date of Hire: 10/21/57  
Employee No.: 11



Harlan Lawler  
Engineer, Device  
Development  
R & D  
Date of Hire: 12/4/57  
Employee No.: 23



Tom Bay  
General Manager,  
Semiconductor  
Mountain View  
Date of Hire: 12/9/57  
Employee No.: 24



George Langevin  
Plant Engineering  
R & D  
Date of Hire: 12/11/57  
Employee No.: 25

## Leadwire

Vol. 9, No. 10

Published by and for Employees of  
Fairchild Semiconductor/Instrumentation

Mountain View - Palo Alto - San  
Rafael - Hong Kong - South Portland,  
Maine - Shiprock, N.M. - Croydon,  
Australia - Ontario, Canada - Tijuana,  
Mexico - Seoul, Korea

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**SAN RAFAEL**—Cleatus Dunkley, Audrie  
Graxiola, Janet Marz, Margaret Queen,  
Hal Knopp, Cary Barford, Bobbie Talley,  
Anne Parfitt, Hilda Kaliczak.

**RESEARCH & DEVELOPMENT**—Janet  
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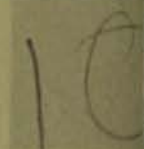
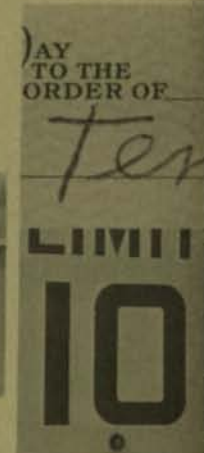
**INSTRUMENTATION**—Jack Ramon, Pat  
Campagna, Anna Ackerson, Walt  
Skruch, Jeanne Meyer.

**SOUTH PORTLAND**—Linda Allen, Bob  
Tetrault.

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The Cover: This month's cover cele-  
brates Fairchild Semiconductor's 10th  
Anniversary. Included are pictures of  
the garage where FSC began, the eight  
founders, and the construction activity  
at our new world headquarters.



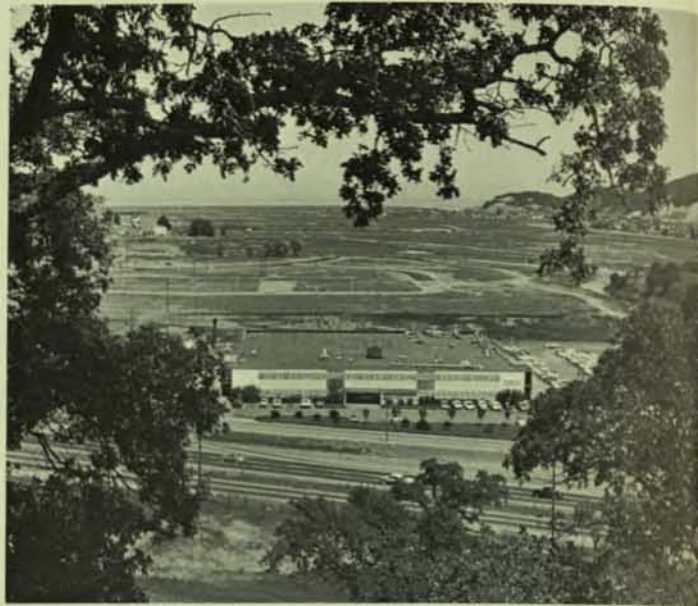
# LEADWIRE 11





You can reach Marin County by land, sea and air. If you come by way of the Golden Gate Bridge, the round trip fare is 50 cents. On the Richmond-San Rafael Bridge, it's \$1.50. If you have your own yacht, it's a fast three-mile sail across San Francisco Bay. If you come by private plane, just try to find a flat spot amid Marin's rolling hills!

Marin County is a mecca of diversity — Giant Redwood trees and the craggy Pacific Coast; Mediterranean-type villages and rolling farmland; cool fog mists and sunshine every day. Frank Lloyd Wright designed one of Marin's famous landmarks, the Marin County Civic Center, and early Spanish missionaries built Mission San Rafael here. Fairchild Semiconductor is also in Marin, just off Redwood Highway a few miles north of San Rafael.



# SAN RA



# FAEL: ■

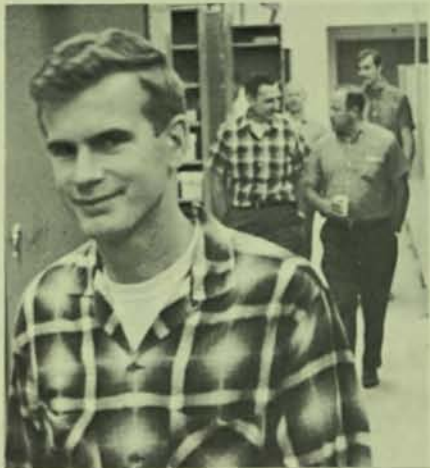
## *Full Speed Ahead*

In 1960 a \$1 million plant for concentrated production of diodes was opened just north of San Rafael in Marin County. It was quite a welcome change for earlier employees who had been working in a small shop (often described in not-too-glowing terms) during 1959. By the end of 1960 more than 300 employees were working at the "Diode" plant, and today (several new additions later) there are three times as many working at that same San Rafael facility.

Now, that name "Diode" might have been very descriptive at one time when San Rafael produced only tiny diodes. (The Fairchild diode is a small glass capsule about a quarter of an inch long with a wire lead protruding from each end.) But today San Rafael manufactures a variety of products in addition to the diode product line.

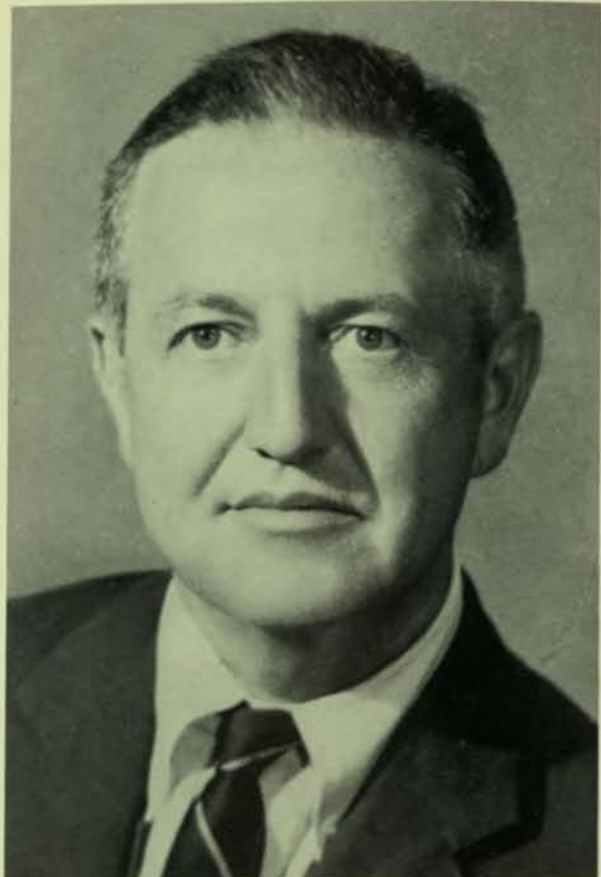
San Rafael is currently working with R & D to take the kinks out of the Glass Microdiode. The Integrated Diode Array is being transferred from the development group at Mountain View to San Rafael. This product is an integrated chip which will be packaged in Cerpac, Dual-in-Line, TO-5's and special packages; and production activities have also extended to Light Sensitive devices (Photo Transistors and new Diode products).

And so, Diode is no longer Diode, but San Rafael—an integral part of the Fairchild Semiconductor world, racing ahead to new projects and to meet new challenges.






**SHERMAN FAIRCHILD**  
*Chairman of the Board*



**RICHARD HODGSON**  
*President and Chief Executive Officer*

 On November 16, 1967 the Board of Directors of our parent company, Fairchild Camera & Instrument Corporation, designated Richard Hodgson, President, as the firm's Chief Executive Officer. This announcement followed quickly on the heels of another major move in which Sherman M. Fairchild, Chairman of the Executive Committee and principal stockholder of the company, assumed the additional responsibilities of Chairman of the Board on October 19, 1967. Mr. Fairchild stepped in immediately after the resignation of John Carter, who had been Board Chairman and Chief Executive Officer since 1962.

A native of Palo Alto, California, Mr. Hodgson graduated from Stanford University in 1937 with a Bachelor's degree in Engineering. He later attended Harvard Graduate School of Business obtaining his MBA in 1939. Following his formal education he held increasingly responsible positions including that as a consultant to the Department of the Air Force through 1952 and 1953. During that time, he was part of a three man advisory group headed by Lt. General James H. Doolittle. The efforts of this team led to the establishment of the Air Research and Development Command. Mr. Hodgson was one of the founders of Chromatic Television Laboratories, Inc. and was President of that firm just prior to joining Fairchild.

Mr. Hodgson joined Fairchild as a vice president in June of 1955. He was named Executive Vice President in April of 1956 and later promoted to President in August of 1962.

It was Mr. Hodgson who, in 1951, convinced Fairchild Camera & Instrument management to sponsor a group of young scientists seeking to enter the silicon semiconductor business. This move resulted in the founding of Fairchild Semiconductor, today the Corporation's largest and most successful Division. He was instrumental in providing corporate guidance to the new operation during the formative years and has maintained a very close relationship with the Semiconductor Division since that time.



# WAFER FAB

## South Portland Style

Something very big has happened at South Portland this past year — wafer fabrication, to meet South Portland's production needs as well as those of other locations.

Just barely an operation a year ago, Don Shea and the twelve girls who transferred from the assembly area last October have built it into a going concern. Today, wafer fabrication operates a brand new area and numbers more than 200 people. Add to this a new Integrated Circuit area and PNP operation, and the result totals only one thing — Wafer Fab at South Portland is done in "le grande style."



## A&D'S CHILDREN'S HALLOWEEN PARTY

If you noticed the newly designed exterior of the Aerospace and Defense building on Middlefield Road, the kids went at it with paint and brushes, decorating it in a Halloween motif. It was all part of A & D's first Halloween party for employees' children.



# of picnics AND OTHER THINGS



**EMPLOYEE RELATIONS**



**ACCOUNTING**



**CONTROLS**

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## Of Interest

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### If You're Ever At The Smithsonian

Ask for the Graphic Arts Gallery, for on the third floor of the Smithsonian Museum of History and Technology in the permanent Graphic Arts collection is Fairchild Graphic Equipment's Scan-A-Graver. Scan-A-Graver, the first commercially successful electronic halftone engraving machine introduced by the Graphics division in 1947, is a new addition to the Smithsonian Collection. The machine literally changed the face of hometown weekly and daily newspapers because it enabled them to make halftone printing plates quickly and inexpensively in their own plants, eliminating the need to send plates to engraving plants in nearby cities. Instead of using conventional photo-chemical methods, the Scan-A-Graver optically scans a photograph and electronically produces a halftone printing plate by engraving a dot pattern on a Scan-A-Plate.

### Fairchild Falcons Honored



Fairchild Falcon team members and fans celebrated the team's outstanding performance during the 1967 Softball season at a dinner in the team's honor. Dr. Robert Noyce, Group Manager of Fairchild Camera and Instrument, and team manager Pat Campagna presented individual awards to the players.



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## Australia

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Mrs. Terry Hall, process worker with Fairchild Australia, recently won the company's outstanding attendance award. She has been with Fairchild for almost two years and has never missed a day's work nor been even so much as a minute late in that time. She received a well-deserved bouquet of flowers from Chris Reardon, Manufacturing Manager, and she and her husband were also honored at a dinner at the local Bird and Bottle restaurant.

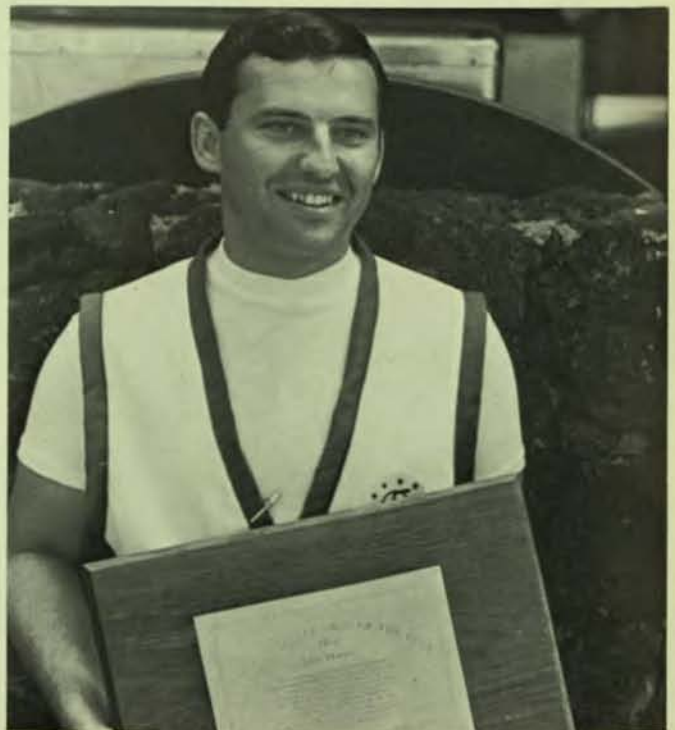


One of Fairchild Australia's last remaining members of the "Freedom for Men" set, Alan Smith, Final Test Supervisor, gladly relinquished his freedom for Miss Lorraine Bell. Alan's engagement is the third this year at Fairchild Australia. John Baldwin, General Manager, was married in May, and Lionel Hunt, Advertising Manager, took the plunge in August. What's happening to the cause of freedom?!

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## From the Field

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Dan Hauer was named Semiconductor's Salesman of the Year for 1967 at this year's sales conference. When presenting the award to Dan, Jerry Sanders, Director of Marketing, com-

mented, "A salesman must get the orders, satisfy the customer, get the orders shipped, and develop new business as well. This year there seemed to be one person who filled the bill more so than anyone else, Dan Hauer." Dan who works in the Los Angeles office, was also named Aerospace and Defense Salesman of the Month this past June.



Also honored at the sales conference were August's top salesmen: Hank Rainone (Consumer-Indianapolis), Harry Neil (Computer-Fort Lauderdale), Bill Kelly (Industrial-Cleveland), and Al Mattal (Aerospace and Defense-Chicago; now Litton Program Manager at Mountain View).

## Instrumentation

There's a feeling of Christmas in the air, and it began as early as November 1st, kickoff date for the Rec Council's sale of Christmas novelties. In addition to giving employees bargain prices on Christmas merchandise, the Council will earn some money from the sales with which to replenish its treasury.

Other Christmas events to mark on your calendars are the Children's Christmas Party, tentatively scheduled for December 16th, and the Christmas Dance December 23rd at the Cabaña.



Moving from Ellis Street to Arques Avenue has been the center of activity at Instrumentation these past weeks, but by November 1st, everything was back to normal. Prior to moving, the women in the Model Shop threw a "get away" party on their last day at the Palo Alto store. Ed Minsky, Dave Anderson, and Paul Cookson just happened to be there to take advantage of the potluck.

And in another move, Ann Wu, wife of Semiconductor's Henry Wu (both are originally from Canton, China), is switching from Tech Writing to Components Evaluation and Standardization.



What makes this move worth watching is that Ann holds the honor of being Instrumentation's only lady engineer.

A letter arrived from the Philippines the other day, a letter from Instrumentation's foster child Bonifacio Navalta. Translated by the Foster Parent's office, Bonifacio wrote: "Before anything else, allow me to give my most cordial greetings to you. How do you do? Is it cold there? Here it often rains and we feel cold at night Flu is common here due to our present climate. Somehow, my siblings and I don't get sick. Before I forget, I wish to convey our sincerest gratitude to you for the valuable things we received. They were multi-vitamins, two fantas rice, raincoat and P31.30 (\$8.00). Many, many thanks for all of these."

## Research & Development

Five-hundred miles, five-hundred miles . . . or at least it must have seemed that long going down the Stanislaus River in tiny rubber survival rafts. R & D's River Rats (Margaret Heard, Jeff Wise, Ted Jenkins, John Gunderschaug, Ken Stafford, Bertha Higa, Valerie Lehman, Sam Uyeda, Paul Kageyama and his wife Naomi) drifted over rocks and rapid currents on their second outing of the season. Six rafts started the trip down the mean Stanislaus, and twelve miles and five hours later a rather drenched crew in only five rafts climbed out of the river's cold waters. The week-end outing wound up at Calaveras Big Trees State Park, and 'round the campfire plans were being made for next year's first raft trip. Though battered and bruised the River Rats all pledged to be there when the first raft hits the water next spring.





The winter Golf League's next outing will be at the Oak Ridge Golf Course in San Jose on December 10th; that is, if anyone wants to play after November's trek to Pasatiempo in Santa Cruz.

R & D hosted Fairchild's annual interdivisional technical seminar on October 26th and 27th that drew some of Fairchild's top talent to the Bay Area. Semiconductor speakers explained all facets of the Semiconductor operation to the visitors during the two-day conference.



Dan Davis (driver) and Barry McCabe and Roger Rusert (pit crew).

Dan Davis came roaring home in first place for Formula type cars at the Laguna Seca road races on October 15, 1967, at Monterey with the fastest amateur time of the meet. In the most thrilling race of the weekend, Dan, starting in third position in a Lotus 41C, jumped into the lead right at the start and then held off challengers. The winner was in doubt until just a couple of laps from the end when Dan went into the last turn a little too fast, bounced off the hay bales and his challenger spun out when he swerved to go around Dan to try to grab the lead.

Dan, who is an engineer in the Technology Development group at R & D in Palo Alto, has been racing for about eight years. The chassis for his new car was built by Lotus Components in England for international formula type races. The engine is a Lotus-Ford, twin overhead cam, four cylinder unit with 90 cubic inches modified for racing by BRM. It develops 170 hp and is capable of 165 mph.

Plans for development of the car include fitting a solid state capacitive discharge ignition system and a solid state controlled fuel injection system.

## San Rafael

Clara Mertz's record on Auto Class was 119,547. Along came Greta Folds who just had to break that record and set one of her own, 120,778. Then there was Rosie Proctor, and thanks to her the record jumped to 125,618. But that record didn't stand very long for Eleanor Graff had to do her one better, or rather 7,893 better for an all-time record of 133,511. But then Clara wasn't present for this picture, so just maybe she's working on a new record of her own.



Leo Roskopf holds the "Wise Owl" award presented to him by Bram Kool, Manufacturing Engineering Manager, and Wayne Snodgrass, General Foreman Production Maintenance. While working on the new automatic tinner, Leo looked through a slit to observe its operation. Although properly guarded, something jammed the machine causing solder to splatter on him and hit his safety glasses. The award was presented by the National Society for the Prevention of Blindness for his judgment and foresight in the conscientious use of eye protection which saved his vision.



The "Kelp Explorers," San Rafael's Skin Diving Club, held a weekend diving trip October 14th and 15th at Monterey, camping overnight in Carmel Valley and attending the Laguna Seca races on Sunday. Wonder if they ever did any diving with that busy schedule?

San Rafael ended its softball season with seven losses in a row — what a way to go! According to Player/Manager Hal Knopp the team literally fell apart as key players kept dropping off the team. Leading batter was Hal Knopp with a .471; followed by Al Danks, .465; Bruce Mack, .463; Frank Barton, .344; Wayne Snodgrass, .324. Most Improved Players were Mike Feldtman and Wayne Snodgrass; Most Valuable Players

were Hal Knopp and Al Danks; Fastest Base Runners were Frank Ellis and Dave Zahniser; Most Exciting Player was Bruce Mack; Most Ability, Jim Smith; Most Consistent, Frank Barton; Tough Luck Batters, Al Stone and Harry Spence; and Luckiest Batter, Herman Martin. Special mention should go to Al Frugletti (now at Mountain View) who, according to Manager Knopp, should have won most of the awards (not the tough luck or luckiest batter awards) had he been able to complete the season.

San Rafael sports fans can look forward to their own football team this season. The team will play in Marin County's Flag Football League, providing they make it through their strenuous Sunday afternoon practices at Terra Linda High School.

This year San Rafael has fielded a larger basketball team than ever before, and Player/Manager Mike Feldtman says his team is ready to go, having won two out of three practice games this season. The line up: Mike Feldtman, Guard/Forward; Al Danks, Forward; Stan Manning, Guard; Bob Casel, Guard; Frank Barton, Forward/Center; Rob Reynolds, Forward; Bruce Mack, Guard/Forward; George Miller, Guard; Harry Spence, Center; Ron Ostertag, Center; Ernie Grosso, Guard.

And as for bowling, it's underway again with last year's winner, the Diode Diddlers (Rich and Evelyn McIntyre, Al Danks, and Madeline Reynolds), far ahead in first place. Madeline Reynolds (148) and Hal Knopp (171) share high average honors; Joe Manino (206) and Rich McIntyre (223) hold high game honors; and Janet Marz (512) and Art Pearson (566) are high series leaders.

With Christmas coming, San Rafael employees should begin thinking about this year's Christmas Dance. It'll be at the Claremont Hotel in Berkeley, December 23rd, from 9:00 pm until 1:00 am. The Gordon Heche Orchestra will provide the music. Reservations for dinner can be made by contacting the Recreation Council. The choice is Prime Rib at \$4.75 or a Buffet Dinner at \$3.75. Get those reservations in early.

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## Shiprock

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Shiprock's Bureau of Indian Affairs office sent one of its ablest representatives to California, and while she was in Northern California, Juanita Myrtue visited Semiconductor headquarters in Mountain View. It was a chance for her to tour the facility and to better understand Fairchild operations as well as see lifelong friend Andy Anderson, Special Products Applications. Mrs. Myrtue is the Bureau's Community Living, Guidance, and Housing specialist and works with George Higgins, Shiprock's Personnel Manager, to increase employment opportunities, develop training programs, and improve housing conditions, all very much the concern of Fairchild as well as the Bureau of Indian Affairs.

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## South Portland

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After thinking about a subject very close to her heart for some time, Estelle Bragdon, took pen in hand. Her poem should hold special meaning for Q.A. Inspectors everywhere.

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### Q. A. INSPECTOR'S LAMENT THE TRANSISTOR

Did you ever see a gadget  
Three legs, a can & head?  
Well lady, if you haven't  
Then you're sure as shootin'-dead.

It's a funny little gismo  
In various shapes & sizes  
And the different ways you test it  
Can bring some great surprises.

Your brain is full of figures  
The AMP & OHM & volt  
And if you don't know the difference  
Then you look just like a dolt.

Production Foremen want the stuff  
To pass just like a breeze  
Specialists too will join the force  
And you can feel the freeze.

It doesn't make much difference  
If it's HFE or (Sat)  
When the doggone spec says 1.4  
If it's 1.5 — that's that!

We find the dents & nicks & rust,  
The voids & failures too  
It's really not an easy job  
But that's what we're to do.

Sometimes it fails parameter,  
The spec & all you see  
Until at last you realize  
It's wrong *Polarity!*

To really get confusing  
Try leakage, that's the worse  
To test the unit normally,  
It's really in reverse.

Another thing that's lots of fun  
Is ovens with their flaws  
You can blow a unit — just like that!  
And never know the cause.

Just ask the Q.A. Foreman  
Of the battles we have fought  
To get the doggone units out,  
& marked & packed — and bought.

I guess it's just like everything  
That *really* is worthwhile  
If you do it *right* — & *know* it's right,  
It goes out with a smile.

By: Estelle Bragdon

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## Mountain View



Yes, Leo, there really is a "Great Pumpkin," and for any non-believers, the "Great Pumpkin" paid a visit to Leo Craft's office, leaving it knee-deep in crumpled paper. Believe it or not, Dian Warnecke, also of IC Engineering, is sitting on Leo's desk.



And in another prank, Mel Snyder, Computer Programs Manager, returned from the National Sales Conference to find his "replacement" dictating to secretary Linda Carlidge. The new CTL king was lovingly constructed by cohorts Ray Jodoin, Dave Rosprim, Bonnie Weber, Robin Rothschild, and Linda. It was made with 2000 CTL dummy rejects and some way out imagination.



Ever since Mrs. O'Leary's cow kicked over the lantern there's been great emphasis on fire safety. In keeping with this, the Mountain View Security Force participated in a safety seminar on fire prevention and fire fighting. Several weeks later they

sponsored a similar program for all Mountain View employees. All of this practice proved to be very practical, for had any of the employees been in the new headquarters building being constructed on Ellis Street, they would have been prepared for the small fire that broke out there recently. It seems someone accidentally kicked over an acetylene torch. George Von Vick, Chief Applications Engineer with Controls, spotted the fire, called the Fire Department, and had time to take pictures, too.



Many of Fairchild's industrial engineers are participating in the Work-Factor course currently being given in the American Standard building, which part of Semiconductor now occupies. The course, sponsored by George Fischer and his Project and Equipment Planning group, is designed to give its graduates a method for analyzing a job and making changes in a work station for better performance.



In another training program, department heads and section heads are progressing through a Basic Principles of Management course given by Gil Lampner, Manager of Training and Management Development. This course is also planned for persons in other managerial capacities and will be extended to include Instrumentation and Memory/Microwave personnel as well as those managers in the Semiconductor Division.



Robert B. Hood of Consumer Applications received a \$50 cash award for his co-authorship of an article published in the *Appliance Manufacturer* in July of this year. The article, entitled, "Build Your Own Low-Cost SCR Tester," was authored by Bob and William L. Harrell. Bob is Section Head of the Consumer Applications Control Circuits Group responsible for all Consumer semiconductor appliance applications. Bill

was recently transferred to Instrumentation from the Control Circuits group where he was a Senior Technician.

Priscilla Neathery, Memory Products Electronic Assembly, was recognized recently for an innovation she contributed to the basic operation of winding a 300 mil transformer. With a keen eye for production improvements, Priscilla tried winding the transformers using a sewing needle. Implementation of this method has doubled production.



And, in the Packaging Production area, Betty Pena and Judy Ponze have been racing standards for days. Both girls are loading 150 boats per shift, almost doubling standard.



In addition to Semiconductor's 10th birthday, many employees got together to celebrate other birthdays including Marlene Sousa's 21st (she says). Marlene is secretary to Bob Hanna in Materials. Slicing goes at it in a big way, honoring each month's birthday celebrants with one big party. September birthdays included Mary Golden, Margie Chappell, Ruth Whitley, Dan Killeen, Brent Pascoe, Bev Lyons, and Pat Bethel. Linda Eason, then soon to be married, was also feted. Slicing's October birthdays included Marty Barcroft, Pauline Niblett, and Lillian Crawford (not pictured). And a while ago, Materials Production Control surprised Betty Boss with a party on her birthday.



Other celebrations of note were those for Olga Miller when she transferred from IC Production Control where she was a Senior Clerk to Aerospace and Defense for a new job as Expediter, and for Hazen Duffman's promotion from General Foreman, Mask Making to General Foreman, LIC.



It was out with the old and in with the new at Management Information as the operation updated its computer operation with new IBM equipment. Ted Salazar and IBM's Bob Porter assist the departure of Semiconductor's first computer.



Larry Bender, Art Director for Marketing Services, gives Commercial Art students from Foothill College an opportunity to see first hand Semiconductor's Graphic Arts operation. The class met with Larry's staff as well as the Repro and Photography staffs. Larry has been teaching an evening course in Advertising Design for three semesters at Foothill.



Rosie Uriarte (center) of Material Slicing displays one of the bonitos she caught while vacationing in Ensenada. She, at least, has proof to back up those fish stories she brought back with her.

The Rec Council continues to have some "really good deals" employees should be taking advantage of and might want to plan for in the future...like a package trip to Hawaii, June 22-30. The savings will be fantastic, but Fred Pieper, Rec Council director, will need some indication of employee interest. Call him on 5131 if you're interested. Meanwhile, continuous discounts are being offered for shows at all three Century Theaters and the Circle Star Theater. A ski trip is planned for December 8-10 at about \$19 per person. This includes rooms for Friday and Saturday nights, two breakfasts and one dinner, and Heavenly Valley ski lift tickets. For those who'd rather stay closer to home, a Fashion Show is being planned for January, and the Council's sponsoring the following activities: bowling, golf, soccer, volleyball, scuba diving, flying, hunting, photography, camping, and tennis. Just let Fred know if you're interested in any of these activities at 5131.

And, speaking of soccer, the Fairchild United Soccer team beat the Half Moon Bay Athletic Club 3-2 and tied South San Francisco 3-3. They need rooters and hope lots of employees will come out for their home games at Fairoaks Park. Call Robin Jeffs (5305) for information about the games.

October saw the Tenth Framers push ahead to lead Mountain View bowlers with a 24-8 record. Team members are Les Haynes, Ann Antonio, Howard Lueck, Ann Lima, and Jim Vinzant.



Winners of the Summer Golf League were Pat Ceglia and Harry Chadwick of Packaging.

## Nov./5 yr. Service Awards

Warner J. Wandry	R&D	Lillie McDonald	R&D
Carmen L. De La Cruz	MV	Johnnie M. Polk	MV
Thomas E. Acton	R&D	Jim E. Stangl	MV
Lidwina B. Silva	MV	Rosemary Tabellija	MV
Jeanne Stone	MV	Mary B. Carrasco	MV
Jo Ann Seuser	MV	Myrna R. Hyatt	MV
Loretta Gard	MV	Marlys I. Fleming	MV
David J. Pilling	R&D	Albert D. Rosales	R&D
Maryann Garcia	MV	Rebecca Real	MV
Frank T. Botte	MV	Maxine I. Hamilton	SR
Carl M. Fender	R&D	Charlene R. Madore	SP
Gloria M. Wright	MV		

Flavio Valiente and Bob Sudduth, technicians at Instrumentation in the System Test area, cut the cake at their five-year anniversary party. Both received their pins from a recent five-year veteran, Jim Chun.

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## Moving Up

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Donald G. Blodgett was promoted to the position of Accountant at South Portland. Previous to his promotion, Don was Assistant Accountant and was formerly Timekeeper.

John Bosch was named Marketing Manager for Discrete Devices, bringing to the job an extensive sales background and business management experience.

Steve Carmichael was appointed Product Manager of Special Products at San Rafael. Steve previously worked at Mountain View as a General Foreman.

Colman Daniel was named Southwest Regional Manager for the Aerospace and Defense Marketing Department. He was formerly Sales Engineer in San Diego.

George Flynn was appointed Central Industrial Regional Manager. He was previously Sales Engineer for Fairchild in the Boston area.

James Kennedy was promoted to Sales Engineer to direct computer sales activities in the Minneapolis, Minnesota area. He was most recently a PNP Marketing Engineer at Mountain View.

Larry Luiz was named IC General Foreman at Aerospace and Defense. He was formerly Supervisor Special Products.

Gaylord Lineaweaver was promoted from Senior Tech Illustrator in Marketing Services to Assistant Graphic Arts Production Manager.

Cloyd Marvin was appointed to the position of Programs Manager for the company's Aerospace and Defense Department. Most recently he was Group Product Marketing Manager for Digital Integrated Circuits.

Alan Mattal was named Semiconductor's Programs Manager for Litton Industries. He has been with Fairchild for five years, last serving as Sales Engineer in the central region.

Jan Peters was named Senior Personnel Assistant in Employee Relations at Mountain View specializing in Insurance Benefits. She was formerly an Employment Interviewer at Mountain View's General Employment office.

Jack Singer was promoted from Manager of the Sales Binder Program to Manager of Marketing Services Distribution.

Marshall Smith has been appointed Group Controller of Aerospace and Defense Products, responsible for A & D, Hybrids, and Canadian plants. His most recent assignment was Manager of Financial Planning and Analysis.

Dick Steinheimer was named Senior Photographer for Marketing Services. He will be specializing in Public Relations projects. He was formerly head of the Photography Section.

Charles Sutcliffe was named to head an integrated Power Product organization within Discrete Operations. Dr. Sutcliffe will be working with those individuals now involved with the power products to establish a plan for evolving power activities into an integrated business. He has been responsible for the development of Fairchild's current MOS organization since joining Semiconductor a year ago.

Ron Turner was named to head up the Photography section of Marketing Services. Ron has been a photographer with the Semiconductor Division for nearly four years.

John Wells was appointed Group Controller of the Discrete Devices product group and will be responsible for the San Rafael, Shiprock, Hong Kong, Korea, Tijuana and Mountain View plants. His most recent assignment was as the Mountain View Plant Controller.

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## New Faces

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Michael Dahl joined San Rafael as a Product Engineer. He was formerly a Research Assistant at Oregon State University.

George W. Dean was appointed Product Engineer at South Portland. He was most recently with RCA in Lewiston, Maine.

James Dixon was named Customer Service Sales Liaison Engineer at San Rafael. He worked for BBDO Advertising Agency as Radio-TV Commercial Production Coordinator before joining the San Rafael group.

Dieter Fieber joined South Portland as Electronic Service Engineer. A native of Germany, Dieter comes to Fairchild from Texas Instruments Deutschland where he was a Production Engineer.

Bruce Gray was named Electronic Services Engineer at South Portland. He formerly worked as a Quality Assurance Engineer with the Norden Division of United Aircraft.

David McLaughlin was appointed Senior Engineer in the PNP Wafer Fabrication area at South Portland. He was previously employed by National Semiconductor where he was a Senior Product Engineer.

James Steele joined South Portland as Quality Assurance Engineer recently. A graduate of MIT, he was on active duty as Lieutenant (jg) with the United States Navy. He served as Ship Superintendent in the Portsmouth, New Hampshire Shipyard until his recent discharge.



Donna Hughes' five-year service award was presented by Materials Production Control Manager Bob Hanna.

George Higgins, Personnel Manager, was awarded his five-year pin by Shiprock's plant manager Paul Driscoll.



Betty Lax, Production Control, received her five-year award from John Shuck, head of Packaging.



Dottie Gallagher was surprised at a party given by fellow employees to celebrate her ninth year with Semiconductor. She was only going to work for a month to pay off an old panel truck and a fence she and her husband had just bought. When she was hired, she was the only tester on the swing shift, then switched to days in applications engineering, moved up to QA and Spec Writing, and today is IBM Specialist for the Discrete Device Product Support group at Mountain View.

## Leadwire

Vol. 9, No. 11

Published by and for Employees of  
Fairchild Semiconductor/Instrumentation

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Rafael - Hong Kong - South Portland,  
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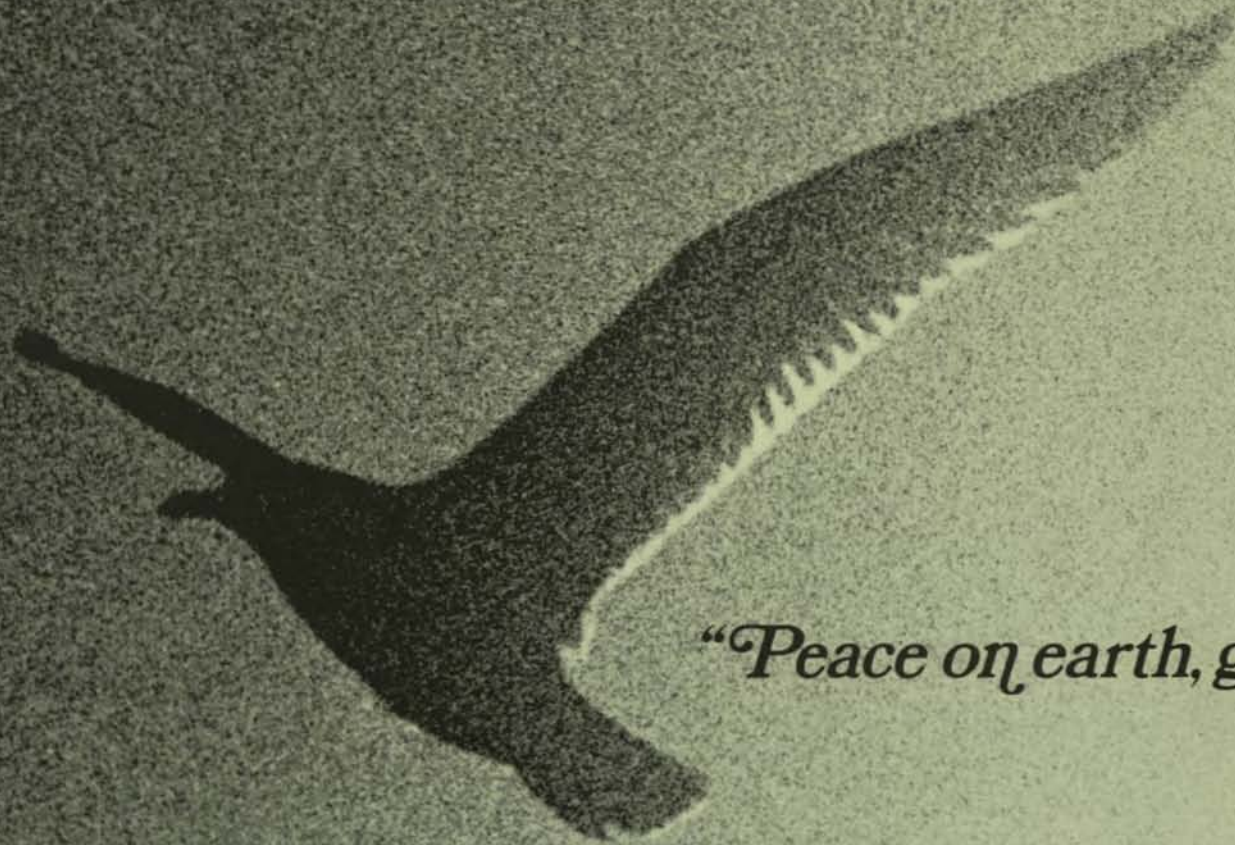
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THE COVER: This month's cover is a  
unique "fish-eye" photo of San Ra-  
fael's Swing Shift who are part of the  
more than 850 San Rafael people fea-  
tured in the November *Leadwire*.



*Leadwire 12*





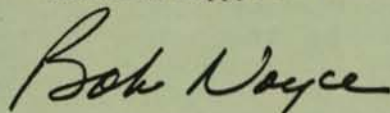
*"Peace on earth, goodwill*

*toward men."*

**T**hroughout the year each of us finds moments of inward satisfaction. moments when we are at peace with ourselves. These feelings are heightened during the Christmas season, and our thoughts not only turn contemplatively inward but extend outwardly to the whole of mankind. This is the Christmas spirit, and it is my hope that this feeling of "peace on earth, goodwill toward men" will continue to prevail throughout the coming new year.

I would like to join Tom Bay and Vic Grinich in thanking each of you for your continued efforts and enthusiasm this past year.

And, in the true Christmas spirit we would like to extend to you and your family our sincere wishes for a very Merry Christmas and a most Happy New Year.



R. N. Noyce  
Group Vice President

# Fröhliche Weihnachten

**T**is the season to be jolly, and throughout the world the Christmas season combines pagentry and merriment in tribute to the birth of Christ. Christmas customs are interwoven with ancient folklore and legends handed down through generations, but they come alive in the eyes of old and young living in many lands.

**I**n Spain and Italy, Christmas is set apart by church services which sound the keynote of the holiday. Every Italian house sets up the *presepio*, a tiny version of the Nativity, and constructs a *ceppo*, an early Italian conception of a Christmas tree. It is a highly decorated structure with shelves filled with gifts and Nativity scenes. In some families there is a *ceppo* for every child.

**A**cross the Mediterranean, Christmas marks Spain's busiest and most elaborate *fiesta*. After attending church on Christmas day, families spend a quiet day at home. That evening they gather in village squares for merry-making. The Twelfth-Day, traditionally the day when the Three Kings arrived to worship the Babe in the Manger, is observed in Spanish lands, and children await the coming of the Magi and the gifts they bring by stuffing shoes with straw and putting them on balconies and in doorways so the King's horses will have something to eat after their journey. In the morning, the children find the straw gone and gifts and candy stuffed in their shoes.

**C**loser to home, our Mexican neighbors celebrate a *fiesta*, or series of *fiestas*, called the *Posadas* beginning on December 16 and continuing until Christmas Eve. The word *posada* means lodging place or inn, and *Las Posadas* depicts and commemorates the nine-day journey Mary and Joseph made from Nazareth to Bethlehem. To Mexican children the *piñata* is the best part of the *Posadas*. *Piñatas* filled with toys and favors, and some with water and confetti, are hung from ceilings. On each night of the nine ceremonial evenings the children form a circle around the *piñatas* and one child, blindfolded in the center, tries to break a pinata hoping it will be the good one filled with candy and toys.

**I**n France, celebrations begin the night before Christmas when French mothers bring out little figurines and miniature Nativity scenes for the children to build a *crèche*.

Church bells ring at midnight calling for celebration of the Christmas Mass, and afterward, in their homes, the French people enjoy the *Reveillon* — the most memorable meal of the year. On Christmas Eve, French children put their shoes before the fireplaces, expecting Père Noël to fill them with nuts and sweets, and New Year's Day is set aside for general gift giving.

**S**aint Nicholas Day, December 6, is a great day for children in Belgium. They set up a tree and expect Saint Nicholas to fill it with gifts and good things to eat. He is depicted in bishop's robes and is supposed to be riding a gray horse or white donkey. The children put out water, hay, carrots, and potatoes for it to eat, and in the morning, the furniture is in general disorder which shows that Saint Nicholas has been there. In their shoes they find sweets and toys if they have been good that year.

**I**n Switzerland, Father Christmas is depicted as having a jovial red face and white beard, and he wears a long fur-trimmed robe. He marches through the villages with his wife Lucy, and while he distributes gifts to the boys, she takes care of the girls. In the French cantons of Switzerland, the Christ child, called the *Chriskindle*, makes the rounds of the villages in a sleigh drawn by reindeer, carrying a load of candy and toys and Christmas cookies that are baked in fantastic shapes.

**I**n Scandinavian countries no one is ever forgotten at Christmas time. Even the animals receive an extra Christmas ration. It is during this season that the "little people" visit all the Scandinavian countries. These tiny gnomelike figures, whose images appear in decorations as symbols of the holiday season, are always found in family groups and it is considered lucky to have such a family come to stay on Christmas Eve. Scandinavians always provide them with a Christmas dinner, and every family carries a great bowl of hot milk out to the barn or up to the attic for their little guests. No one ever sees them drink it, but the children always find it empty in the morning.

**T**he Danes have their "Little Christmas" on December 23 when the house is swept and garnished with holly and mistletoe. The Swedish folk begin their festivities on De-

# und ein Glückliches Neues Jahr

ember 13, Saint Lucia's Day. *Jule-nisen* brings gifts to the boys and girls. He's a red-clad figure with a pointed cap and long white beard. He lives in a stable during the year, and comes riding astride a goat bringing gifts for everyone at Christmas. It's also traditional to start great bonfires on the heights of Norway and Sweden to honor the birth of Christ.

**T**he people of Finland have some very special customs all their own. One is the steam bath that tradition rules everyone must take on Christmas Eve. January 6 celebrates the end of Finnish yuletide, and the tree is dismantled and the holiday ends in a mad rush of singing and dancing.

**I**n Slavic countries, though Communist-controlled, most Christmas customs are still kept in the homes. They sing the story and are rewarded with gifts. In Poland, each child writes a letter telling what he wants for Christmas. It is placed in the window where the Wise Men can see it. Gifts, though, are exchanged earlier on the Feast of St. Nicholas Day, December 6. Bulgarians and Romanians begin their festivities with the first star on Christmas Eve, the end of two weeks of fasting. In Romania, on Christmas night, boys go from house to house singing carols, reciting poetry, and repeating the Christmas story. The leader of the group carries a large star, the *steana*, made of wood and mounted on a pole. It is covered with gilt paper and colored streamers on which are fastened small bells and a picture of the Holy Family is painted or pasted in the center. To make it glow, a small candle is placed inside.

**T**he Christmas spirit of the Teutonic lands goes by the name of Good Saint Nicholas — a tall, kind-faced man with a beard, wearing a cape of a bishop and a miter head-dress. With him is his devilish partner, Evil Peter, who always carries a bunch of switches. Saint Nicholas rewards the good children by giving them gifts from the bag he carries and Peter distributes switches to the parents for bad boys and girls. In Germany, Saint Nicholas is an advanced messenger of Christmas, and the actual gifts are not delivered until Christmas Eve. Sometimes these gifts come from the hands of the Christmas Man, and in other sections it is *Christ Kindle*, the Christ child, who gives them. The weeks between St. Nicholas Day and Christmas are times

for great fairs in Germany and they are often called *doms* from the fact that they were once held in the cathedral squares. The Christmas tree is the prime German contribution to holiday decorations, and in Hungary a special candy is made and rolled in bright-colored papers to hang from the Christmas tree boughs.

In Hungary as in other middle European countries, the season opens with Saint Nicholas Day on December 6. The actual Christmas festivities, however, begin at school on Christmas Eve. Before classes are dismissed, the children gather in a circle and each recites a verse from the Bible about the Nativity. They sing carols and each child is presented a bag of sweets. When they arrive home, they find the door to the best room in the house is closed and they must wait until a bell is rung and the door is thrown open to reveal the lighted Christmas tree. Underneath are the gifts from Saint Nicholas.

**I**n America, there is a Santa Claus who fills children's stockings with toys and leaves gifts too large for stockings under evergreen trees covered with ornaments. There are Christmas carols and yule logs, holly wreaths and mistletoe, and so many more Christmas customs — all passed on from generation to generation throughout the world.

MEPN KRNCMAC N XATTN HEY EP (RUSSIAN)

KELLEMES KÁRARSONYI ÍSSNNEPEKET E'S

BOLDOG UJTÉRET (HUNGARIAN)

SRETAN BOŽIĆ I VESELA NOVA GODINA (YUGOSLAVIA)

VROLYK KERSTFEEST EN UN

GELUKKIG NIEUWJAAR (DUTCH)

FROHLICHE WEIHNACHTEN UND EIN

GLÜCKLICHES NEUES JAHR (GERMAN)

JOYEUX NOËL ET BONNE ANNÉE (FRENCH)

FELÍ NAVIDAD Y FELÍ AÑO NUEVO (SPANISH)

MALIGAYANG PASKO AT BAGONG TAON (PHILLIPINO)

FELICES PASCUAS Y PROSPERO AÑO

NUEVO (PORTUGUESE)

BUON NATALE FELICE PRENCIPIO D'ANNO (ITALIAN)



## *In the True Christmas Spirit*

Throughout the year each of us has many rewarding experiences. Someone you work with does more than asked of her, and it makes your job easier. Women put together potlucks, showers, and birthday parties . . . this takes extra planning and effort on someone's part. Then there's the person in the hallway who always greets you with a smile or calls out your name when she greets you and you really didn't think she knew your name at all. Or, there's the person closest to you who knows when you're down in the dumps and can lift you up again. This is the Christmas spirit, and that these things happen throughout the year is a fringe

benefit you receive for being part of the human race. And, while there are many instances of man's goodwill, here are two group efforts that deserve special recognition.

Giving to the United Fund is a routine sort of thing, but for a whole department to pledge their Fair Share is unique. 99% of Packaging Production (that's more than 100 day and swing shift people working for Dan Murray) did just that, and their gifts will be appreciated throughout the coming year by those people assisted by the Santa Clara United Fund.



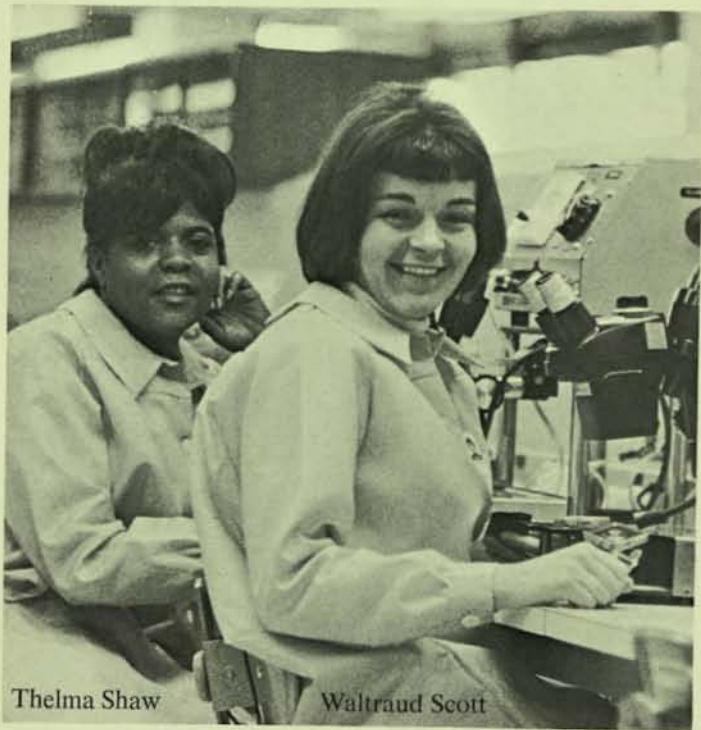


In the other instance, all the girls on Aerospace and Defense's IC and Special Products Assembly swing shift baked 258 dozen cookies for America's Special Forces serving in Viet Nam and another group stationed in Germany. The cookies were headed for the 5th Missile Battalion in Germany, the 9th S and T Battalion at Da Nang, the 12th Aviation Group at Bien Hoa, the 661 Ordnance Company AMMO, a Navy ship just off the coast of Viet Nam, and the Commander Carrier Division FIVE (this last choice, the result of a letter received from RDC James R. Davis, USN, published in *Leadwire* 10). Several of the girls

have relatives stationed with the six groups, and that also accounted for their selection.

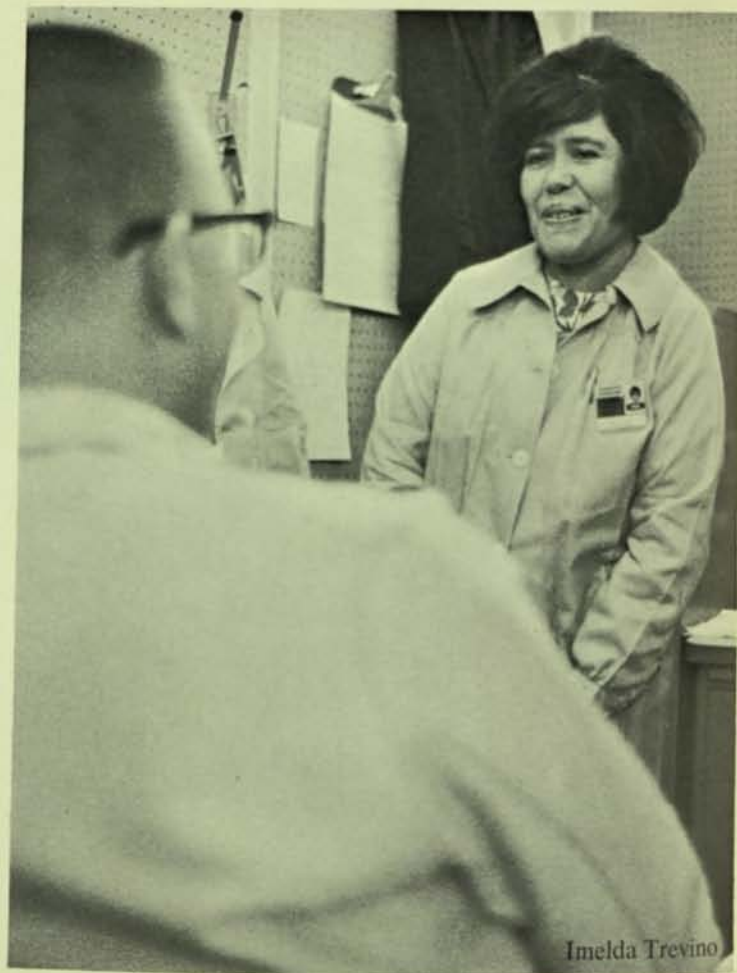
Joan Connally organized the "bake-in" and Joy Waters, Diana Tollner, Darla DuBois, Lynette Evans, and Andrea Anderson helped her wrap each cookie hoping to save them from crumbling en route. The cookies were then neatly wrapped in Christmas packages, and six huge cartons of cookies were transported to Fairchild's mailing room and sent on their way.

*Industry and Community:  
Partners in  
A Commitment to Job Opportunities*



Thelma Shaw

Waltraud Scott



Imelda Trevino

The industry representative just happens to be Fairchild Semiconductor, and the community organization is OICW. OICW stands for Opportunities Industrialization Center West.

OICW is a job training center organized two years ago in Menlo Park to provide a variety of courses (Business Skills, English, Math, IBM Key punch, and Electronic Assembly) for San Francisco Peninsula residents. It then follows these with an all-out attempt to enlist local industries to support its program by providing job opportunities.

Fairchild Semiconductor is one of many Peninsula firms that regularly hires OICW graduates, and according to Bill Strickland, Personnel Assistant who does quite a lot of the Mountain View hiring, he's received lots of favorable comments from the supervisors OICW graduates work for. He is continually hiring OICW applicants and finds them not only well qualified but quite adaptable to Semiconductor's specialized skills.

OICW is a demonstration project of "self-help." In fact, that's the

Lucy Plascencia



organization's motto, "We help Ourselves." And Fairchild's employees who graduated from OICW certainly typify this.

Imelda Trevino is doing RF Testing, testing tuners for radios and TVs in Mountain View's Commercial Test and Finish Department. She's been with Semiconductor for seven months, and according to her foreman, John Mack, she's one of the best girls he has. All the girls she works with have the greatest respect for her and comment that she's the hardest worker of them all.

Dessie Rogers works for Aerospace and Defense, and more specifically for Bruce Thomas, Mark and Pack supervisor. Bruce has raved about Dessie's work for some time and is a big booster of OICW mainly because of Dessie's fine work. She's been with Fairchild for four months and has been cross trained in many jobs adapting easily to each new challenge.

Lucy Plascencia, originally from Guadalajara, Mexico, has been working at Fairchild for three months. Her supervisor, Dan Bittel, praises her work



Dessie Rogers

highly. She's done a variety of jobs and currently is loading Fairpac Caps on the Flatpac line in the Packaging Department.

Mary Lindley is one of two girls backlapping wafers to specific thicknesses in the Wafer Test and Finish operation. This is a highly skilled job, and her foreman, Al Nott, depends heavily on the accuracy with which Mary performs her job. Mary has been with Fairchild for about three months.

Waltraud (Wally) Scott, a native of Frankfurt, Germany, studied OICW's English, Math, and Typing courses, but eventually wound up in the electronics field working for Fairchild Semiconductor in the Hybrid Products group. Bob Powell, foreman of the Flatpac line, says Wally is his best die attach girl and when she starts working nothing disturbs her concentration. (Thelma Shaw, graduated from OICW in 1965, the IBM Key punch School, and it wasn't until Wally's interview that either one of them realized the other had attended OICW.)

Mary Lindley





Christmas comes but once a year,



but it t  
anyway  
our Fir  
almost



What used to be a simple recordkeeping  
has evolved into economic and financial  
overhead control, pricing and profit plan  
international finance as well as payroll, c

This department even provides



a travel service,  
too!

Yes, as Semiconduc  
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autonomy than ever before be  
cause each plant or major  
department has its own



Controller and staff.

Even with all this, the Finance Department  
doesn't forget about the simple tasks it's  
asked to perform, but then preparing near  
10,000 paychecks a week isn't any simple  
matter.

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y. And, speaking of paychecks,  
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10,000 paychecks each week.



That's not  
all they do,  
either!

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Following this evolution, the Finance Department reorganized along product lines to match "straight-through production with "straight-through accounting." Group Controller organizations have been established to service each of the major device manufacturing organizations. Now there's more ' local financial

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The End.





# Art Abounds

Deck the halls with lots of paintings, fa-la-la-la-la-la-la-la. And, that's just what's been going on lately at Mountain View. Mountain View employees and their families rallied to the cause of art, contributing more than 115 works of art to the Rec Council's combination contest and exhibit. All entries were judged by Larry Bender, Marketing Services Art Director; Tom Hewitt, Marketing Services Designer; and Roger Flanagan, Art Director *Sunset Magazine*.

First prize winner was Helen Magnus of Maskmaking for her pastel portrait of her daughter, Rachael. Helen has been doing portraits on commission for nearly ten years, and she likes to dabble in other media as well.

Second prize went to Bea Wilkerson of CLIC for her still-life painting of flowers done in oils. Bea considers herself only a week-end painter, but her

abilities rank her as a professional. She also specializes in portraits.

John Arthur, Senior Personnel Administrator, has been painting for nearly 20 years, and like all artists he never has enough time to spend painting. His seascape done in oils earned him third prize in the employee art show, but then John was entering a tested winner, for it has won honors in every show he's entered it in.

Frank Gusdorf of Memory Products' Engineering Department won an honorable mention for his woodblock print, and Sophie Keefe's sister-in-law also won an honorable mention for her acrylic painting. Sophie is in Maskmaking and is an artist herself.

Clockwise: John Arthur, third prize winner; Bea Wilkerson, second prize winner; Helen Magnus, first prize winner; and Sophie Keefe who accepted an honorable mention for her sister-in-law. Not pictured was Frank Gusdorf who also received an honorable mention.

# Photography, Fairchild-Style

It's not the film, lens opening or camera that makes a good picture. They help, but what counts is what the photographer sees. That criterion — content — was the basis for selecting the best of 64 entries in this year's *Leadwire* Photo Contest. Photos arrived from almost every Fairchild location, and most of them fell into two categories, scenics and human interest. Choosing the best photos from 64 excellent ones was the job of Marketing Service's art directors and photography staff.

This year's grand prize winner received a Kodak Instamatic M-18 Movie Camera, first prize winners received Polaroid Swingers, second prize winners received transistor radios, and honorable mention winners received certificates. Now, here are the winners:



LEADWIRE'S PHOTO CONTEST

(Below Right) Grand Prize Winner: David M. Barton of Instrument Engineering, Instrumentation. (Above Left) Scenic First Prize Winner: Richard Johnson of R & D. (Below Left) Human Interest First Prize Winner: Lau Wan Hon of Hong Kong, Diode, for his photo "Buddhist Temple, Hong Kong." (Below Center) Still Life First Prize Winner: Henry Mahler, Production Control Manager, Aerospace and Defense, Mountain View.





Human Interest Honorable Mention: W. H. Lau, Hong Kong, Diode, for his photo, "Hong Kong Worker."



Human Interest Honorable Mention: Konrad Herman, Plant Controller, for Hong Kong.



Human Interest Honorable Mention: James Combes, Cost Accounting at Mountain View.



Scenic Honorable Mention: Brodie Spencer, Industrial Relations Manager for Hong Kong.



Human Interest Honorable Mention: Y. T. Chang, Hong Kong, Diode, for his photo "Summertime, Hong Kong."



Human Interest  
Second Prize Winner: Louie Kish, Foreman in the Hybrids section at Mountain View.



Scenic Second Prize Winner: Kiyoshi Murakami of Electronic Design, San Rafael.



Still Life Honorable Mention: Herman Martin, Special Products, San Rafael.



Still Life Second Prize Winner: Jurgen Wickert, Fairchild Australia.



Scenic Honorable Mention: Sandi Richlin, Department Secretary in Packaging at Mountain View for her photo "Sunrise Down Under,"



Sports/Action  
Honorable Mention: Charles Hunter, Materials, Mountain View, for his photo "Around the Cape."

## Of Interest

### FCI Buys World Magnetics, Inc.

Fairchild Camera and Instrument announced the acquisition of substantially all the assets of World Magnetics, Inc. of Charlotte, Michigan, in exchange for a number of shares of Fairchild stock. World Magnetics designs and manufactures magnetic heads for the electronic reading of printed magnetic ink characters from checks, ledger records, and similar data for the computer and data processing industry. It will be operated as a wholly owned subsidiary of Fairchild.

### Credit Union Advances Reported

Fairchild's Credit Union serving San Rafael, Mountain View, and Palo Alto locations, as well as Instrumentation, reported assets exceeding \$1.5 million and loan volume exceeding \$1.5 million by the end of the year. Manager Bob Maydeck said that the operation was exceeding its budget on gross income and was way underbudget on expenditures. 4500 employees now belong to the Credit Union.

## Research & Development

The new R & D cafeteria observed its first birthday on October 31st with a lavish smorgasbord menu served from elegantly decorated tables in the dining room. The Halloween motif was carried out in the floral arrangements and room decorations. Birthday cake and coffee were served during the day with the compliments of the cafeteria contractor, Coca Cola Bottling Company of San Jose, and staff. Chef Floyd Manning was celebrating his birthday as well, and his popularity was attested to by the many hearty birthday congratulations and the musical tribute he received from the lab groups.



Pasatiempo was the site of the Golf League's last grueling event. John Gundershaug took low gross honors with an 89, and Joan Blome and Arnold Riemer won closest to the pin and fewest putts contests. Joan was only 53 inches from the pin on the par-3 fifteenth hole, and Arnie went around in 30 putts. Low net honors went to John Michel (76) in Flight A, while Dave Elrod's 66 was low for the B Flight, and Joe Ruiz captured low net in the C Flight with a 72. Next course on the agenda is the Oak Ridge Golf Club in San Jose. It promised to be only slightly easier.

## From the Field

Top salesmen for the month of September included Scott Brown (Industrial-College Park), Hank Merino (Aerospace and Defense-Minneapolis), and Dick Koehler (Computer-Minneapolis). Named for October were Chuck Keough (Industrial-Elmwood Park), Ronald Smith (Aerospace and Defense-Albuquerque), and Tom Dyer (Computer-Poughkeepsie).

## Instrumentation

Monopoly, Parchesi, and Password are a few of the traditional games many Instrumentation families will find under their Christmas trees this year, for they are being sold like "hot cakes" by the Rec Council at their Discount Christmas Gift booth. More than 100 employees a day browse during their lunch hours and breaks, selecting from a variety of toys, stuffed animals, and novelties. The project is the Rec Council's biggest money maker of the year, and the profits go toward the annual Children's Christmas Party and to support Instrumentation's foster child for the approaching new year.



Bonifacio Navalta, Instrumentation's foster child, has been writing very regularly. Here's his last letter:

*How are you? Guess you're busy at the moment. About me, we're also busy here getting ready for our examination on October 2nd. From here, they'll get our grades for the second grading. I am studying hard. I wish to thank you for the things we're receiving. Last month we got hold of the mosquito net and the sum of 31.35 (\$8.00). Please do take good care of your health. This is all for now. May God bless you always.*

Winner of the sales trophy for instrument sales, Western Region, is Jim Coffey, who succeeded in having the Model 7000 specified on a phase of the Phoenix program. First month's orders totaled \$15,000 with more to come. In the East, regional winner was Bill Ernul for his efforts promoting the Model 8220 specification on a large FAA requirement. Highest man in instrument sales this year is Gary Verwer with more than \$200,000 to date.

## Mountain View

Microwave Assembly has two assemblers, Susan Yoshimine and Bev Chase, who maintained a perfect record of quality over a four-week period, October 2–November 3, a fete which makes Assembly Foreman Barry Richardson quite happy. To the girls it's just all in a day's work.



Derek Bray, Manager Consumer Applications, presented Ted Hanna, Consumer Applications Engineer, his share of the cash award he and Dave Bingham, LIC Consumer Microcircuits, received for publishing their article, "A Low-Cost AM-FM Radio Employing An Integrated Circuit." The article was presented at the Chicago Spring Conference in June and published in *IEEE Transactions on Broadcast and Television Receivers*. Ted also had an article, "An Integrated FM IF Amplifier" published in the September issue of *Electronic Products*.

Robin Jeffs reports that the Fairchild United Soccer team dropped its first contest to the Germania team. The loss also knocked them out of the top spot in the league. However the team added wins over the Newark Kickers, Hercules, and a "friendly" with the University of Santa Clara to their string of victories. They also tied the Fortuna 66 team. Jan Visser is trying to get a second team organized, so anyone who just wants to play for the fun of it should get in touch with him.

The Tenth Framers continue to lead the Mountain View Winter League stretching their lead with a 29–11 record. In second place is the F Troop team (26–14). Ed Beers' high series (617) leads the men, and Ann Lima's high series (566) leads the women. Charlie Kuhlmann holds

high game honors with a 246, and Aggie Myreholt and Ann Lima share the women's high game honors with a 212.



QA and QC are joining forces in the IC group, or at least that's where all the people making up the new Packaging Inspection group come from. Some of the people in this operation are Dick Stafieri, Manager, and Dick Berger, General Foreman. Bill Huff is QA test room foreman on graveyard, and Pete Fletcher is graveyard technician. Jerry Bendinelli is now day shift foreman for QC Packaging, and Al Hiratsu serves as the Engineer. Jim Tucci rounds out the staff as swing shift foreman, but the most important additions, the girls, are shown below — days on the left and swing on the right.



## Hong Kong

Hong Kong's summer picnic was held October 22nd. The place was Har Leung in Hong Kong's New Territories. The pictures were entries in this year's *Leadwire* Photo Contest taken by Jim Perry, Y. K. Yeung, S. W. Chiu, and Y. H. Tsui.



## San Rafael

Amid holiday goodwill and good cheer, each person harbors his own Christmas wish. Here are just a few:

**Avrille Nielsen**, Receptionist, would like to find actor Paul Newman in her Christmas stocking.

**Jeanette Schwinghammer**, Nurse, would like to receive a six month cruise to the Orient with an interesting (???) companion.

**Bill Morinville**, Foreman, would like a really good single lens reflex Miranda camera.

**Naomi Petri**, Can Line, would like a tape recorder.

**Tony Schiavo**, Line Maintenance, must be one of the happiest fellas in the plant. "Now what more could a man like me want, I have everything!"

**Karel Svoboda** is asking for a six-month trip to the Adriatic.

**Harry Spence** has a sports car kit and would like someone to change it into a new sports car.

**Wayne Lawson** wants a Ferrari.

**Madeline Reynolds** would like her husband home from Vietnam for good.

**Rose Colona** would like a new wardrobe.

**Robin Hodge**, Engineer, would like a new Ferrari, too.

**Jane Lysher**, Can Line, would like another week's vacation with pay.

**Janet Marz**, Engineering, would like a round-trip ticket to England to surprise her family.

**Clara Crouch**, Can Line, would like her home redecorated.

**Mario Scavino**, Engineer, is just asking for a trip around the world.

**Jackie Stephenson**, Special Assemblies, would like a new marking machine.

**Bob Campagne** would like a 40 point rise in the Stock Market.

**Bert McNamara** would like a white elephant.

**Alex Danks** thinks a signed and approved P.W.O. for lab equipment would be a welcome Christmas surprise.

**Herm Martin** would like a stable organizational chart.

**Hal Knopp** wants Mikio Suzuki to accept his letters the first time without tables and appendixes.

Palmer Merrill, Foreman on the Module Line, was called upon to assist the training effort down in Tijuana. He not only wrote a maintenance manual, but served as a trouble-shooting guide and trained mechanics and operators in Com Fab.

Going into November, Team No. 2 (Rich McIntyre, Evelyn McIntyre, Al Danks, and Madeline Reynolds) is leading the bowling league. Most surprising woman bowler this season is Madeline Reynolds who leads all women bowlers with her 151 average. Other women causing quite

a stir are Jo Manino with a 212 high game, Janet Marz with a 512 high series, Sheila Morton with a 238 high game handicap, and Karen Callaway's 606 high series handicap. Hal Knopp leads the men with a 170 average, Rich McIntyre's 223 is high game so far this season, Art Pearson holds the high series record with a 566, Jerry Callaway leads the high game handicap category with a 245, and Daryl Cremers' 652 is high series handicap.

Coach Mike Feldtman predicts an improvement over last year's 0-17 basketball record thanks to the addition of youth and height. Ron Ostertag and Gordon Tremoureux stand 6'5", and Al Danks and Frank Barton check in at 6'3". Bruce Mack, at 6'2", and Mike Feldtman at 6' even add additional height. Those below the 6' level are Stan Manning, Bob Casel, Rob Reynolds and Ernie Grosso. Receptionist Avrille Nielsen came out for team tryouts, but the fellas and Avrille all decided there was too much holding under the boards and she voluntarily retired from the game.



## Seoul, South Korea

Production at Semikor, Ltd., hit a million devices a week, and employees celebrated the occasion at a picnic held in late October. Morning activities consisted of games, races, production skill contests, a masquerade parade, and a group talent show. After box lunches, a local radio station helped the group celebrate the event by taping a show which will be broadcast at a later date. Many prominent local celebrities in the singing field participated in the affair, and a singing contest held among Semikor employees topped off the afternoon.



## Ten Year Anniversaries



Murray Siegel, Industrial Applications Manager accepts his 10-year pin from Industrial Marketing Manager Jim Martin.

## Five Yr. Service Awards

Elaine Davis . . . . .	SP
Lloyd Smith . . . . .	Instr.
Margaret Crandall . . . . .	MV
Toshiko Matsunaga . . . . .	MV
Marce Mora . . . . .	MV
Viola Alderete . . . . .	MV
Ruth Brown . . . . .	SP
Leonard Hernandez . . . . .	MV
Anne Eaker . . . . .	Controls
Peter Cangialosi . . . . .	R & D
Russ Harper . . . . .	MV
William Worcester . . . . .	SP
Nette Blaylock . . . . .	MV
Jim Dixon . . . . .	MV
Alice Gomez . . . . .	Instr.
Evelyn Wright . . . . .	MV
Ray Reposa . . . . .	MV
Donald Morlan . . . . .	Instr.
Anita DiPerno . . . . .	SR
Earl Golsan . . . . .	SP
Stan Smith . . . . .	R&D
Marjorie Wade . . . . .	MV
Virginia Ruiz . . . . .	MV
Helen Sasaki . . . . .	Instr.
Shirley Remington . . . . .	SP
Joe Paret . . . . .	MV
Diane Livingstone . . . . .	SR
Delores Stephens . . . . .	SR
Maxine Teague . . . . .	SR
Thelma Mageean . . . . .	SP
Jean Spencer . . . . .	SP

## New Faces

Philip Edwards III joined Mountain View as Power Devices Application Engineer. He formerly worked for Teltronic Industrial Systems.

Robert Hodges was named Manager of Compensation for the Semiconductor Division. Bob will be responsible for all wage and salary administration including job classifications, merit reviews, and wage and hour law interpretations. He was formerly with Raytheon's semiconductor operations as Industrial Relations Manager.

Kurt Stehling was named Test Equipment Engineer at South Portland. A native of Germany and a graduate of the Munich Technical University, he was employed by Siemens A6 in Munich as an Equipment Design Engineer.

Guy Tessier was appointed Shop Supervisor at Instrumentation. He was previously associated with Statham Instruments in Oxnard, California.

Ken Van Kleck joined the Finance Department as Mountain View Plant Controller for Discrete Devices. He previously worked for the Norton Company as a member of the Corporate Controller's staff.

## Moving Up

Steve Ammann was named Technical Director for the Instrumentation Division, heading a research staff located at R & D. He was formerly Section Manager, Advanced Circuits and Techniques Research.

David Barton was promoted to Time and Frequency Manager at Instrumentation.

Robert Cadwell was appointed Special Instruments Development Manager for Instrumentation.

Joe Fulginiti was promoted from Technician to Foreman, Discrete Devices on the swing shift at Mountain View.

Gene Kruschke was named Applications Engineering Manager for Memory Products. He was formerly Central Regional Sales Manager for Memory in Minnesota.

John La Porta was promoted to Plant Manager, Small Instruments, at Instrumentation. Formerly with the company's Clifton, New Jersey, engineering group, he joined the Mountain View facility earlier this year.

Richard Thornton was named Manager, Development Engineering for Small Instruments at Instrumentation. He has been with the division since 1963 working in instrument design engineering.

## Leadwire

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**THE COVER:** The photo taken by  
David Barton of Instrumentation  
would have been cover material no  
matter what the season, but it affords  
the *Leadwire* an unusual approach to  
the Holiday Season. As grand prize  
winner in this year's *Leadwire* Photo  
Contest, it handsomely reflects this  
year's Christmas theme—*peace on  
earth, good will to men . . . of all  
nations and all faiths.*

# Leadwire Year-End Review



It's been a year of Apollo flights and successful lunar landings, of new division manager Joe Van Poppelen and reorganization for new goals, of expansion and construction, of parties and potlucks and department picnics. It was a year of new semiconductor devices, a second lady foreman, motivation and productivity sessions. It was a year for setting world records in production areas and for Semikor, Ltd. to fly their new Fairchild flag. It was a year of successful Open Houses, of five and ten year anniversaries, of new badges and new faces. It was a year of greater communications between all Fairchild plants and people. Yes, it was quite a year!

What will 1970 bring to Fairchild Semiconductor? New solutions to present and future problems, new opportunities and benefits for employees? It should bring new ways to cut mechanical downtime and save dollars. It will certainly bring expansion—new plants and products. 

*"Progress is the activity of today  
and the assurance of tomorrow."*

Emerson

# Winter



## Singapore Plant Under Way

Starting off the new year with a bang was the construction of Semiconductor's new Singapore plant. This new addition is a 40,000 square-foot manufacturing facility located in Singapore. The new plant, its construction under the direction of Equipment Engineering and Facilities group, was scheduled for completion in late Fall.

## Leadwire Takes Award

Judy Horst, then Editor of Leadwire, received three awards at the fourth annual United Bay Area Crusade's Company — Military Publications contest awards dinner held in San Francisco. In the five-county contest, the Leadwire won two honor awards and one merit award in the following categories: Honor awards, Best Overall Edition and Best Company-Crusade Tie-in; Merit award, Best Pictorial Treatment. The Leadwire was one of two publications to receive, for the first time, three awards. Presenting the awards was Peter Haas, UBAC's 1969 Campaign Chairman.

## United Fund Wrap-Up

The final outcome of the Santa Clara United Fund Campaign brought winter to a close. Fairchilders in the Mountain View/Sunnyvale/Palo Alto area gave most generously — \$61,333.83 as compared to \$48,338 collected in 1967.

## Yea, Wafer! Yea, Die Fab!

This was the cry from San Rafael when these two groups boosted their previous production records way out of sight as die shipment hit 52 million die. Quantity was matched by quality, according to General Foreman Dan Murray and Line Foremen John Cox and Jim Woodward — all very proud of their girls!

## An Eyewitness To History



Ann Russo, Final Test, South Portland, was an eyewitness to history — she attended the Presidential Inauguration! After showing her invitation to Plant Manager John Sussenberger, she received a banner to display in the grandstand. Later, Senator Margaret Chase Smith of Maine, autographed the banner expressing her personal regards to all Fairchild employees at South Portland.

## An Academy Award



February brought an Academy Award to Les Hogan, President and Chief Executive Officer of Fairchild Camera and Instrument. Dr. Hogan was chosen by the American Academy of Achievement as one of 50 extraordinary leaders in America today. The academy annually honors leaders in the sciences, professions, industry, arts and service to fellow man.

## Learning Made Easier

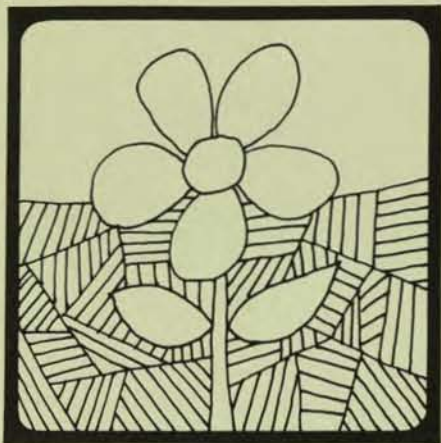


Pat Trongo, head of South Portland's new masking operation, used closed circuit TV to illustrate to his people what mask making is all about. With an eventual staff of fourteen, it was anticipated that Pat's group would supply South Portland's entire masking requirements by the second half of 1969.

## IR Workshop

From all corners of the world Industrial Relations personnel came to discuss Semiconductor's IR policies and programs. They came to talk safety and salaries, to discuss job evaluation and communication, and to work on new policies and programs. They came to learn about an everchanging Fairchild as portrayed by many guest speakers including Doug O'Connor, Group Director of Marketing; and George Scalise, Group Director of Manufacturing Services.

# Spring



## Hybrids Win A Critical Contract!

Fairchild signed a purchasing agreement with Medtronic for a number of Fairchild hybrid devices to be used in Medtronic heart pacemaker. This unique product application, representing a matter of life and death for many people, was another testimony to Fairchild's high quality and reliability standards.

## Operation — Wiesbaden



Fairchild Semiconductor confirmed construction plans for a production operation in Wiesbaden, Germany. Land was purchased for the 120,000 square-foot plant. The first 40,000 square-feet is expected to be operational during the first quarter of 1970, with an additional 50,000 square-feet to become operational in various stages during early 1971 and 1972. The company has also established an extensive marketing operation for Europe in Wiesbaden.

## "A Solution Before the Problem"

Fairchild Semiconductor established a Customer Satisfaction department to help solve customer problems—delivery delays, quality requirements, etc. Part of the department's job is to anticipate in-plant problems with a customer order and "head them off" before they interfere with a satisfactory completion of the order. Employees throughout the division were recognized by this department during the year for their outstanding efforts to help the customer receive his order on time.

## Open House — Fairchild Style!



When you put adults, kids, prizes, balloons, food and lots of noise and laughter together, it's the annual Fairchild Open House! There were many prizes given away including five portable TV's, and for the kids, free balloons, hot dogs, soft drinks, and rides with Bozo the Clown in his miniature hot rod.

## A Bowl of Fun!!



If you went, you loved it—if you didn't go, you blew it! Why the Bowling Extravaganza sponsored by the Mt. View Recreation Council, of course—what else would keep people inside on a beautiful day in May. Hundreds of bowlers and non-bowlers joined together to eat, drink and be merry from 10:00 AM until the wee hours of the morning. There were many door prizes given away throughout the day including four portable TV sets. It was definitely a "bowl of fun for everyone".

## Ahh Sooh



Celebrating the opening of the new Japan Air Lines cargo facilities at San Francisco International Airport were Bill Bertetta and Al Lemelin both of Fairchild Semiconductor and Fred Fulmer, JAL's San Francisco Cargo Sales Manager. Both Bill and Al keep a close eye on Fairchild's international shipments; not to mention Riki Safa, the kimono-clad hostess.

## Men on the Move



Dr. C. Lester Hogan, President of Fairchild Camera and Instrument Corporation; and Doug O'Connor, Group Director of Marketing are being shown the new bonding equipment at South Portland by Phil Perry, Manufacturing Manager.



Jim Smaha, Operations Manager, Les Hogan, and Doug O'Connor pay close attention to an I.C. Test operation at South Portland.



Joe Madjerac, General Foreman, explains the layout of the Mark and Pack area to Dr. Hogan and Doug O'Connor at South Portland.

# Summer



## Semiconductor's New General Manager



Joe Van Poppelen, a Vice President of Fairchild Camera and Instrument Corporation, was named General Manager of the corporation's Semiconductor Division. Van Poppelen, who joined Fairchild last September, 1968, filled the position that was held on a temporary basis by Fairchild Corporation President Dr. C. Lester Hogan. In making the promotion announcement, Dr. Hogan explained "I feel we need a tighter organization with greater control over our many diverse operations and better communication between all of us in order to make our course more efficient and the achievement of our goals more rapid." Dr. Hogan described Van Poppelen as a "real generalist within our industry" whose background and abilities "will lead us to the goal we are seeking." Prior to joining Fairchild, Van Poppelen was with International Telephone and Telegraph Corporation, most recently as Director of Business and Planning and earlier as President of the semiconductor division's United States

operations. He was also Executive Vice President and General Manager of Signetics Corporation, and previous to that he was Vice President of Sales for Motorola Semiconductor and a district sales manager for General Electric Semiconductor.

### It's Revolutionary!

What! Fairchild's new high speed Memory System in a one-inch multi-chip package. Fairchild Semiconductor began offering a 128-bit read/write random access memory (RAM) featuring access speeds of 35 nanoseconds and a fabrication technology that can be applied to semiconductor active memories.

### A Look at the Far East Plants

Dr. C. Lester Hogan, President and Chief Executive Officer of Fairchild Camera and Instrument Corporation, and Walter Burke, a member of Fairchild's Board of Directors and Executive Committee, attended a series of conferences with Fairchild managers and customers in Japan, Hong Kong, Korea, Singapore, and Australia. Fairchild's Far East operations are engaged in the production of semiconductor devices for sale in the Far East. Hong Kong alone buys many millions of dollars worth of locally produced Fairchild devices used primarily in small radios, televisions and stereo systems.

### Motivation and Productivity . . .



. . . was the subject discussed at Rickey's Hyatt House in Palo Alto. The guest speaker was Dr. Frederick Herzberg, who has been responsible for the single largest breakthrough in the field of motivation in the last 30 years. The meeting of Semiconductor managers in Mountain View was one of several held this year as part of Industrial Relations management development program.

## Up, Up and Away



The Semikor, Ltd. plant in Seoul, Korea began flying a new flag! Each little design means something special—the circle mark in the center of the flag stands for Fairchild Semikor Ltd., four round spots stretched out from the circle symbolize the electronic industry, green stripes of both edges are the trade marks of Fairchild Semikor Ltd., company's name is written in both English and Korean. The flag is now flying next to the Korean flag above the company building. The winner of the flag design, Kil Surn Hwang, was congratulated by the plant's General Manager, David Heck.

### V-e-r-r-y In-ter-est-ing!!



If you think this is something from outer space—you're wrong! It's just Jean Hanes, Test and Finish, San Rafael, dressed as a transistor for a costume ball held at Hobergs Resort in Lake County during the Pioneer Telephone Convention which her husband was attending. Matter of fact, Jean looked so strange she won a very nice prize for her unique costume.



## First Men on the Moon — Fairchild Helped!



"On July 16, 1969, Apollo 11 was launched into outer space—its destination: the moon. Four days later, the spiderlike Lunar Module touched down on the moon's forbidding surface. It rested there for almost seven hours before Neil A. Armstrong made man's first footprint on the moon. He was followed some 20 minutes later by Edwin E. Aldrin, Jr. On July 24, the space capsule became a fiery ball for a few breathtaking moments as it hurtled into the earth's atmosphere. Then the parachutes opened and Apollo 11 splashed down in the Pacific."

Fairchild Semiconductor played a part in this fantastic feat. Together with Motorola, Inc., the division supplied 1741's and 4200's transistors, diodes FD 100's, UDL 2N918, primary for the Communication Systems and Up Data Link. Fairchild provided Collins Radio Company with high reliability component parts and materials (2N918 small Signal transistor used in the Command Module Communication and Data System and the Lunar Module Signal Processor).

Fairchild received many telegrams congratulating its people on their conscientious efforts in achieving the successful lunar landing.

"On Sunday, July 20, Apollo 11 landed safely on the moon and the world rejoiced. Since that time Neil Armstrong, Michael Collins, and Edwin Aldrin have returned to earth with data and samples which will contribute greatly to man's knowledge of the Universe. The most daring adventure in history—man's first actual exploration of the moon—has been successfully completed. This mission, which

was undoubtedly the greatest technological achievement of all time, could not have been successfully concluded without the dedication of your firm and all of the other contractors and subcontractors involved in this imaginative undertaking. Please accept our congratulations for the important role in this mission which was played by your company. Our thanks are extended to you and all of your personnel who contributed so greatly to the success of this epic mission."

M. F. Wilson, Director  
Collins Radio Company,  
Reliability & Quality Assurance  
Div., Cedar Rapids Region.

"The Motorola S-Band Transponder and Up Data Link on the Apollo Command Module and the S-Band Transceiver on the Lunar Module performed flawlessly. These units provided the only voice and television link our astronauts had with earth after their spacecraft reached a point 30,000 miles from earth, and transmitted the first voice and TV pictures ever sent from the moon to earth.

We at Motorola commend you and your dedicated employees who helped make this possible. Without your able support and constant attention to the reliability of your company's vital components required to produce this equipment we seriously doubt that the Apollo 11 mission would have been successful.

Our sincere thanks, congratulations, and a hearty well done to you and your people who joined with us on the Nasa/Industry team to help make history on Apollo 11."

Paul J. Leinheiser, Purchasing  
Manager  
Motorola Inc.—Government  
Electronics Division  
Scottsdale, Arizona

History was made and Fairchild helped make it.

## World Records



It must have been a world record when Miritha Moon, FSI Operator in Testing at San Rafael, tested 140,000 units in 8 hours. Because of a terrific job well done, her very elated foreman Jimmy Nelson and Zener Product Manager, Charles Houle showed their appreciation by taking Miritha to lunch. Helen Stieding and Herbetta Clark, Die Fab, also should be congratulated for their outstanding performances. With the gentle encouragement of their foreman, George Miller, they scribed over 2,000,000 dice in an 8-hour shift on the Standard Scribing Equipment.

### A Lift For San Rafael



A new fork lift truck brought many smiles to Shipping and Receiving. Accepting the delivery for his department was Charlie Jorkling, foreman. After many years of nursing a sick unit, everyone was quite elated.

### In the Good Old Summertime

Fairchild Semikor, Ltd. in Seoul, Korea, had its annual picnic at Mt. Kwan Ak. By glimpsing at the photos and captions—all had a good time even the losers!



Here, office workers and production line supervisors have a tug of war. Who won the game? Judge from the facial expression of the cheer leader and section chief of Material Control!



Apple carrying contest—if she drops the apple off her head, she will be disqualified automatically.



Go-go picnic



Singing along with their line supervisor.



Swing shift operators challenge the Day shift operators to another game.

### Ride 'em Cowboy!



Shiprock threw one of the wildest, fun-packed barbecue-rodeo-bingo party-dances (disguised as the annual company picnic) for some 4,000 people. Even the employees participated in the rodeo events such as saddle bronc riding, bareback riding, calf roping, bull riding, and steer wrestling, matching their own skills against the untamed animals. Ending the day's activities were Navajo tribal dances, bingo and the modern day frug!

### Another Degree!



Dr. C. Lester Hogan, President of Fairchild Camera and Instrument, received an honorary Doctor of Science degree from Worcester Polytechnic Institute. He was honored at the University's June commencement exercises.

### You Have to Get up Early to Beat These Folks!



R&QA graveyard shift, Mountain View, enjoyed an early morning potluck breakfast given by Basil Tasker, visiting R&QA engineer from South Portland. Basil spent a week checking over the graveyard shift's system of processing South Portland's C#s. A breakfast was his idea in appreciation for the help graveyard employees gave him.

### 400 Join in for Picnic Festivities



Tijuana had its annual picnic on Sunday, August 17th, at Bob Brotherton's ranch. There were many activities for adults and kids—volleyball, swimming, dancing and pony rides. After a fun-filled day, everyone settled down for a big barbecue with all the trimmings. For an added attraction, piñatas were distributed to the picnickers.

## It All Started . . .



. . . with over 3500 employees and their families one bright and early Sunday morning in August, it was South Portland's annual picnic at Thomas Point Beach in Brunswick, Maine. Between the hamburgers; hot dogs; fried chicken; ice cream; and cold drinks, the picnickers witnessed a sky diving exhibition, played crazy games and for the fast-moving set—danced to a live band.



"I wouldn't jump out of a plane for all the IC's in South Portland!"



"Gee, it hurts when you land on your head!"



"What do ya mean, shut up and deal!?"



"3500 chickens coming up."

## A New Plant Record



San Rafael's Test and Finish area set a new plant record by shipping 21 million diodes. This outstanding achievement topped the previous high for a four-week schedule by 2.4 million. All QA and Test and Finish employees shared cake and ice cream to celebrate this auspicious occasion.

## A Second Lady Foreman!



Fairchild was pleased to honor Delores Thomas with the title of Swing Shift Foreman for the Epitaxial Department of Materials in Mountain View. Delores is the second woman to receive this promotion at Fairchild Semiconductor. The other foreman, Norma Lias, was honored November 1968, when she began as foreman for Day shift in DIC Assembly in Mountain View.

## Ready for Indy!



Thomas Messer, age 11, didn't win this year's Soap Box Derby, but in local competition his car was judged the best constructed. Tom's father, Elford, works in the Design Department at South Portland. Fairchild sponsored Tom's entry. Shown with Tom are his father and John Gundershaug, Personnel.

## South Portland Hosts Guidance Directors



The Personnel Department played host to 45 high school guidance counselors of southern Maine. This was part of a continuing program in which industry and education are attempting to devise programs to make education more meaningful for the student who does not intend to pursue his education beyond the high school level. George Manolakis spoke to the group on the company's needs for labor and skills requirements while both Jack Carter and Jim Vaughn gave the educators a tour of the Fairchild facility.

## Assembler Makes Foreman Happy!



Sandy Tanguay, Bonder, broke a South Portland record. She bonded 866 units—99.5 yield or 200% of standard. She previously did 192%. Sandy has been with Fairchild two years.



## Shiprock Dedication



Fairchild Semiconductor's \$1.1 million facility in Shiprock, New Mexico, standing as a proud monument to the Navajo people, was officially opened in dedication ceremonies September 6th. An estimated 5,000 people braved hot sun and the crowds to attend the ribbon-cutting ceremonies and to catch a glimpse of Julie and David Eisenhower who flew in to cut the ribbon. The 34,000 square foot plant, which employs some 1200 persons, all but 24 of them Navajo, was built with tribal and EDA funds and is leased to Fairchild.

Following the speeches, the ribbon cutting ceremony opened the new building and employees and their guests toured the new facility.



## Fairchild Falcons Placed Second in World Championship

The Fairchild Falcons had to settle for second place in the 1969 National Fast Pitch Softball Championship, losing the world title to the Stratford, Connecticut team. The Falcons, under coach Pat Campagna, took 5 straight games in Regional competition to earn a spot in the Finals played in Springfield, Missouri. The Falcons lost their first contest to St. Paul, 3-0, but won the next 8 games beating Springfield 8-1, Salt Lake City 5-0, Birmingham 2-0, Cedar Falls 1-0, Portland 3-1, Aurora 2-0, Armed Forces 4-0 and Stratford 4-3. They lost the final game to Stratford 7-0 which placed them second in the World Championship. Roy Burlison earned the Most Valuable Player award and Roy was named also to the first national All-Star team as were Ed Loveless, first base; Ray Phillips, second base; Glenn Beamon, center field. Named to the second All-Star team were Dave Timok, catcher; Chuck Caldera, third base; and Bill Lovato, left field. Pat Campagna was named All-Star manager.

## New Color, New Style . . .



. . . new badges are here! All employees of Semiconductor, and the other divisions were issued colorful new badges and ID cards. Semiconductor badges are identified by the green and white markings, with the name of each plant on the bottom. Each of the other divisions is represented by a different color. The new badges have that modern, long and sleek look. The ID cards will remain the same but the pictures are in color. In addition to identifying you as a Fairchild employee, the ID card also serves as a group insurance medical card, and permits you to obtain a 20% discount when renting a car from either Hertz or Avis Rent-A-Car companies.

## A Sound Investment



Dr. C. Lester Hogan, President of Fairchild Camera and Instrument, has a special interest in a new peninsula company, Junior Fairchild Achievers directed by President Ramonda Mustiful (right), 16-year-old Ravenswood High School student who serves as the company's vice president of sales. He had so much faith in the company he even invested \$1 in it. He wanted to invest more, but Junior Achievement companies can only sell one share of stock to each of its investors. Junior Fairchild Achievers, like all JA companies, sell stock to raise capital to run their company. The company's first product line was Christmas candles; however, it will be in operation with a second product until May when it liquidates its assets and hopefully returns a dividend to its investors. Fairchild has participated in many JA companies, and this year's advisors were Garret Walther, sales advisor; Murlin Vallequette, production advisor; and George Courtney, finance advisor. All three Mountain View employees, they meet with the high schoolers one night a week to make sure Dr. Hogan gets that dividend on his dollar.

## Construction Begins in Wiesbaden

In ceremonies officiated by Schierstein Lord Mayor Rudi Schmitt and Wiesbaden Mayor Alfred Herbel, the foundation stone of Fairchild Semiconductor's new European manufacturing facility was solidly put in place signifying the start of construction on the building. A certificate and several semiconductor devices were closed into the foundation stone by Lord Mayor Schmitt. After speeches by Joe Van Poppelen, Vice President and General Manager; Schierstein Lord Mayor Rudi Schmitt; Wiesbaden Mayor Alfred Herbel and Dedy Saban, Fairchild Semiconductor's Marketing Manager for Europe, a crowd of some 100 people toured the building site. The 120,000 square foot manufacturing plant will employ 500 people and is scheduled to be completed sometime during the first half of 1970.

## Tour Of Far East Plants



Joe Van Poppelen and Gene Blanchette, Group Director of IC's attended the opening at Fairchild's Singapore plant. Officiating at the ceremony was Dr. Toh Chin Chye, Minister for Science and Technology. Listening to Joe Van Poppelen speak are I. F. Tang, Economic Development; Woon Wah Siang, Jurong Town Corporation; Dr. Toh Chin Chye; Art Francis, Plant Manager; and Gene Blanchette.



Dr. Toh Chin Chye and six other guests tour the plant's facilities.

## For Fun and Profits

The race was on for all OEM semiconductor salesmen in the continental USA and Canada. The name of the game—promotion of PNP metal can transistors. For every sale of PNP Metal Can GPA's and Switches, the lucky salesman received a designated number of orange and purple certificates which he carefully tucked away in his Handy Dandy PNP Certificate Holder. By referring to a conversion table he discovered that 15 certificates were equal to one book of Top Value stamps. He kept them until the end of the promotion when he had enough books to complete the "Award Ordering Form" for the prize of his choosing. The prizes were shown in his "Handy Dandy Prize Catalogue," which was, of course, really a Top Value redemption catalogue. A special bonus award was available for landing a new account or booking the largest, second largest or third largest dollar amount of the month.

## Vacation Visit



Vina Mae Clark and Emma Jane Clark, Shiprock, spent a few hours at Mountain View during their fall vacation. Vina, telephone operator for the Shiprock plant visited with Pat King, of the Computer Aided Design group and later toured part of the Mountain View operation. Marilyn Kloes, chief operator at Mountain View hosted their visit.

## December . . .



. . . not only ends a year but a decade called the 60's. For 1969, it was a year of expansion and reorganization for Fairchild Semiconductor. Employment worldwide rose by approximately 2,000 employees.

Three new plants were constructed—one in Shiprock, New Mexico; one in Singapore; and one in Wiesbaden, West Germany. Manufacturing was doubled in Seoul, Republic of Korea and the Mountain View plant expanded with three new buildings—401 Ellis Street, Chem-Mix and Graphic Production building.

401 Ellis Street was completed in the early Spring for the Engineering and Administration function of Equipment Engineering and Facilities Operations, all under the direction of Bill Lehner, Group Director, and their Purchasing Support. All in all some 260 Fairchild employees moved into the 36,700 square foot facility.

Chem-Mix is the newest of the three completed in early December. Located on National Avenue, it's main purpose is to act as a "big supermarket" for DI Water Treatment and various chemicals that are used at the Mountain View facility.

Graphic Production located on Middlefield Road in a 17,703 square foot one story building accommodates an art department, reproduction services, photography and distribution services for the Semiconductor division.

Fairchild Semiconductor's re-organization got into full swing when Joe Van Poppelen was named General Manager for the division. There were many other promotions and new appointments in 1969. With these new appointments, departments have been refashioned and new departments have been formed.

"As a result of the dedicated efforts of Fairchild Semiconductor employees—both old and new—the division began in September to earn a profit and take its first big step toward becoming the #1 semiconductor manufacturer in the industry," says Joe Van Poppelen, Vice President and General Manager of the Semiconductor Division.

One small step by each of us;  
one giant leap for our team.

## New Faces

Herb Scott, sales engineer from Texas Instrument, has been appointed product marketing manager for diodes and will be located at San Rafael.

Roy Nesson has been named department head of integrated circuits electronic test equipment group at Mountain View.

Mike O'Neal has accepted the position of product support supervisor for the small signal transistor standard reliability group at Mt. View. He was formerly district sales manager with Philco Ford.

Ray Mayer has joined the reliability and quality assurance department at Mountain View as manager of the procurement section. He comes to Fairchild from Dalmo Victor.

Don Cassell has primary responsibility for the operation of the Department of Defense security requirements, protection of Fairchild Company Private Material and Investigation. His last security assignment was with Stanford Research Institute.

Bill Beecher was appointed manager of quality control for discrete devices at Mt. View. He was with Tektronics in Beaverton, Oregon.

Robert M. Skinner, eastern regional sales manager for Transitron Electronic Corp., joined Fairchild to head a new marketing group called the Division Programs Department which will oversee Fairchild's marketing and product planning efforts to satisfy the program needs of key customers.

Reed Neddermeyer was appointed director of discrete product marketing. Before joining Fairchild he was director of marketing for Motorola Semiconductor in Toulouse, France.

Henry S. Smith was named director of MSI circuit product line. Prior to joining Fairchild he was product marketing specialist and senior associate engineer with IBM.

Paul Reagan was appointed operations manager of digital devices in Mountain View. He was previously associated with Raytheon's Semiconductor Division as IC operations manager.

Colin Knight recently joined Fairchild as operations manager of a new assembly system closely identified with the R&D laboratories in Palo Alto. He was formerly manager of the solid state laboratories of the Computer Control Division of Honeywell.

Stephen Stuart, previously with Transitron where he was manager of product planning at the company's Wakefield, Mass. plant, has been appointed to the position of marketing manager for special integrated circuits.

Kenneth M. Hughes has joined the marketing customer satisfaction group as a sales engineer. He comes to Fairchild from Machlett Labs. He graduated from Duke University in June in Electrical Engineering.

Frank Petsock recently joined Fairchild Sales Office in Dayton as a sales engineer. He has twelve years experience as a Project Engineer and comes from Bell Aerosystems.

Richard Ribas has accepted the position as marketing manager, Computer Systems where he will be involved with product planning, marketing and promotion. He comes to Fairchild from EMR Computer.

Larry Piper has been appointed manager of the transistor Hi-Rel test operations. Larry was formerly with Wyle Laboratories in Huntsville, Alabama.

Bob Gentles has been appointed director of integrated circuit product marketing where he will be responsible for linear, CCSL, and special integrated circuit product lines. Bob comes to Fairchild from Signetics where he was product marketing manager.

Arthur Heller has been named director of marketing services where he will be responsible for the division's public relations and advertising as well as graphic arts and printing facility. Art was formerly manager of marketing communications for Signetics.

Forest Peter Huntsinger joined Fairchild as product marketing manager for the Epoxy Transistor Line. He came to us from Motorola where he held the position of product marketing group manager.

Stephen Finta, Jr., has been appointed market development manager for Fairchild Semiconductor's European operations. He will be in charge of Fairchild's European market planning, distribution system, all product planning and market research. Prior to Fairchild, he came from Texas Instruments as Southern European Sales Manager.

Roy de Clercq recently joined Fairchild as Montreal area sales manager. Prior to joining Fairchild, he was sales representative with Aunet Electronics of Canada.

Hugh McManus, formerly with Raytheon as linear test methods group leader, joined Fairchild as supervising engineer for LIC testing services.

Seong Jin Lee has recently become the new Editor of Semikor Ltd. News in Seoul, Korea.

Ferris L. Johnson has been named Director of Motivational Programs. Ferris came to Fairchild from Motorola in October.

## Moving Up

Gene Gildenmeister, formerly a staff assistant to the director of electronic test equipment, was named manager of electronic services.

Mike Lautner has assumed the duties of supervisor of integrated circuits electronic services.

Fran Krch, regional sales manager in Minneapolis for the past three years, has been named memory systems product marketing manager.

Jack Ordway was transferred from the Poughkeepsie sales office to fill the regional sales manager post in Minneapolis. He began his career with Fairchild four years ago as a sales engineer in Minneapolis.

Steve Marks was named regional sales manager for IBM in Poughkeepsie. He was formerly district sales manager with Fairchild.

Teresa Cuevas has become supervisor of records and benefits. Teri was previously in General Employment.

Jan Francis was appointed to supervisor of general employment. Jan was formerly supervisor of records and benefits.

Sheri Shing Chan was promoted to manager of financial accounting in the Hong Kong operation.

Joel E. Scheinberg has become senior product marketing manager. He's been with Fairchild for two years in the LIC product marketing group.

J. Darryl Lieux has been promoted to the position of manager of linear microcircuits. He was formerly a supervisory engineer.

James E. Boyd was named product manager of custom linear microcircuits. He gained experience for the job as a supervisory engineer.

Promotions within the programming services group are — Tony Morales to NC programmer, Carol Duarte and Carol Johnson to senior spec designers.

Bob Vuglar was named district sales manager in the Elmwood Park sales office. Bob was 1968 Salesman of the Year, Consumer Market.

Len Milauskas was promoted from district sales manager in the Elmwood Park sales office to distributor regional manager for the Control area.

Jim Smaha, formerly quality assurance manager in South Portland, has been named the new operations manager at that location.

John Schneider was named reliability and quality assurance manager at South Portland. He formerly headed the test services group.

Art Francis was promoted to plant manager of the recently opened factory in Singapore after serving for several years as engineering manager at the Hong Kong plant.

Terry Jones was recently promoted to marketing manager for Fairchild's Far East operations. He was marketing manager for special integrated circuits in Mountain View before accepting his new assignment.

Larry Scaglione, formerly director of distributor marketing at Mountain View, is now appointed to the new position of director of distributor marketing and customer services.

Dick Bohnet has been promoted to the position of operations manager for plastic transistors.

Pat Johnson was recently promoted to laboratory technician. Pat was previously a senior assembler in DIC Assembly.

Bill Reifschneider was named RCA program manager. Bill has recently worked as headquarters sales engineer.

Chuck Keough has been promoted to district manager in the central commercial region. He was formerly senior sales engineer.

George Perris was recently appointed customer services manager and responsible for customer satisfaction, order services and distribution services unit.

Jim Draper was promoted to manager of distribution service unit.

Chet Lauchner was recently promoted to foreman of plant maintenance in building 20. Chet was formerly leadman in building 20.

Marcia Root was appointed to head of test systems programming at Mountain View.

Dick Downs was promoted to section head of projects and property accounting. Prior to that, Dick was a member of the internal audit staff.

Manny Choy was appointed as coordinator of the 1970 international budgets and reports. Manny previously was with our Semikor in Korea as controller.

Gary Sutton has been appointed to the Controllership for Semikor, Ltd.

Barrie Henderson was recently appointed to the Controllership in Hong Kong. Barrie will be responsible for the Korean Finance department.

Jim Johnson was selected to handle administrative budget, sales analysis and other special assignments.

Derek Bray has assumed the appointment as applications manager in Europe. Derek's responsibilities will head an applications team of European nationals who will cater to European customers out of Wiesbaden, Germany.

Jan Visser was promoted from engineer to supervising engineer at Mountain View.

Don Mason recently became assistant technician at Mountain View.

Bill Sievers was promoted to section head of digital microcircuits engineering. Bill is responsible for the mask design group for DIC and the engineering of all new products. Bill was serving as supervisory engineer.

Chris Reardon, formerly manufacturing manager of Fairchild Australia, was appointed the position of engineering manager at Semikor, Ltd.

# Happy Fifth Anniversary

Celebrating their fifth anniversary with Fairchild were:

## Mountain View



Susie Robertson



Tatsue Joyce



Phyllis Perry



Carol Johnson



Pat Johnson



Dottie Ray



Rosemary Cabral



Maryanne Santiago



Lavonne Leimer



Les Gallagher



## South Portland



Jackie Collard



Theresa Gillespie



Juliette Girouard



Ruth Dyer



Paul Skully



Gert Hanusek

## San Rafael



Helen Michalik



Pat Rooney



Margie Gouveia



Anne Dunbar



Eleanor Barnett



Vivian Mangan



Mary Cady



Dewayne Smith



Ann Freeman



Eleanor Graff



Tomoko Middleton



Richard Wick



Virginia Forney



Albert Schmidt



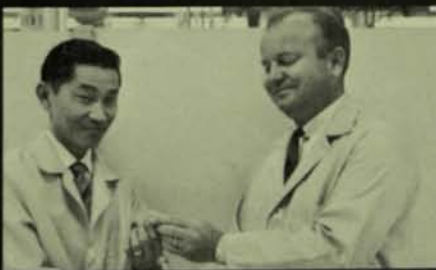
Toni Puccinelli



Bert McNamara



Roy Adams



Kiyoshi Murakami



Al Wright



Rosetta Calloway



George Miller



Clara Mertz



Thelma Chestnut



Frances Dilbeck



Sharon Seeley



Sandy Medeiros

# Happy Tenth Anniversary

## Mountain View



Mitzi Hoshino



Uli Hegel



Virginia Hall



Ron Ivancich



Thelma Roseborough



Irene Kolacia



Frank Ramos



Marguerite Chappell



Carmen Sullivan



Virginia Margettes



Lucy Laidlaw



Flo Boutcher



Ann Martin



Helen Basford



Ursula de Vries



Bev Delos Santos



Dorothy Gallagher



Helmut Altman



Marcia Root



Peggy Johnson



Nellie Covington

**Mountain View**



Phyllis Fullan



Mary Valmoja



Myrtle Jackson



Pat Alfred



Bill Sprinkle



Virginia Franklin



Karl Kent

**Shiprock**



Don Thorn



Edna Louchs



Connie Tanaka



H. Jack Larson

# Five Year Service Awards

## September

### Mountain View

Theodore Hollinger Ruth Vennes  
Joseph Solinski

### San Rafael

Audrey Coad

### South Portland

Robert Beecher Gerald Dickinson  
Leona Dona Charlotte Douglas  
Norma Campbell Raymond LaJoie  
Winona Potvin Ruth Traynor  
Sara Strickland Eleanor Jewell  
Filomena Yarnold Jane Witaker  
Sharyn Warren

### Sales Office

Tom Murph, Dayton, Ohio

## October

### Mountain View

Paul Butler Gene Porcari  
Raquel Solis Laura Myers  
Shirley McQuarrie Maria Diazchristians  
Nicolas Karsten Mary Galvin

### South Portland

Marion Sullivan Jeannine Pendergrass  
Noilla Michaud Evelyn Bell  
Betty Maxwell Dot Robinson  
Vesta Seavey Starr Coyne  
Aline Saucier Kathleen Cantara

### San Rafael

Eleanor Polo Doris Chiaravalle

### Controls

Patsy Carpenter

## November

### Mountain View

John Larum Lydia Ochoa  
LaVonne Leimer Jene Dass  
Harry Neil Robert Whelton  
Armida Mayorga Leand Mikkelsen  
Per Mogensen Carolyn Wood  
Edwin Damm

### Foreign

Lyle Ronalds

### South Portland

Linda Cobb Simones LaBrecque  
Ethelyn Abbott Alan Waterhouse  
Alan St. Amand Ross Bellino  
Sylvia Jordan Frances Reed  
Lenora Scott Robert McKee  
Theresa Demers Alberta Clarke  
Shirley Wheeler Betty Leighton  
Donald Pettingill Doreen Gardner  
Mary Tibbetts

## December

### Mountain View

Marcia Perguidi William Simone  
JoAnn Corter Frances Latz  
Martha Barcroft John Walsh  
Letha Tarrance Margaret Garcia  
Ray Lomker Mona Haynes  
Beryl Cook Sylvia Cozart  
Janis Goins Juanita Crosby  
Roy Walden John Barton

### San Rafael

Sue McNeal Clara Cooper  
Joyce Savage Alice LaRue  
Ruth Demartha Lois Schaefer  
Gwendolyn Holland

### South Portland

Dolores Davis Real Paul Labrie  
Dora Hinckley Julia Germano  
Nancy Prindall Maria Bifulco  
Gerald McCormick Barbara Sandora  
Frank Paul Rita Gagne  
Dolores Edwards Anita Harkins  
James Fraser Marie Howell  
Pauline Belair Donald Gouzie  
Sharon Plummer Helen Wakefield  
Elinor Huston Sheila Emery  
Bertya Larracey Marlene Seavey  
Alice Leighton

## Ten Year Service Awards

## September

### Mountain View

Beverly Dutra Clint Haines  
Robert Peck Bea Custer  
Frank Durand Esther Durden  
Mildred Wilkinson Marcia Root  
Bernice Dixon William Hamrol  
Carman Sullivan

## October

### Mountain View

Richard Burzycki Joy Barrett  
June Chadim Rosemary Moore  
Kay Tokutomi Vergie Franklin  
Myrtle Jackson Norma McNeal  
Irene Schuler

### San Rafael

Allen Desmond

## November

### Mountain View

Audrey Heddy Elizabeth Vincent  
Karl Tampier Robert Skurko  
Cecil Harris Gertrude Tennant  
George W. Gray Les Wilcox

## December

### Mountain View

Helen Martinez Bill Sprinkle  
Donald Thorn Donna Stidham

### South Portland

Phil Perry

### Leadwire

#### January 1970

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Fairchild Semiconductor

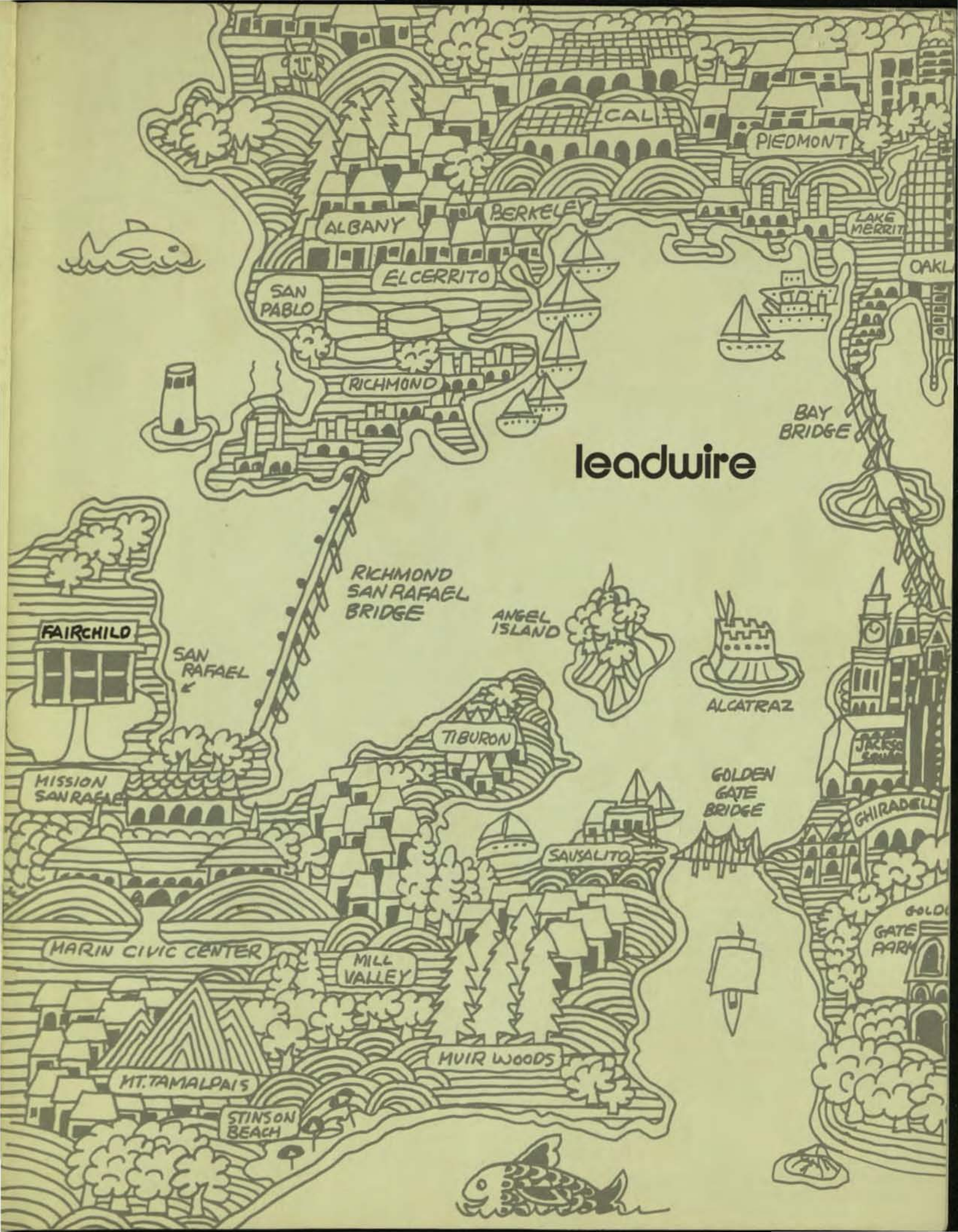
Mountain View - San Rafael -  
Hong Kong - South Portland, Maine -  
Shiprock, N. M. - Croydon, Australia -  
Seoul, Korea - Mexico City -  
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leadwire

FAIRCHILD

SAN RAFAEL

RICHMOND  
SAN RAFAEL  
BRIDGE

ANGEL  
ISLAND

ALCATRAZ

MISSION  
SAN RAFAEL

TIBURON

GOLDEN  
GATE  
BRIDGE

SAUSALITO

GHIRARDELLI

MARIN CIVIC CENTER

MILL  
VALLEY

GOLD  
GATE  
PARK

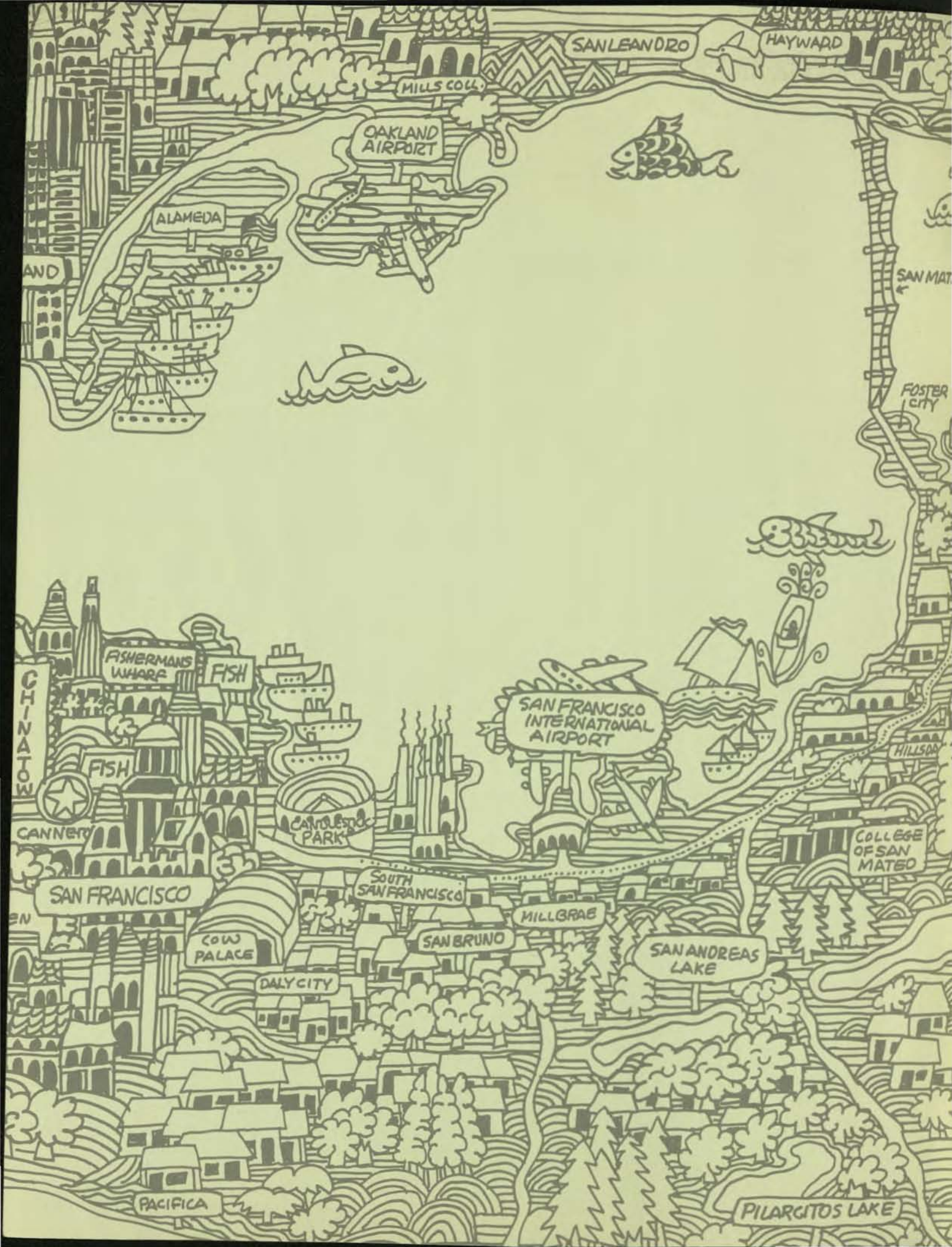
MT. TAMALPAIS

MUIR WOODS

STINSON  
BEACH







SAN LEANDRO

HAYWARD

MILLS COLL.

OAKLAND AIRPORT

ALAMEDA

AND

SAN MAT

FOSTER CITY

FISHERMANS WHARF

FISH

CHINATOWN

FISH

CANNERY

CRANFORD PARK

SAN FRANCISCO INTERNATIONAL AIRPORT

HILLSBORO

COLLEGE OF SAN MATEO

SAN FRANCISCO

SOUTH SAN FRANCISCO

MILLBRAE

COW PALACE

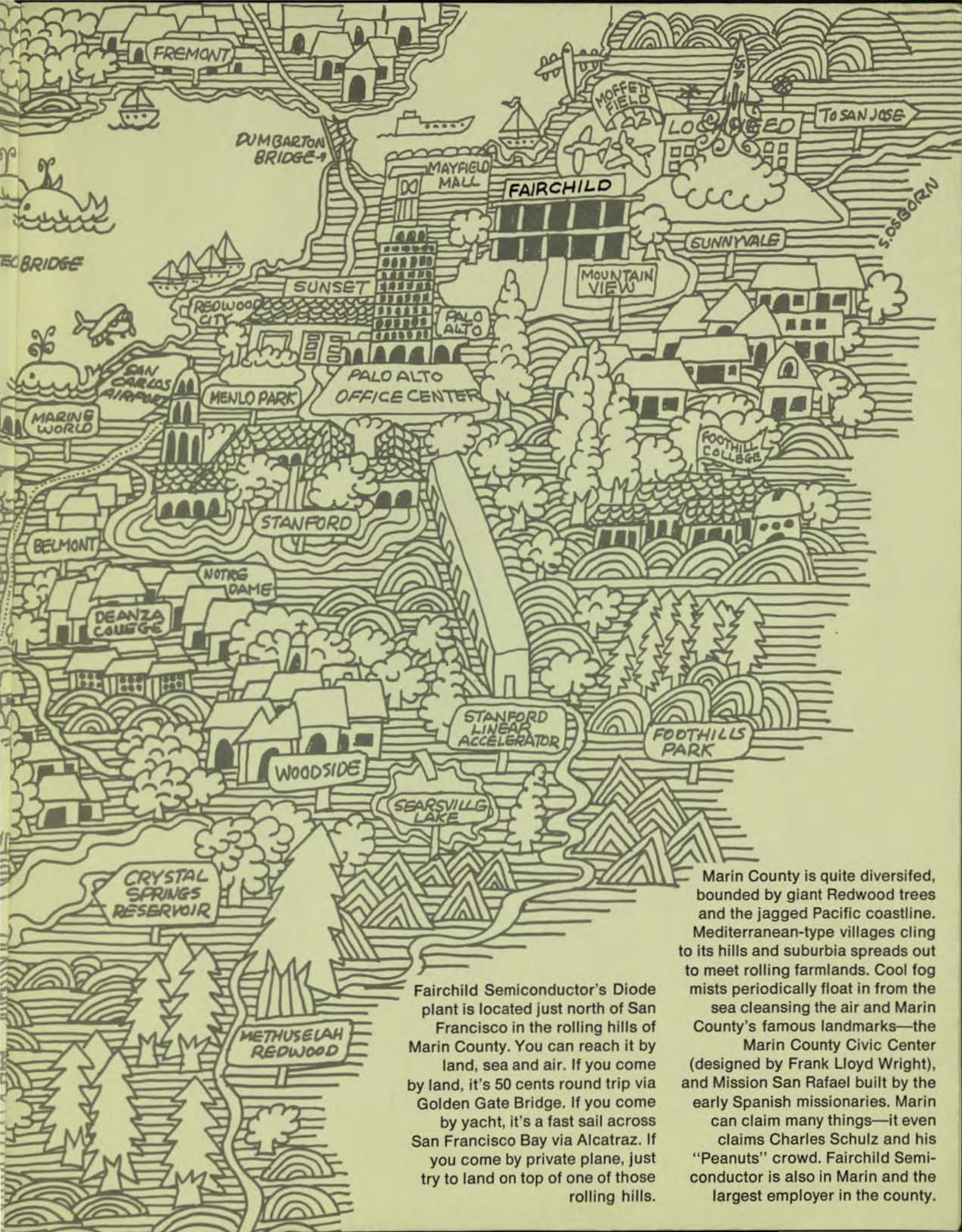
SAN BRUNO

SAN ANDREAS LAKE

DALY CITY

PACIFICA

PILARCITOS LAKE



Fairchild Semiconductor's Diode plant is located just north of San Francisco in the rolling hills of Marin County. You can reach it by land, sea and air. If you come by land, it's 50 cents round trip via Golden Gate Bridge. If you come by yacht, it's a fast sail across San Francisco Bay via Alcatraz. If you come by private plane, just try to land on top of one of those rolling hills.

Marin County is quite diversified, bounded by giant Redwood trees and the jagged Pacific coastline. Mediterranean-type villages cling to its hills and suburbia spreads out to meet rolling farmlands. Cool fog mists periodically float in from the sea cleansing the air and Marin County's famous landmarks—the Marin County Civic Center (designed by Frank Lloyd Wright), and Mission San Rafael built by the early Spanish missionaries. Marin can claim many things—it even claims Charles Schulz and his "Peanuts" crowd. Fairchild Semiconductor is also in Marin and the largest employer in the county.



# San Rafael: the Place, the People, the Products

## Where Does Fairchild Fit In?

Fairchild Semiconductor moved to marvelous Marin in 1960. The plant was established to produce diodes — a specialized semiconductor device. The vigorous demand for the diode plant's solid state products required additional production facilities. So, in December, 1960, all Diode employees picked up their belongings on Jordan Street in San Rafael and moved into the \$1 million plant just off of Redwood Highway a few miles north of San Rafael. By the end of 1960, more than 300 employees were working at the new plant, and today (a few additions later), there are 550 employees working at that same San Rafael facility.

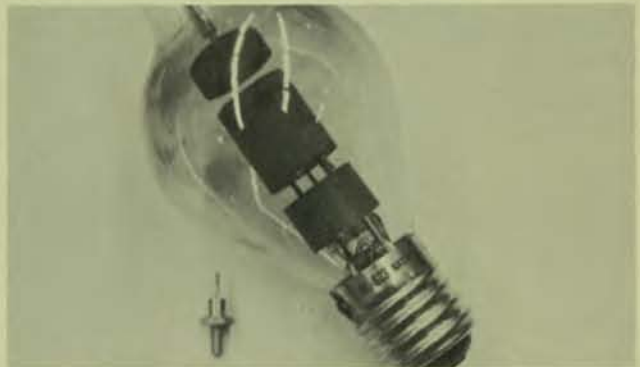
## What's A Diode? What Do Diodes Do?

A diode is a small glass capsule about a quarter of an inch long with a wire lead protruding from each end. Diodes come in two basic flavors, Germanium (a grayish-white metallic chemical element) and Silicon (a non-metallic chemical element). The Germanium market is fast being replaced by Silicon diodes which are very "in" today.

In fact, Fairchild only makes Silicon diodes and makes them for a market growing quite rapidly — 11% per year. Silicon diodes come in all shapes and sizes and fall into three categories. Glass Switching diodes are the most popular and inexpensive. Fairchild manufactured about two billion units in 1969, worldwide, with one billion sold in the U.S. Production should grow about 10% this year to keep up with market demands. These diodes go into computers, instruments, radio and TV sets.

The second category is Zener diodes. Zeners are found in computers, power supplies, regulators, and protective circuitry.

The last category is known as Assemblies. Diode assemblies consist of groups of diodes living in the same package, with each individual diode usually matched for compatibility with its cohorts. Living arrangements may be in pairs, quads, bridges, or other arrays of individual diodes. One of the most popular arrangements is eight or sixteen diodes in a core driver array for computer use. A variant on this latter device is the monolithic core driver array, with sixteen junctions on the same silicon chip. The mono array is the coming thing, and the market for such devices should grow at a very rapid rate in the future.



*Some of the most powerful things come in small packages! The first Vacuum Tube Diode, a 10 amp 250 volt rectifier measured 8" x 12" in diameter at its widest point, and made its appearance in the marketplace in 1917.*

*1970's version, the Zener Diode, a 15 amp 150 volt rectifier measures 1.2" x .5" and has a warranty of 50 years as opposed to a warranty of 2,000 hours or one year for the Vacuum Tube Diode.*

# San Rafael: the Place. the People. the Products

## **Our Market Position—Where We're At**

Fairchild Semiconductor's position in the wonderful world of diodes is good and getting better. According to Wilf Corrigan, Group Director of Discrete Devices, "the diode sales will be 20% over 1969 sales." Technologically, Fairchild is the leader in the industry. Fairchild is shipping in excess of one million diodes a day and supplying 95% of all diode products with silicon-nitride passivation. This process has resulted up to ten-fold increases in reliability. Combined with Fairchild's unique sealing methods and chip contact metallization, the nitride process makes possible the industry's most reliable diodes. With nitride passivation, Fairchild also enjoys greatly improved production yields. The resulting cost savings are passed along to customers, enabling Fairchild to continue as the price leader in the diode market. Elimination of lengthy reliability screening ensures faster delivery.

High reliability products are now a standard San Rafael commodity. Introduced to San Rafael in October of 1969, and presently operating on a single shift basis with eight fully qualified operators, the Hi-Rel assembly area has not reached full capacity. The operations include 100% visual inspection post assembly and 100% electrical inspection prior to lead conditioning and environmental testing. The creation and operation of the Hi-Rel assembly is Fairchild's way of saying: "We want Hi-Rel business."

## **Our Customers—Where They Are At**

Fairchild diode assemblies and arrays are specifically designed for and used in everything from the most critical military space application to the simplest electrically powered hand tool for the home handyman. While making world history walking on the moon's surface, American astronauts carried Fairchild diode arrays in the S-band communicators strapped on their backs. Fairchild diode arrays and assemblies are used in a number of other high-reliability military communications systems, as well as numerous industrial and consumer products such as core drivers for computer memories, and RF applications, for example balance mixers or UHF TV tuners.

A Fairchild customer has the assurance of knowing that if there are any design snags or circuit troubles, the applications group is available for advice. This group is backed with seven years experience in manufacturing and using special diode products. All Fairchild application engineers have broad experience in a wide variety of product applications. Regardless of the customer's application, whether it be control circuitry, RF, data processing or anything that calls for multiple diodes, Fairchild applications group is there to help.

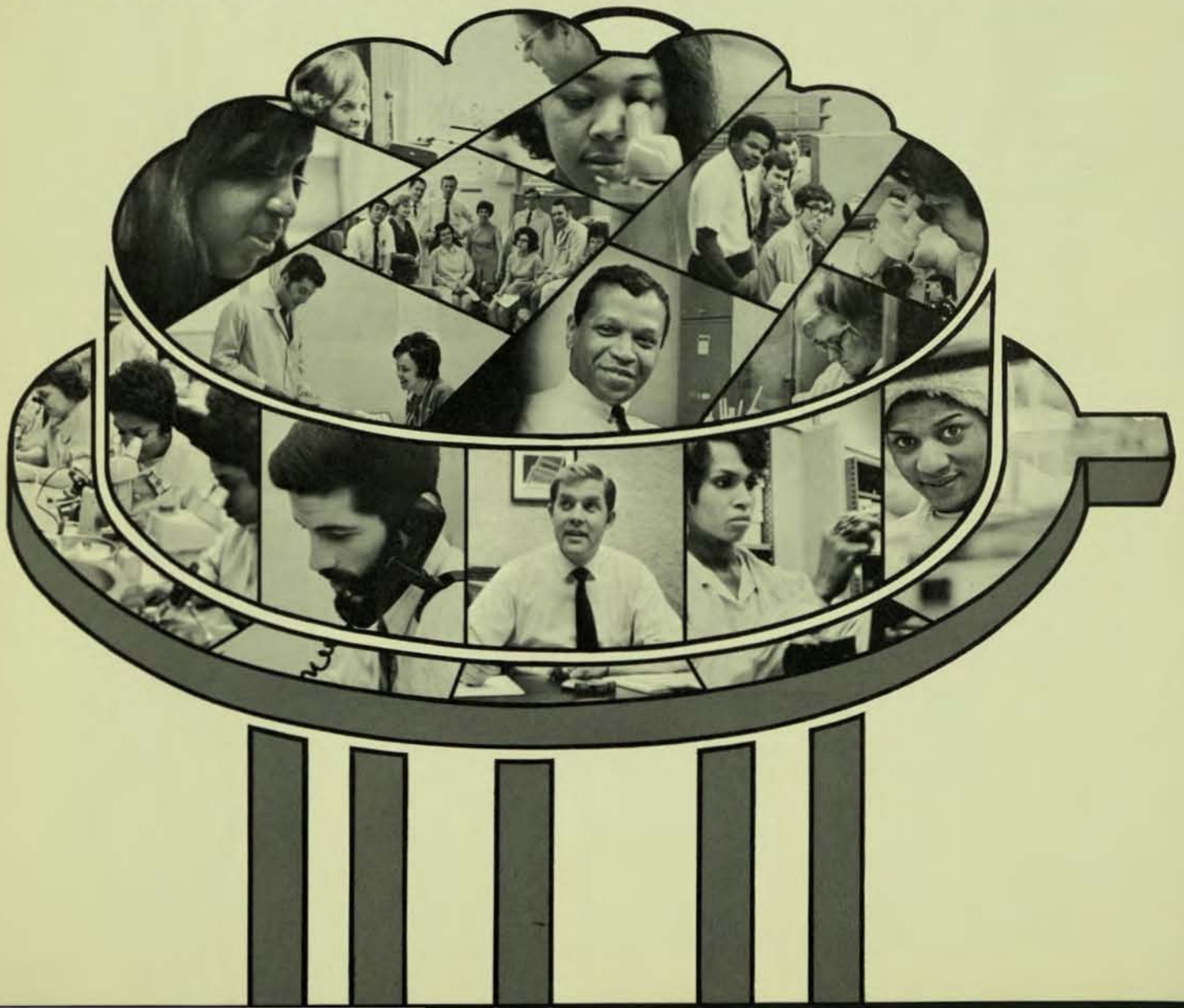
Some of the Fairchild Semiconductor's key accounts for these devices are Burroughs, Collins, Control Data Corporation, General Electric, Hewlett-Packard, IBM, Honeywell, Magnavox, RCA, and Zenith.

# San Rafael: the Place. the People. the Products

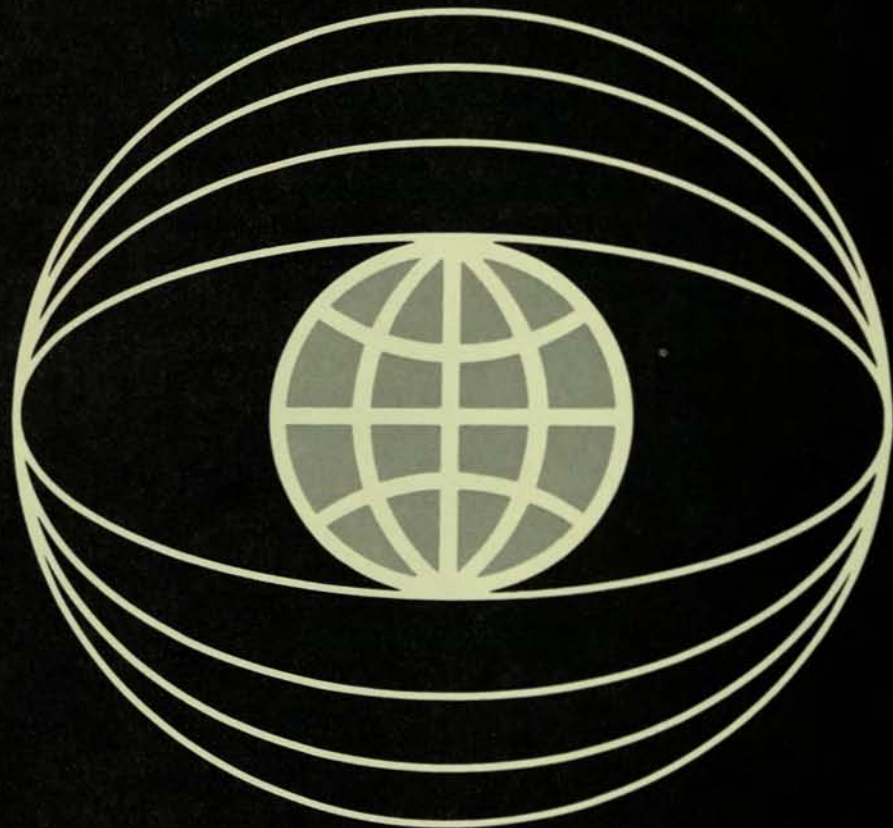
## What Makes It All Click?

San Rafael, like any other company has one common denominator — PEOPLE! These people make a company grow. More than 550 employees make San Rafael go! In Fab #1, there are 10 girls who have worked a combination of 85 years with Fairchild. There are people like Betty Little, Engineering, and Tomiko Middleton, Special Products, who have not missed one working day since joining Fairchild — Betty for 8 years, and Tomiko for 3 years. There are accountants, assemblers, produc-

tion schedulers, mechanics, foremen, engineers, inspectors, personnel administrators, and secretaries. They come in all sizes and shapes, and they bring to work every day many talents which when combined are the things that make San Rafael click. Dave Marriott, Director of Diode Operations, can easily say, "San Rafael and its people are an integral part of Fairchild Semiconductor's world — racing ahead to new projects and meeting new challenges."



International  
Sales  
Conference—



Goals  
For The  
Seventies



"Our overall objective is to dominate the semiconductor industry in the 70's. To dominate means you have to be number one in volume and profits." These words of Joseph Van Poppelen, Jr., Vice President and General Manager of Fairchild Semiconductor Division, were addressed to an audience of Fairchild Semiconductor salesmen on January 22, 1970. The occasion was the International Sales Conference held January 17 through January 23 in La Costa, California.

In his keynote address, Mr. Van Poppelen cited the improvements that Fairchild has made in a one year period. At the beginning of 1969, the production volume was inadequate and every single product line was in serious trouble. Despite this, the salesmen sold enough to make Fairchild grow twice as fast as the semiconductor division because of tremendous improvements in manufacturing capacity. Other improvements mentioned were Fairchild's 25% increase in the division's sales force and the building and staffing of an entire marketing organization in Europe.



The International Sales Conference was held for the first time to reaffirm Fairchild's goals for the 70's and to call out what is needed to make Fairchild the leading force over all competitors in the market by the end of 1970. The conference provided a candid dialogue between the sales force and product marketing and operations groups concerning 1970 marketing goals and strategies. It stimulated group discussions to explore possible resolutions to major operating problems between the sales force and management and support personnel. It reviewed sales strategies and techniques and product knowledge. The conference was designed in such a way as to provide maximum participation from the sales staff.



Highlighting the week's events was Dr. C. L. Hogan, President of Fairchild Camera and Instrument Corporation, presenting the annual Sherman Fairchild Awards for professionalism in sales and sales support to Burton Piaser, Sales Engineer at Fairchild's Jericho, New York office, and Richard Beebe, Supervisor of Customer Satisfaction at South Portland plant. The awards, which were established for the first time this year at the request of Joe Van Poppelen, are named after Sherman Fairchild, company founder and Chairman of the Board. The trophies were miniature gold and silver replicas of King Arthur's legendary sword "Excaliber" set in a block of polished Steuben crystal.

In addition to the awards, the winners had their names engraved on an achievement plaque for permanent showing in the home office lobby in Mountain View, California. Each also had the privilege of naming his favorite charity, school or other non-profit organization, to which Fairchild will donate \$1,000 each in their name.

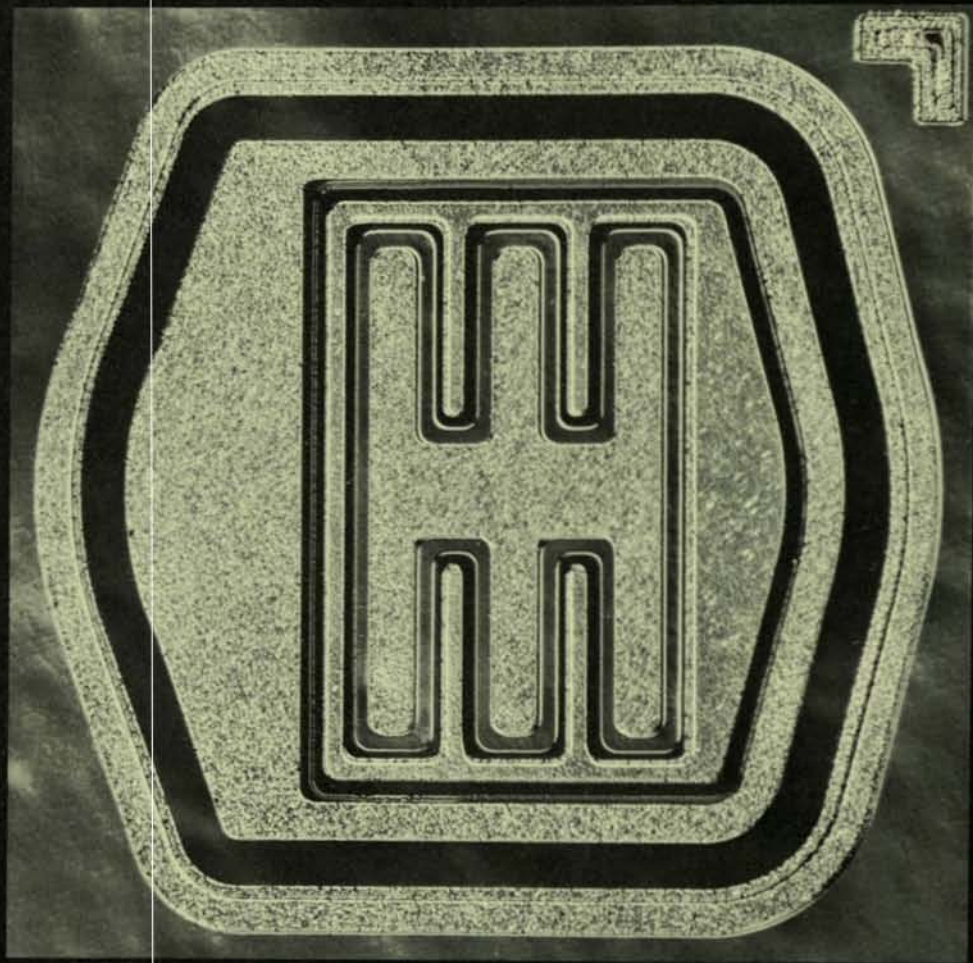


Burton Piaser, the recipient of the Sales Award, has received three Salesman of the Month awards and has been nominated many times previously for the same award. Burt transferred last April from New Jersey to the Connecticut territory where he has built a strong base of accounts. He continued to help his replacement, while exceeding his quota by 100%.

Richard Beebe, the winner of the Sales Support Award, is one who, in working with field sales, devotes extra hours to get them responses that are precise and always complete. Burton and Richard are top-notch because they, in striving for achievement, believe in surpassing the odds against their success by 200%.







# MISSION ACCOMPLISHED!!

It all happened in just ten days! It involved salesmen from the various field sales offices. It was the Small Signal Transistor presentation.

Alan Ankerbrand and Dave Hall, Discrete Marketing in Mountain View, packed up their belongings and attaché cases on December 7th to fly all over the country for ten days. Their mission?—to present a new 240-page manual including a complete review of the Planar process, a complete product characterization, and a full description of over 60 generic devices (each explained in detail with drawings)—a complete updating of terminology and definitions.

During the course of the week several telegrams were sent to Dave and Alan praising them for their outstanding work.

"Congratulations are in order for Ed Farrell, Alan Ankerbrand, and Dave Hall for what we consider to be one of the most outstanding product presentations made to field sales during 1969.

It is obvious to us the amount of effort and time expended to prepare the product training manual.

Please extend to all your people who contributed to the preparation of the manual and the presentation our sincere thanks. Let's hear from the other groups."

Regards,

Bill Dresser  
Regional Manager - Commercial  
Elmwood Park, Illinois

"Beyond a doubt the best salesman oriented product information meeting in the last two years. I think Ed Farrell and Reed Neddermeyer deserve congratulations on a well organized, well planned, and well delivered seminar. Alan Ankerbrand and Dave Hall did an excellent job in conducting the meeting. I strongly recommend more sessions of this type in all product lines."

Best regards,

Jim Carr  
Regional Manager - Computer  
Jenkintown, Pa.

"Would like to say 'well done' for the job Alan Ankerbrand and Dave Hall did on their discrete presentation in Dallas. It was well organized and extremely effective. Should help us immensely in the field."

Regards,

Randy Olson and Dwight Gilley  
Denver Sales Office  
Denver, Colorado

"Congratulations on a most informative, yet concise, well prepared seminar on discrete devices. The cost of its preparation must have been significant, but I am certain that it will be repaid many times over in Small Signal Transistor sales as a result of the information presented.

Thank you for including the Canadian sales personnel in the schedule."

Regards,

Dick Longman  
Toronto Sales Office  
Toronto, Canada

Under the direction of Ed Farrell, Small Signal Metal Can Transistor Product Marketing Manager, Alan and Dave accomplished their mission and at the same time stressed the importance of this program to other departments. According to Ed Farrell, "this will increase my sales for 1970 over 10% for Metal Can sales."



# news briefs

## Quarterly Regional Sales Managers Meeting



Sales and Marketing Management hosted twenty-one of Fairchild Semiconductor's sales managers at the year-end meeting in San Jose, California

"Strategy and Business Training" was the subject discussed during the six-day session. It involved the reviewing of goals, the needs of the company, and planning for the future. The first two days were spent on product training, the second two days on reviewing job responsibilities of the managers, and the last two days were on developing administrative skills. Fifteen Fairchild managers were guest speakers including five of Semiconductor's group directors—Andy Procassini, Wilf Corrigan, Gene Blanchette, Doug O'Connor, and George Scalise.

## Fairchild Soccer Club

Fairchild Third Division Soccer Team, located at Mountain View, is holding second place with seven wins and only two losses.

On Sunday, December 14, they played Los Aguilas Club and won by a slim margin 3-2 at Griffith Park in Redwood City. On that same day, their Alliance Division took a hard loss to the Latino Club "A" 5-1 at Watson Park in San Jose.

Rainy weather prevented both teams from playing during January. Therefore, many of the postponed games will be played in February.

Anyone interested or think they have a "talented toe", contact Johan Lund on Ext. 2129 or Tony Cobalogula on Ext. 2439 in Mountain View.

## A Job Well Done!



Diane Sullivan became the first girl in SLIC, Mt. View, to expose 900 wafers in 8 hours. Her foreman Bill de Carbonel showed his appreciation by treating her to a steak dinner.

## Mountain View Welcomes New Cafeteria Services



When Fairchild employees entered their cafeterias on Monday, December 29th, they noticed something very unusual—a "groovy" new menu, free coffee and donuts, and champagne (non-alcoholic) flowing.

Harding-Williams Corporation, a division of Saga Administrative Corporation, has assumed responsibility for food services at all Mountain View cafeterias.

Les Strom, Food Service Administrator, will work closely with the Harding-Williams people by representing the Fairchild employees for suggestions and complaints.

## Fairchild Mountain View Sea Otters



With all their scuba diving equipment, over forty members of the Fairchild Sea Otters spent an enjoyable three days on Santa Cruz Island in November.

The club makes this trip about twice a year and it's one of the most eagerly awaited events. This year the club went first class by charting a large Greyhound bus to bring divers and equipment to and from the point of departure—Ventura Harbor.

The bus left on a Thursday night and arrived at the harbor early Friday. By 8:30, the members were ready for the three hour ride to the island. Santa Cruz Island is quite unique—Polynesian style cabins with thatched walls and roofs, a row boat for each cabin, gas stove and foam mattresses. The water is very clear and a few degrees warmer than what the club is used to in Northern California. There is an abundance of marine animal and plant life—an underwater paradise for sightseeing, photography, spear fishing and abalone hunting.

The "Sea Otters" invite employees and their friends to come and join the fun of underwater exploring. For information call Bill Towler on Ext. 5140 in Mountain View.

**Fairchild Sport Parachute Club  
Sponsors First Annual Novice  
Sky Diving Meet**

Santa Nella's airport in Los Banos, Calif. hosted the First Annual Novice Sky Diving Meet on December 13th from 11:00 AM till dusk.

There were many sky diving participants but few winners. Jumping on target for Women's first place was Sherry Slocum, Payroll, and grabbing second was Lana Schlitz, Production Control. Men's first place went to Gene Warter, Power Marketing, with Dick Bowers, Power Fab., and Scott Seaver, Power Marketing placing second and third. The advance jumpers had their chance too. In order to receive the \$50 prize money, they had to make one accurate jump—former Fairchilder Gene Pounds did just that!

Highlights of the day were free spaghetti and beer for everyone, two movies on sky diving and several exhibition jumps.

It was a successful day thanks to Gene Pounds and Gene Warter who coordinated the entire meet.

**Mountain View's Monday  
Bowling Standings**

The team standings as of January 26 and ending the first half are the Lively Ones in first place winning 51½ out of 76 games. Moving into second place with 47 wins are the Nowgos and sliding back to third place with 45 wins are the Gutter Snipes.

In the Men's High Series standing, Hal Knopp moved up to first place with 623. Gus Melliek's 621 kept him in second place. For Women's High Series standing, Ann Lima remained in first place with 586 while Joann McElfresh kept her 574 for second place.

Earl Beeman leads the Men's High Game standing with 254. Bob Bolvin took second place honors with 245. Joann Modeiras held first place for Women's High Game with 231. Five points behind Joann is Joann McElfresh in second place.

Men's Hi Handicap Series was captured by Rich Schell with 722, and Women's Hi Handicap went to Stella Veach with 708. For Men's Hi Handicap Game, Bob Severson took the honors with 289 and Tammy Pritchard took the Women's Hi Handicap Game with 267.

**With Guys Like This —  
Who Needs The Red Baron!!**



"Bo" Bowman, Assistant Personnel Manager, Shiprock

Dick Jones, Customer Satisfaction, Mountain View

*(Just typical of Fairchild's desire to understand personal needs and meet customer delivery schedules.)*

**Never A Day Missed**

Rain, sleet, snow, mud or floods cannot keep Betty Little, Engineering Aid, San Rafael, away from her job. Betty has done the impossible—she has not missed one day of work during her eight years at San Rafael.

This fantastic feat caused much excitement around the plant on Dec. 12. Dave Marriott, Director of Diode Operations, presented Betty with her sick leave pay check. After the presentation, seven of Betty's supervisors treated her to a luncheon and presented her with a beautiful white sweater. Fairchild Semiconductor also wanted to offer Betty something special for her dedication—a free night on the town for her whole family.



Tomiko Middleton, Special Products, also proved her dedication. She did not miss a work day for three years. Presenting Tomiko with her sick leave pay check is Trevor Smith, Manager, Special Products.



**Parties and Potlucks Around Fairchild**



Cora Imbat, Training Specialist, Hybrids, Mountain View, was the honored guest for her baby shower. She received lovely presents and a large paper stock.



Tom Grodeman, Equipment Design, Mountain View, celebrated a Christmas birthday with the largest donut the group could find for him.



Dr. Narayanamurthi ("Murthi" for short) Supervising Engineer, LIC Engineering, Mountain View, celebrated his birthday with a large cake and his fellow workers.



Industrial Relations surprised Claudio Serafini, Division Manager of Organization Development, Mountain View, with a birthday cake.



Kay (Zimmer) Anderson, Industrial Relations, Mountain View, was the honored guest at a bridal luncheon.



Anita Downard, Mechanical Polish, Mountain View, received beautiful bridal presents.



Al Watkins, General Foreman, CRIC, Mountain View, just couldn't keep his hands off all the lovely baby presents his group surprised him with.



Hybrids surprised Terry Brisbin, Mountain View, with a large cake with the U.S. flag on it. Terry just became a U.S. citizen.



Bill Bechtold, Engineer, Power Group, Mountain View, was presented a potluck and lots of individual baby presents.



Linear Integrated Circuits in Mountain View had a potluck with several turkeys and cranberries.



Darryl Lieux, LIC Manager, Mountain View, was given a surprised birthday party by all the LIC gang.



Carolyn Barker, Material Handler, Mountain View, received lots of presents at her surprised baby shower.

## New Faces

Leo Czarniecki, formerly Manager of Equipment Engineering, Motorola, has been named Director, Mechanical Equipment and Maintenance for Discrete Devices.

Bruce Suppes, formerly employed by Motorola as Manager of Integrated Circuit Industrial Engineering, was named Director, Industrial Engineering.

Robert J. Friedman (Retired General) has joined Fairchild as Director—Far East. His office will be located in Mountain View, and when in the Far East, he will act as F.J. Van Poppelen's personal representative.

Jim Grimm has joined the Finance Department as Manager of International Finance. He was formerly with Motorola as Manager of European Business & Finance.

Cono Pasqua has been named Director of Procurement for the Semiconductor Division. Cono comes to Fairchild well qualified with about eighteen years of experience in the Purchasing field. For the past five years, he has been Director of Purchasing for the Computer Division of Control Data Corporation.

Rick Martin has joined Fairchild as an Organization Development Consultant in Mountain View. Rick came to Fairchild from Hughes Aircraft Company in Culver City, California.

Jerry Plec has joined Fairchild as another member of the Organization Development department in Mountain View. Jerry was formerly employed by TRW.

## Moving Up

Steve Zelencik has been named to the position of National Sales Manager of the Computer Market. Steve joined Fairchild in 1965, and his most recent position was Southwest Regional Manager for the Computer Market based in Los Angeles.

Tom Kearnuff, a Fairchild employee since October 1968, was promoted to Director, Mechanical Equipment and Maintenance, for Integrated Circuits. He was formerly Manager of Manufacturing Engineering.

Norm Miller has been named Plant Manager of the new plant in Wiesbaden, Germany. Norm's ten years experience in the semiconductor industry uniquely qualifies him for this position. During this time he has worked in R&D Applications, Marketing and Manufacturing with some of his experience in Europe.

Doug O'Connor, formerly Group Director of Marketing for Semiconductor, has been appointed Group Director, Marketing - Worldwide.

Andy Procassini, formerly Group Director of R&QA, has been named Group Director, Marketing - U.S.

George Wells has been promoted to Operations Manager, Aerospace & Defense Transistor Products.

Andy Mann was named Product Manager, Aerospace & Defense Transistor Products with total manufacturing and engineering responsibility for these lines.

Larry Piper became Hi-Rel Processing Manager, Aerospace & Defense.

Herb Lewis is Production Control Manager, Aerospace & Defense Transistor Products.

In the NPN and PNP Transistor Group, Tony Steimle was named Operations Manager, NPN.

Jerry Schoonhoven became Product Manager PNP.

Paul Gupta assumed the position of Product Manager for NPN.

Marilyn Westlake became an Engineer in SLIC. She was formerly an Assistant Engineer.

John Tatum took over as Product Manager for all R.F. power and FET's.

Glenn Frater assumed assembly engineering responsibility for the L.F. power studs.

Jon Hearn, Manufacturing Manager, is assuming manufacturing responsibility for the L.F. and R.F. Power line.

Ron Kovacs is now responsible for all planar L.F. power and SCR's as Product Manager Planar Low Frequency Devices.

Bob Bolvin has assumed responsibility for all power test engineering, Power Engineering.

Neill McCormack has been named Product Manager, Bimesar Devices.

Bill Horning has been named manager of Domestic Cost Accounting in the Finance department.

# Happy Fifth Anniversary

Celebrating their fifth anniversaries were:

## Mountain View



Tokiko Handa



John Walsh



Carolyn Wood



Beryl Cook



Mick Mikkelsen and Roy Walton



Juanita Crosby



Jo Ann Corter



Fran Latz

## San Rafael



Gwen Holland



Madeline Reynolds



Marion Hubbard and Lorraine Tremblay



Clara Cooper



Cara Goodrich



Rachel Owen



Delores Cleland



Sue McNeal



Ruby Stewart



Hazel Watson



Paul Newkirk



Horst Krueger



Lois Schaefer





Ruth DeMartha



Joyce Savage



Emma Heard and Katie Wickwire



Alice La Rue



Florice Shuemake



Marcelyne Butler

# Tenth Anniversary

Celebrating their tenth anniversary with Fairchild were:

## Mountain View



Kay Tokutomi



Hank Woo and Maria Simons



Bev Dutra and Jose Peralta



Les Wilcox and Clint Haines

# Five Year Service Awards

## January

### Mountain View

Joseph Flores  
Ed Harris  
Bruce McMurry  
John Wilber  
Shizuko Fogle  
Mame Perkins  
Robert Hoffman  
Robert Hart

Violet Fugate  
Wanda Bagley  
Ken Pemberton  
Tokiko Handa  
Lydia Celaya  
Jeanette Visser  
Ella Jones

### South Portland

E. I. Quinn  
M. D. Merritt  
R. P. Sparks  
D. A. Kinney  
E. D. Griffin  
J. P. Carter  
G. L. Carver  
M. O. Plummer

B. C. Hawthorne  
G. P. Taylor  
A. G. Brown  
F. D. Forcier  
B. F. Suchowolak  
E. F. Hill  
D. M. Edwards  
J. M. Whitaker

### Shiprock

Ulysses Bartmess

### San Rafael

Cara Goodrich  
Rachael Owen  
Katie Wickwire  
Emma Heard

Florice Shuemaker  
Madeline Reynolds  
Horst Krueger  
Marcelyne Butler

## February

### Mountain View

Sharon Taylor  
Lowell Schneider  
Dick Kors  
Margaret Szalko  
Cliff Reich  
Mary Perez  
Juanita Leyba  
Jack Wilm  
Chuck Self  
Hellmut Lowe  
Josephine Thrash  
Jean Hamilton

Fannie Parker  
P. J. Barlow  
Sue Grimmer  
Carol Bategno  
Avelina Salvador  
Lee Wetmore  
Daniel Smith  
Al Cassezza  
Harriet Dixon  
Benet Jefford  
Julie McManus  
Lydia Banderas

### South Portland

E. S. Poitras  
R. A. Houle  
D. P. McAvoy  
I. S. Miles  
J. R. Bisco  
D. R. LaFortune  
D. M. Camire  
P. S. Cantara  
P. M. Hall  
L. R. Rea

J. Y. St. Hilaire  
Y. R. O'Gara  
S. M. Abrahamson  
R. L. Fowler  
I. L. O'Carroll  
J. L. Miller  
J. D. Schneider  
A. M. Dery  
M. F. Wade  
G. M. Jones

### Foreign

John Trepanier

# Ten Year Service Awards

## January

### Mountain View

Inez Williams  
Cecelia Yau

Lillian Giles  
Roy Mace

### San Rafael

V. M. Watson

## February

### Mountain View

Valamir Lara  
W. R. Jones  
Richard Crippen  
Bill Riefschneider

John Clark  
Richard McClelland  
Velda Gale  
Carolyn Arena

### San Rafael

S. M. O'Neal

### Controls

Bill Greene

### Foreign

Harry Suzuki  
Sandy Wyman

### Leadwire

#### February-March 1970

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