

Microwire

Published for the Employees of the Fairchild Corporate Headquarters and Semiconductor Components Group — Mountain View/Palo Alto

CCD demonstrates new ability

CCD technology proved on January 8 that it is not all imaging and show.

At a press conference for members of the technical and business press, the CCD Department demonstrated that CCD has more than visual imaging capability, it has memory, too.

Charge coupled device technology, developed at Fairchild, was first used in image sensing applications such as the miniature television camera manufactured by the Fairchild Space and Defense Systems Division. Image sensing devices have been in full scale production in CCD facilities in Palo Alto for the past two years.

During 1974, Research and Development harnessed CCD's unique features to develop memory devices that offer a significant advancement in density for solid state memories.

The first in this family of devices, called the CCD450, is slated for application in terminal buffers, video displays, and electronic switching systems in data communications networks.

The memories can be used individually to provide the brain in terminals such as airline reservations read-out equipment or a number of CCD450 devices can be com-

bined to provide data storage and read-out for larger, more complex information systems.

In the reservations terminal application, the CCD450 would be located in a terminal at the reservations desk. Airline personnel using the terminal keyboard could call specific passenger information from the central reservations file. The information would enter the CCD450 and be displayed on the terminal screen as long as it is needed. Once the data is no longer useful, the CCD450 would be erased to await further requests for other ticketing and reservation information. A read/modify/write mode would allow airline personnel to enter reservation changes directly from the desk terminal into the central computer file.

The CCD450 offers 9216 bits of serial storage capacity organized into a format of 1024 words by 9 bits. Information is contained in the CCD memory by the absence or presence of bundles of charge, representing the 1s and 0s in the computer binary language.

The CCD450, the first charge coupled device memory product to go into large scale production, was developed by the CCD Department under the direction of Gil Amelio.



Almost 2,000 pounds of turkey were served by Fairchild managers and officers on December 18, 19 and 20 in the company's cafeterias on the Peninsula. The turkeys were the entree for the holiday luncheon attended by more than 5,000 employees and sponsored by the Employees' Activities Association and the company.



Isaac Ruiz, known to television viewers as Mando on NBC-TV's "Chico and the Man" series, is better known as cousin "Butch" to Armada Mayorga (left), senior clerk, Transistor Division, and Dora Davila, assembler B, Automotive SBU, and nephew "Butch" to his aunt, Alice Morris, work leader in Power Assembly. Isaac visited his aunt and cousins during a recent trip to Mountain View, his home town. Seizing the opportunity to introduce their famous relative to co-workers, Armada, Dora and Alice took Isaac on a tour of their work areas.



CCD Memory team: (front, l. to r.) Gene Held, Dale Means, Dr. Ramesh Varshney, Dennis Stoscher, Scott Keller, Tony Crossley and (back, l. to r.) Ben Choy, Ron Hopwood, Alan Keen, Terry Christensen, Linda Adams and Al Watkins.

Cafeteria gains new dimension as budget stretcher

Can a bachelor (or single woman, for that matter) find happiness (or at least a budget-stretching break) in the Fairchild cafeteria?

By mid-1974, thoughts of the energy crisis had taken second billing to the rise in inflation. And, nowhere was the inflation more apparent than in the supermarket. Many employees have altered their view of the Fairchild cafeteria in the past six months. They no longer look upon it simply as a convenient site for lunch with fellow employees; it's become a major budget stretcher, as they compare the costs of cafeteria foods with similar home-prepared menus. Cafeteria costs win hands down in the budget department. So, many employees are making their Fairchild meal the big one of the day to avoid visits to the supermarket.

James Taylor, an assistant engineer in MOS, was a

bachelor until recently and depended on the Fairchild cafeteria to stretch his food budget. He still does.

"I was eating all of my meals out, and there is nowhere that I can get a meal at a price comparable to that at Fairchild. If I'm on a rush project and can't get to the cafeteria during its regular hours, I have to go out to lunch and spend \$2 to \$3 more.

"I arrive at Fairchild a little early so that I can have breakfast in the cafeteria, because it's simply more convenient than having my wife prepare it at home."

Jim does have one complaint about the cafeteria, however. "If they served beer, it would be perfect."

Mike Wendt, product engineer in Bi-Polar, shatters the stereotype of the non-domestic bachelor by cooking one meal a day. "That's weekdays only," he adds. "On weekends, I don't have time to cook because I'm too busy skiing or boating. I could probably save a bit of money if I brought my lunch from home. But the inconvenience wouldn't be worth the savings. I eat in the Fairchild cafeteria every day because the food is good, inexpensive and it is convenient."

For bachelors Ray Momura, illustrator, and Louis Kowamoto, senior electronics technician, the daily trip to the Fairchild cafeteria is made because it is a convenient site to have lunch and the food is "cheap." Both



Elliott

men cook at home and are able to evaluate the cost of the ingredients that go into the lunches they order each day.

George Elliott spends more time thinking about what Jim and Mike and Ray and Louis would like to eat than they do. It's all part of his job as manager of the Fairchild cafeterias in Mountain View, Palo Alto and San Jose.

Cafeteria management earns the dubious distinction of being one of the most challenging jobs in business today. Keeping customers happy at the food counter and the cash register demands all the innovation any manager can muster. Faced with the soaring price of sugar, George was on the trail of desserts with lower sugar content, when MICROWIRE talked with him. "You can't expect people to pay twice yesterday's prices for a piece of pie," he sighed as he poured over his collection of dessert recipes.

Palate-pleasing foods at economical prices are the reward for George's unrelenting search for new recipes and food bargains. Many of the specials which appear on the daily menu are the result of a good buy George has made on a particular cut of meat. "Whenever we make a special purchase," George says, "we pass the benefit along to our customers. The Fairchild cafeterias are non-profit operations. Fairchild hopes only to cover the actual costs of operating the cafeteria, so items are priced to reflect just the cost of ingredients and preparation."

George, a speech and history graduate of Whitworth College in Spokane, Washington, had a short career as a split end flanker for the British



Taylor

Momura



Wendt

Kawamoto



Columbia Lions in Vancouver, before going into the restaurant business. "It was natural that I would make a career in the food business," he explains. His parents operated a small restaurant in his home town of Charlotte, North Carolina, and his childhood and young adult years were spent in and around the family business learning, by association, the complex tasks involved in operating a profitable restaurant.

George joined Saga Foods, Inc., the organization that operates the Fairchild cafeterias in Mountain View, Palo Alto and San Jose and participated in that company's methodical management training program before being assigned to supervise a cafeteria at the Northwestern State University of Louisiana. During his training, he learned to perform every assignment in a Saga cafeteria from dishwasher to chef in order to fully understand the myriad of efforts that must come together to create an efficient and pleasing cafeteria or restaurant.

"Cafeteria management," George says, "shares the same basic principle as the operation of any other business. You must establish priorities and they must be your customer's priorities. Today, the majority of my attention is devoted to innovative thinking on how I can lower, or at least maintain, menu prices. There is some evidence," he says, "that food costs are beginning to stabilize. Once that occurs we can attack some of the other projects that will make the cafeterias more appealing to Fairchild personnel--improved decor and expanded services."

Fairchild product increases engine Performance

Would you like to lower your automotive maintenance costs, extend gas mileage and improve your engine performance? Who wouldn't in light of rising gasoline prices and increasing service charges?

Well, it's all possible with a new Fairchild electronic ignition system which can bring pre-1975 automobiles up to the performance level of the latest models equipped with factory-installed electronic ignitions.

The Fairchild system, Model E-100, available at the Fairchild Credit Union office in Mountain View is priced at \$18.95 plus tax for employees and other Credit Union members. Suggested retail price for the E-100 is \$39.95.

A transistorized breaker point system using solid state circuitry, the Model E-100 reduces current in the points to increase their life and maintain their setting. Installation of the E-100 on virtually any automobile can be accomplished with standard tools.

Because peak engine performance is maintained over a longer period, gasoline economies of approximately five percent are usually realized. Of particular interest to skiers is the E-100's ability to improve starting and idling performance in cold weather.

The E-100 uses semiconductor devices manufactured by the Fairchild Transistor Division.

Sello contributes To SEMI panel

Dr. Harry Sello, technical director for the International Division, was one of three panelists discussing the future of off-shore semiconductor assembly at the January 15 meeting of the Semiconductor Equipment and Material Institute, Inc. (SEMI). Sharing speaker's duties at the dinner meeting were G. B. Levine, President of Mentor International, and Roy Clarke, U.S. Director for the Barbados Industrial Development Corporation. The meeting was held at Rickey's Hyatt House.

Fairchild recognized By Mental Health Assn.

Fairchild is one of two U.S. companies to be recognized by the National Association of Mental Health, Inc. (NAHM) for its achievements in mental health programs. The award, naming Fairchild a 1974 Employer of the Year, was presented at a NAMH luncheon in connection with the Association's annual meeting on Saturday, November 23, in Washington, D.C.

The award is sponsored jointly by the President's Committee on Employment of the Handicapped and the National Association of Mental Health to encourage employers to hire former mental patients, to improve mental health practices in industry, and to participate in community mental health efforts. O. Bruce Dickerson, Corporate medical director, accepted the award for Fairchild.

Silicon plant Joint venture Announced

Fairchild and Applied Materials, Inc. in November announced an agreement in principle to enter into a joint venture for the production and sale of semiconductor polycrystalline silicon.

The joint venture will be 45 percent owned by Fairchild and 55 percent by Applied Materials, a Santa Clara, California, manufacturer of semiconductor processing equipment and materials. Most of the polysilicon output of the joint venture will be utilized by Fairchild and by Applied Materials' subsidiary, Galamar Industries, Inc., a supplier of silicon crystals and substrates.

Under terms of the agreement, the joint venture will construct a polysilicon plant financed jointly by the two partners and by outside sources. The plant is estimated to be in production by 1977.

Applied Material will furnish technology and know-how required for the construction, operation and maintenance of the polysilicon facility.

MENU		JAN 20
NAVY BEAN		35
HOT DELI HAM ON HARD ROLL		120
OR RYE BREAD		
BEEF BURGUNDY	W NOODLE	95
SPAGHETTI	W MEATSAUCE	90
ROAST BEEF		100



They arrived, bearing gifts. In the true tradition of the season, members of the Transistor Division extended their Christmas spirit to encompass some of the less fortunate in our community. Throughout the early days of December, collections of toys, games and children's clothing were made among the Division employees. The gifts were packaged and delivered on December 20 to the San Jose Children's Shelter which provides temporary housing for orphaned youngsters and children whose parents are unable to care for them. The Shelter budget has no provision for holiday gifts for the children. Above and below, members of the Transistor Division's Power Assembly, Fabrication, Quality Control and Engineering sections examine the gifts before delivery to the Shelter.



FEAA news

The FEAA has arranged a bargain excursion to the Warriors-Seattle game on Saturday, March 8. Five dollars buys two tickets and covers bus transportation for two from Fairchild (Bldg. 20) to the Oakland Coliseum. For reservations, contact Dee King, Ext. 3930.

Ski Club--Employees with winter vacation plans can find a lodging bargain at the Fairchild Ski Club cabins on the north and south shores of Lake Tahoe. Club members and their families are offered special weekday rates on accommodations at the cabins. The cabins are leased by the Ski Club through May 6. Call Rich McCoy, Ext. 5224, for membership information.

Fairchild Flying Club members are spending a great deal of time up in the air as the result of fly-ins organized by club officers. A recent club excursion took members and guests to Solvang. A reconnaissance flight up and

down the California coast to identify other sites of interest for future club fly-ins is planned by club officers.

Pilots, would-be pilots, and other interested employees are invited to become Flying Club members. More information can be obtained by contacting Gar Puett, club treasurer, Ext. 4102, or attending the club meetings on January 22, 4:45 p.m. in Conference Room A1 or A2 in Bldg. 20 or February 13 (same time and place). Below, Gar poses with one of the planes available for Club use.

Other club officers are: John Strandberg, President; Betty Barber, Secretary; and Paul Simon, Chief Pilot.



Making Christmas merrier

Youngsters at Rubicon Centers in Fremont and Mission San Jose had a very merry Christmas thanks to the generosity of employees in the Linear Integrated Circuits Division.

The Centers which house children and young adolescents with emotional and behavioral problems, looked forward to few packages under the tree because the Centers' budget does not stretch to cover such extras as holiday gifts. Through donations collected in LIC and shopping excursions conducted by LIC employees, each of the dozen children housed in the Centers received gifts especially selected for them.



A STAND-OUT--Festive clothing was the order of the day on December 20, the final workday before the holidays, but no one drew the attention that George Wells commanded. Wells, general manager of the Transistor Division, turned every head as he made his rounds of the Mountain View building in his tartan kilt. Above with Fairchild president Wilf Corrigan, Wells wore the historic national costume of his native Scotland to add his personal touch to the holiday atmosphere.

MICROWIRE - January 1975

Editor: Veronica Kane

Microwire

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March 1975

JOURNAL Features Fairchild's Black Managers

The JOURNAL (San Jose Journal and Nairobi Journal) devoted one of its February issues to recognizing Black individuals who represent, in the newspaper's words, "news-makers in the tradition of Black History Month."

Fairchild and several of its black managers were featured in a lengthy story titled "Fairchild Corporation Black Executives Excel in Community Work." The article covers the community contributions of John G. Wyatt, Corporate Manager of Equal Opportunity programs; Georgia Washington, Bipolar skills training instructor; Felton Brown, Executive Recruiter; Frank Ashby, Production Program Manager, Space and Defense Systems Division; Chet Hutchinson, Personnel specialist at the San Rafael plant; Joseph Grevious, Electrical Engineering Program Manager, Space and Defense Systems Division; and Melvin Jackson, Engineering Manager, Space and Defense Systems.

The publication states these managers exemplify a philosophy of awareness, affirmative action and involvement. Copies of the JOURNAL story are posted on all bulletin boards.

Fairchild through its corporate policies and through the actions of its people, is committed to affirmative action in employment of women and members of minority groups and in encouraging their career progression. Fairchild provides equal employment and promotional opportunity to all applicants and current employees without regard to their race, color, religion, national origin, age or sex. Highly skilled Blacks such as those persons featured in the JOURNAL are helping Fairchild to communicate broadly the company's commitment to non-discriminatory practices.

F-8 packs unprecedented capability on two chips of silicon

A hand-held electronic wand that reads and transmits inventory information contained on merchandise tags has come within the economic reach of most medium-to-large department stores as the result of the development of Fairchild's newest MOS product, the F8 microprocessor. First customer deliveries of the new devices began in January.

Using a completely new design approach to microprocessor chips, a team of MOS engineers led by program manager Dr. David Chung, has packed more electronic capability in the two tiny dice that make up the F8 than is contained in any other devices aimed at similar applications produced by competitors.

The Fairchild approach combines a central processing unit along with all support circuitry on two silicon chips. The F8 microprocessor also can be linked with memory interface and direct memory access chips to allow several F8 packages to be tied together to form a multi-processing system.

Designed for application in products ranging from home washing machines to information

processing systems that interface with main frame computers, initial use of the Fairchild devices will be in inventory control electronics such as the merchandise wand and as the intelligence in supermarket check-out readers. Groceries—canned and packaged foods, even fresh fruit—marked with the Universal Product Code pass over the reader which scans the items. The type of product, its cost, weight and other significant information contained in the code is captured. Data vital to inventory and financial records is fed into a central control unit while the cost of each item is relayed directly to the cash register where the bill is totalled.

Low cost home security systems, automobile monitors which can respond to driver's questions, appliances that can be instructed from a distance by telephone and shopping via television all become within the realm of economic possibility with the creation of the F8.

The new MOS product is manufactured at plants in California and Wappingers Falls, New York.



Increasing the intelligence of MOS Technology are F8 Microprocessor crew members (front row, left to right) Denise Danisch, Dr. David Chung (Program Manager), Patty Greig; (second row, left to right) Rich Olney, Mike Williams, Harley Mathews, Len Chen, Marcus Atwell, Suresh Vasa, Claude Alleaume, Dennis Habgood; (third row, left to right) Robert Frankovich, John Cosley, Robert Hartmann, and Kam Li. John Katsaros is missing from the photo.

CCD department develops image sensor for facsimile transmission

The Integrated Circuits Group last month introduced a 1,725-element charge-coupled linear image sensor that will reduce costs and improve fidelity in optical page scanning systems such as transmission of facsimile copies.

The new charge-coupled device, the CCD 121, is capable of reading a standard 8 1/2 x 11-inch page in less than a second. This can greatly increase the capacity of facsimile systems and reduce transmission costs, which are based on time used on long distance telephone lines.

The CCD 121 contains more than three times the number of imaging sensing elements in Fairchild's first linear image sensor introduced in 1973.



Members of the CCD 121 development team: (left to right) Young Sun Moon, Howard Dean, Choong-Ki Kim and Maija Sklar complete a laboratory experimental set-up that will test the fidelity of images transmitted through the new image sensor designed for use in facsimile transmission.

This improves resolution (up to 200 lines per inch), and makes it possible to transmit facsimile prints of highly detailed

images such as fingerprints and weather maps. Other uses for the CCD 121 include mapping, surveillance and machine control applications.



Workshop-without-walls--Nancy Saunders (above right), employment and benefits manager, described Fairchild's success in the employment of handicapped in temporary assignments over the past several years. The presentation was made as part of a Hope Workshops panel discussion during the annual conference of the California Rehabilitation facilities held in San Francisco recently.

The workshop-without-walls concept and accompanying programs developed by Hope Workshops has been helpful in placing many handicapped persons in jobs in industry in Santa Clara County. During 1974, 50 Hope workers were employed in temporary positions at Fairchild. Hope Workshops are part of a private nonprofit United Fund agency, Hope for Retarded Children and Adults, Inc.

Foothill College faculty members will conduct credit courses at the Fairchild Management and Career Development Center, Bldg. 13 during the spring semester. The offering includes Survey of Electronics; Basic Electricity and Electronics; Semiconductor Processing - Deposition; Semiconductor Processes; Technical Mathematics; Consumer Law; Managerial Accounting; and Team Effectiveness.

Registration can be made at the Career Center on March 21 or at Foothill Community College, March 24-25.

LONG TERMERS--At a recent service awards presentation in Bldg. 22 in honor of 15-year employees Bob Peck (left) and Bill Reifschneider (second from right) there wasn't a soul in the room with less than ten years with the company. Dick Jones (second from left) is a 15-year veteran, Bob Skurko, also claims 15 years of service and Jack Ordway, is the junior member of the group with 10 years of service. Carrying that math a bit further, 13 members of the Business Development section, which these men represent, have a combined total of 135 years of Fairchild experience.



Bipolar is growing its own experienced engineers

When engineering managers in the Bipolar Division are involved in one of their rare, closed-door meetings, terms such as "Les Enfants Terribles" may be used in connection with a description of the engineering staff. There's a common and obvious characteristic shared by the majority of the Division's engineers--youth. The group, which claims an average age of 25, draws barbed comments from their over-30 managers. The references, however, reflect humor born out of respect for the contributions the division's recent college graduates are making to Fairchild technology.

The Bipolar Memory Division began its technical staffing build-up at the peak of semiconductor industry activity in 1972 and 1973. Experienced engineers simply weren't available. So, Bipolar representatives combed the campuses of the nation's major technical schools for employees. The results is probably the youngest engineering team in the semiconductor industry. Led by seasoned managers and experienced designers and other engineers, this young staff can claim a good deal of the credit for developing Fairchild's enviable position as the supplier of the broadest line of Bipolar products in the industry.

"When we faced the fact that we would have to train our own engineers," Doug Peltzer says, "we saw this as a handicap. We had the opportunity to exploit fully the opportunities in the bipolar market, and we believed we needed experienced engineers. We soon saw there were benefits in growing our own engineering staff," he adds. "The first college graduates who joined Bipolar set an exemplary style. They were making significant contributions to our processes and technical knowledge within six months."

"Working in Bipolar," Bob Nevela says, "is similar to performing on a high technology tight rope. You have to keep moving to maintain your balance, yet if you move too fast, you'll fall. Our young engineers have demonstrated an amazing sensitivity to this



A Bipolar manager gathers his youthful staff for an update on project progress.



At left, Bipolar designs take shape in the mask making section with the assistance of computer-aided design equipment.



Above, spontaneous staff meetings occur throughout Bipolar. Here, a group of process engineers gather in one of the fabrication areas.

vital balance. They're constantly aware of their audience--our customers--while keeping their eye on the next objective in the product plan.

"Carrying that analogy a bit further," Bob continued, "work in Bipolar is very much like a circus. There are a dozen acts going on simultaneously and we're constantly asked to demonstrate our agility and flexibility."

There is a level of excitement in Bipolar that might make one forget that it, as the entire industry, is undergoing a down market. "Though the economy is generally soft," Doug Peltzer says, "we have the advantage of entering entire new areas with our new PROMs and RAMs. Getting those devices

Below, a Bipolar manager works with two young engineers in the laboratory.



(continued on page 4)

into volume production has generated a sense of urgency and keyed activity to peak levels. One of the significant qualities we searched for when we interviewed engineers on campus in 1973 was their ability to withstand pressure and strain, knowing that this would be a fact of life in Bipolar Memory for some time to come," Doug says.

Chuck Fernold, who was on the team of Bipolar recruiters who interviewed graduating engineers, says, "We painted a realistic picture of the jobs within the division. We weren't looking for academic ranking alone. We were searching for engineers who would fit well into the Bipolar organization. Bipolar's strength is built on teamwork, so we sought qualities that indicate a person would work well as a member of a team."

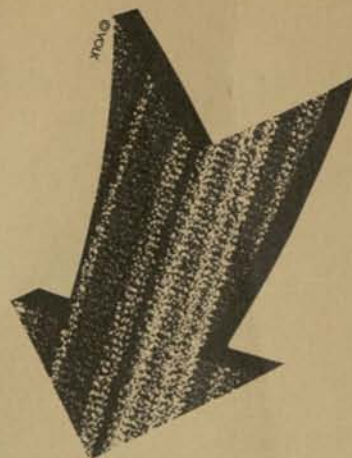
"Engineering graduates of the past several years possess a very high level of skill," Jerry Secrest says. "Their training prepared them for immediate contributory assignments on our staff. I attribute the ease with which the young engineers settled into their jobs to the ability of more experienced engineers and managers to adapt to changing technology. The guiding rule in the division," he reveals, "is to question every assumption you've every made. Absolutely erase everything you learned more than seven years ago."

"Those qualities," Doug believes, encourages young engineers to express their ideas and to think through solutions without fear of stating their opinions because someone will say 'that's been tried and failed.' Many things have been tried the second time and have succeeded."

"The Bipolar memory Division has had an outstanding success in its brief history," Jerry says. "It has enabled Fairchild to become the leader in the fast memory market. This has been the result of a top notch design, production and engineering crew. A good deal of the credit for our successes of the past two years has to go to our recent college grads," he says.

Policy problem?

Confused about a program or policy that concerns your job or benefits? Talk with your supervisor or industrial relations manager. Managers or supervisors have current information on the administration of all Fairchild policies and programs.



RECREATION COUNCIL HAPPENINGS

GOLFERS FOR PIGA PLAY:

Fairchild team needs several more golfers for a team entered in the Peninsula Industrial Golf Association league. Competition begins the first week in May and continues through August. Four members of the ten-person team compete each week against teams from other firms on the Peninsula. The league is run on a handicap basis and the lineup is rotated to give every member an equal opportunity to play.

In addition to weekly meets, monthly weekend tournament are run at courses in the area. If you are interested in league play or would like to compete in the monthly tournaments, contact Rick Schaffzin, Ext. 3503, as soon as possible. Three score cards will be necessary to establish a handicap.

SKI CLUB--Don't let the signs of spring mislead you. The Club continues to think snow. Weekend visits to the Club's two cabins at Tahoe are planned until the end of April when the season will be formally capped with a clean-up and close-up party. For information on booking reservations before the end of the season, contact Rich McCoy, Ext. 5224.

BOWLING LEAGUE LEADERS--First half results of the Fairchild bowling league place the Pindowners in first place, followed by the Ice Cream Kohns and the Unpredictables.

Members of the Pindowners are: Bill Roy, capt.; Bob Siesbutt, Gloria Kirby, Ted Erickson and Diane McDaniel.

ICE CREAM KOHNS: Donna Kohn, capt.; Lloyd Kohn; Marion Oswald; Jim Boyd, and Lew Trusty. UNPREDICTABLES: Barbara Butler, capt.; Jo Miller, Frank Miller, Lennie Erskine and Tom Stuart.

BASKETBALL--Fairchilders will be found on local courts throughout the spring competing in an intra-plant basketball league. Practice for the league, which is made up of employees and spouses, began in mid-March. If you are interested in a vacant spot on any of the teams, contact Leroy Borba, Ext. 4287, Ext. 4386.

GOLF--For some, summer wouldn't be summer without golf. So, some enterprising golfers have begun a plant-wide survey to determine if interest is high enough to warrant forming a summer golf league. If you'd like to add your name to the league listing, call one of the organizers: Mike McIntyre, Ext. 3133; Fred Redman, Ext. 4001; Bert Gunzel, Ext. 2177; Fred Fenane, Ext. 4126.

BASEBALL SPECIALS--The Recreation Council plans to offer its bus-and-baseball specials for selected Giants games this season. Watch your bulletin board for ticket instructions.



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May 1975

Profit margins maintained over past nine months despite downturn

Fairchild on April 24 reported first-quarter earnings of \$3,255,000, or 62 cents per share, on sales of \$69,757,000.

In the comparable 1974 period, the company earned \$10,412,000, or \$1.97 per share, on sales of \$103,817,000. Earnings for the year-earlier quarter included a special gain of \$1,250,000, or 24 cents per share, from the sale of land and buildings occupied by a former company division.

In the fourth quarter of 1974, the company had earnings of \$4,129,000, or 80 cents per share, on sales of \$78,891,000.

Wilfred J. Corrigan said, "Despite a continuing decline in sales due to the recession, Fairchild has been able to maintain generally consistent profit margins for the past three quarters."

"Working capital, cash and shareholders' equity reached record levels in the first quarter. Working capital was \$103.6 million, and the current ratio 2.4 to 1. Cash and short-term securities approximated \$43.4 million and shareholders' equity rose to \$162 million.

"Short-term bank borrowings, all of which are foreign, also declined during the period. The company further reduced inventories and receivables, as well as worldwide employment, in line with current economic activity.

"Fairchild is continuing to invest significantly in advanced technology and product development programs. Total spending for research, development and engineering was \$7.6 million in the first quarter."

"We believe Fairchild is positioned, financially and operationally, to perform well during the present downturn and to expand rapidly when business conditions improve," Mr. Corrigan said.

Rich Parker named 1974 Sales professional

Self motivation, self organization, sensitivity to customer needs, creativity in negotiation, accuracy in forecasting, precision and clarity in communicating...these qualities and more were formally recognized in Rich Parker, Fairchild salesman, when he was named to receive the 1974 Sherman M. Fairchild Award for Sales Professionalism. The announcement that Rich was to receive the highest honor that can be bestowed on a field sales representative was made at the annual Sherman Fairchild Awards Banquet, held April 19, the final evening of the 1975 national sales conference.

Rich, knowing that he was among several nominees for the 1974 award, had mentally prepared an acceptance speech—a speech he believed he would never be called upon to deliver. "This is absolutely the high point of my professional career," he says. "I have such incredible respect for the award and the people who have received it in past. I can't imagine any other recognition that would match this honor."

The award, a reproduction in precious metals of King Arthur's legendary sword, Excalibur, encased in Stueben glass, was taken gingerly back to Minneapolis where it was displayed for the Fairchild staff and, immediately thereafter, for personnel at

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Bill Walton voted 1974 Sales support award

Bill Walton, knowing that he was among the five nominees for the Sherman Fairchild Sales Support Award for 1974, carefully rehearsed an acceptance speech on the drive to Rickey's Hyatt House in Palo Alto on April 19, the evening of the Fairchild Awards banquet.

Yet, when Wilf Corrigan announced that Bill was the recipient of the award, he was as surprised as if he had no forewarning of his nomination. Fortunately, however, he did have that acceptance speech memorized. He had numerous people to thank and some very special words to say. "When I got up to the microphone and looked out over that sea of smiling faces, I promptly forgot everything I had planned to say. My excitement was so great, I'm still not sure what I did say."

Bill, who has been in Fairchild marketing for ten years, has watched as the annual awards went to outstanding field and inside sales personnel since the program's inception in 1970. His name has been listed among pre-

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Below, Bill Walton accepts the Sherman Fairchild Sales Support Award from Wilf Corrigan, Fairchild president.



HAPPINESS IS... children's achievements

What makes a person happier than personal accomplishment?

The achievements of children...as any parent will confirm.

Parental pride is at the root of the special smiles that Bruce Deal of R&D and MOS; John Wyatt, corporate; Jim Smith, R&D; and Dick Guilhamet, Transitor Division; are displaying these days.

Dick's daughter and sons of Bruce, John and Jim have been named 1975 Sherman Fairchild scholars in the annual competition held for children of Fairchild employees. Their awards: scholarships which cover the cost of tuition, fees, room and board at the college or university of their choice for up to four years of undergraduate study.

Roxanne Guilhamet will attend Stanford University to begin study toward a medical degree; John Wyatt III will enter his sophomore year at the University of Southern California to work toward a degree in engineering or computer technology; Michael Deal will enter Occidental College in September to study toward a degree in chemistry or related science; and Russell Smith will enter Santa Clara to begin work toward preparing to become a physician.

In all, ten Sherman Fairchild Awards were made in 1975. Four went to the children of employees in plants in the eastern United States; six went to students whose parents are employed in West Coast operations. Two of the West Coast scholarships were granted to the children of employees of the Systems Technology Division.

The scholarship winners were among 134 candidates for the awards in the 1975 competition. An independent board of educators and educational counsellors appointed by the Educational Testing Service of Princeton, New Jersey conducted the evaluation and determined the award winners. The candidates are judged on the basis of their performance on Scholastic Aptitude Tests, academic performance while in high school and extra-curricular activities.

In addition to being outstanding students, the Fairchild scholars are involved in a variety of school and community activities.

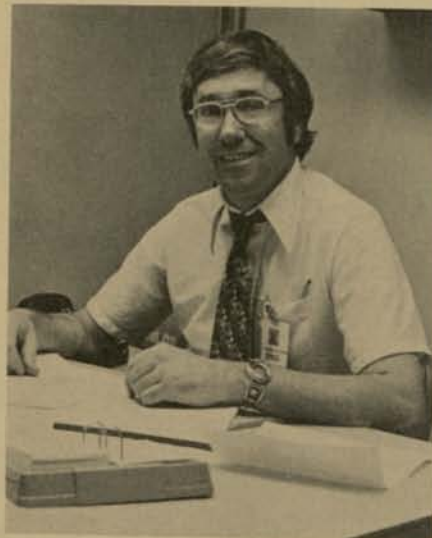
Michael is the second of Bruce Deal's sons to receive a Fairchild grant. His eldest son, Donald, who was among the first Sherman Fairchild scholarship winners to be named, is in his junior year at Occidental College.

The Fairchild parents claim little or no credit for their children's outstanding achievement other than establishing a home environment conducive to study. However, education is a thread that flows through the lives of the families of local scholarship winners. Both of John Wyatt III's parents have been students while he was growing up and, therefore, study was not something limited to children in the Wyatt household. In fact, John and his mother are both attending San Jose City College this semester. Russell Smith has parents who

have both worked as teachers. Michael has the example of his father, who holds a PhD., and his elder brother, an honor student at Occidental, to follow in setting his academic aspirations; and Roxanne comes by her achievements naturally through her parents who were honor graduates of the University of Santa Clara.

In expressing their pleasure over the selection of their children as recipients of the Fairchild scholarships, each of the Fairchild parents stated that to their knowledge the Sherman Fairchild program provides the most generous scholarship awards available today.

The scholarship program is sponsored by the Fairchild Foundation and is funded through a legacy of Sherman M. Fairchild founder of Fairchild Camera & Instrument Corporation. Applications for the annual grants are accepted by the Educational Testing Service between September and December of each year. Industrial relations managers will have a supply of the scholarship applications for the 1976 awards by September 1, 1975.



Dick Guilhamet
John Wyatt



Bruce Deal
Jim Smith



Manufacturing Magic

Mix hustle and determination

Members of the Linear Division's high reliability department smile at visitors' amazement when they tour the organization's new assembly area in the basement of building 20 in Mountain View. What was a vacant room was transformed in ten days into a fully operational manufacturing area for production of devices headed for highly critical applications.

The metamorphosis occurred as a result of the loss of Shiprock plant production. Fairchild had customer commitments for high reliability devices formerly assembled in New Mexico, which had to be fulfilled. Instantaneous decisions were in order and miracles appeared necessary to meet what seemed to be an impossible deadline. The Facilities and High Rel department didn't depend on Divine Providence to bring about the transformation; instead, they turned to the thing that has always worked in the past--unrelenting toil. The refurbishing operation was accomplished in less than two weeks with crews working around the clock, directed by the Facilities Engineering Department.

The pressure on the project was created by an impending audit by the Defense Electronic Supply Center which is necessary to certify that the Fairchild Mountain View facility was capable of producing devices to stringent Joint Army Navy specifications. "Everyone connected with the project," Russ Floyd says, "understood the urgency because if we didn't receive DESC approval on this pass, we didn't know when the auditors could schedule a future visit."

Much of the equipment in the area is used machinery that received a rapid face lift as time would not allow the luxury of ordering new equipment. Pete Weiler called on the inventory knowledge of the Central Production Control group to search for retired equipment in plants around the world. Donations came from Hong Kong and Mexico and were quickly refurbished by Pete's equipment group to meet the high rel needs. The new area, which has to live up to DESC's ultra-clean standards, needed its own air supply and conditioning system. That was a rather simple problem to solve. The air conditioning unit which served the computer center in Building 20 remained after the group moved elsewhere. It was "borrowed" and put to work in a new task.

Staffing the vital activity sent industrial relations people scurrying throughout the division to find personnel with the necessary skills. The enginerring assembly group for Linear made the greatest contribution in this area, providing 15 experienced operators for the new line. Employees on lay-off from Linear, who possessed experience in the highly demanding production, were recalled. Special training efforts to certify the operators at the level of proficiency that DESC demands were underway in the midst of construction efforts. Carpenters, plumbers, machinists, production operators and supervisors worked elbow-to-elbow.

Asked if he would undertake a similar project again, Russ Floyd answered with an emphatic "yes." The morale of employees involved in the start-up was high. We had a challenge and we were

going to meet it. Everyone cut through a great number of envisioned handicaps in meeting the deadline through sheer ingenuity and energy.

"Twelve hour days were commonplace for supervisors over the two weeks," he says, "and 20-hour work schedules were frequent. A broken water main that flooded the just completed area on Sunday night some 10 hours before the inspection was to begin was taken in stride. It was 10 p.m. but, fortunately, we were there to turn off the water and mop up the damage."

A project of the kind represented in the new high rel assembly area would usually require two months from conception to completion. When the need is urgent, however, High Rel and Facilities demonstrated that they can shave weeks off a comfortable schedule to retain business and customer faith in Fairchild's ability to deliver.



Mickey Kashima and Russ Floyd, who worked double shifts in making the Hi Rel transformation within two weeks.

Below, Anna Larson conducted assembly training classes in the midst of chaos to prepare operators for the Hi Rel jobs.



Sales award -- Bill Walton (continued)

vious nominees and he had lived through the anticipation of the awards announcement in former years. "I believe that my knowledge of the program and my previous participation as a nominee heightened my expectation and excitement. As far as I am concerned, there is no greater honor I could receive in my career. The field sales personnel, people with whom I work every day, were responsible for my receipt of the 1974 award. I hope that I thanked everyone."

Bill's award occupies a place of honor in a curio cabinet in the Walton home, a constant reminder of the esteem in which he is held by the field sales staff.

Bill's assignment with the LIC inside marketing staff is to support the efforts of sales representatives working in the eastern United States. He handles all factory contacts for product in the LIC line providing delivery, pricing and expediting details to Fairchild

sales personnel and customers. In description the task appears more manageable than it actually is. Fulfilling his responsibility to customers and salespersons requires non-stop searching, urging, pleading and persuading to provide information or parts the customer requires within, often pressing, deadlines.

Bill's success at juggling numerous simultaneous demands for attention was duly recognized by the people he serves.

Nominations for the Sales Support Award are made by field sales engineers. Before the annual sales conference, all sales engineers are asked to vote for one person among the field of candidates to receive the coveted award.



The Recreation Council has arranged for a block of tickets for Fairchild employees and their guests for the Giants-Dodgers game at Candlestick on June 27. Bus transportation from Fairchild to Candlestick and a usual \$3.50 admission are included in the \$2.50 per person Fairchild price. Buses will leave Fairchild at 6 p.m. For reservations, contact Dee King, Ext. 3930.

Service Awards

FIFTEEN YEARS

Shirley Daly
Anny Zander
William Sprinkle
Hazel White

TEN YEARS

Vincent Fulginito
Loma McDaniel
Joseph Flores
Bruce McMurry
Shizuko Fogle
Robert Hoffman
Violet Fugate
Tokiko Handa
Pearl Costner

FIVE YEARS

Betty Brooks
Barbara Hill
Janet Gath
Floyd Adams
Victor Caguag
Robert Brueck
Beverly Freitas
Mark Larsen
Patricia Garcia
Nancy Saunders
Vern Wilson
James Comstock
Gary Matteoni
Paul Stibbe
Louis Cole
Earl Costner

FIFTEEN YEARS

Richard Jones
Vladimir Lara
Lillian Giles
Richard Crippen
Bill Reifschneider
Richard McClelland
John Clark

TEN YEARS

Jerry Frazee
Margie Kerwin
Juanita Leyba
Josephine Thrash
Lura Metcalf
Fannie Parker
Avelina Salvador
Carol Balegno
Daniel Smith

FIVE YEARS

Robert Simon
Donald Prince
Mike Keyashian
Linda Beers
Petra Alvarado
JoAnn Delozier
Gordon Peterson
John Cartwright
Henry Johnson
Virginia Thomas
Mary Ortiz
Kathryn Dermant
Dorothy Doudell

Brochures explain benefits coverages

Just about everything you ever wanted to know about your Fairchild insurance coverage is told in a new series of brochures to be issued by the Corporate Compensation and Benefits office in May. The booklets explain the benefits you can anticipate from your Fairchild coverage and include information on how to file claims and enroll for different coverages.

The brochures will be distributed by industrial relations managers this month.

Effective May 1, 1975, Fairchild has assumed full responsibility for its comprehensive medical and dental plans. These benefits are no longer insured but The Travelers Insurance Company will continue to administer claims payments as before. The change to a non-insured program as no affect on the benefits employees will receive or the procedures for filing claims.

Ski Club plans river ride

In spite of a slow start for ski season (nature didn't begin to be cooperative until February), the Fairchild Ski Club realized a record number of member visits to its leased cabin in the Sierras. Rich McCoy, club president, reports that more than 450 individual visits were made to the Ski Club snow headquarters during the 1974-75 season.

The official cabin closing ceremonies will be conducted over the May 17 weekend with a dinner party Saturday night for dedicated members who help with the clean-up, close-down chores. The prospect of a summer-fall hiatus in skiing activities hasn't dampened Club members' spirits, because they've turned their attention to other outdoor sports.

The first non-snow outing planned by the Club is for May 31 when members, other Fairchild employees and guests will head out from the plant at 7 a.m. for a trip to the Russian River and a full day of running the rapids in canoes.

Cost for the excursion, which includes bus transportation, canoe rental, and a barbecued steak dinner at the conclusion of the river ride, is \$15 per person for Club members; \$17 for non-members. Reservations can be made by calling Rich on Ext. 2287.

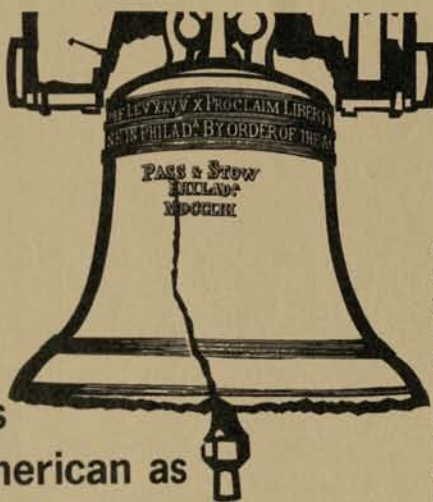


As American as semiconductors

The United States prepares for its bicentennial birthday celebrations. A significant anniversary. Newspapers are filled with stories on Americana. Baseball, hot dogs, apple pie take on new dimensions. They are part of a treasured heritage.

"What could be more American than...?" punctuates conversations. We have to add ours. What could be more American than semiconductors. It was in this country that the industry was born. In fact, it was in 1947 at the Bell Telephone Labs that the first transistor was demonstrated. The semiconductor industry has moved so fast and so far that its roots are sometimes obscured. But, it was here in this country that engineers and scientists developed the foundation of what was to become a \$4 billion worldwide industry within 28 years. The U.S. continues to be the largest, single national consumer of solid state devices for products ranging from sophisticated computer systems to children's toys.

Now that we are on the subject of Americanisms. Who could be more American than Suresh Vasa... or Sid Bagwe... or George Wells... or the hundreds of other Fairchilders who are naturalized American citizens. A Fairchild internal telephone book reads much like a United Nations listing, exemplifying that the talents and training needed to maintain America's leadership position in the development of semiconductor products are not limited to those born in a single country or raised in a single culture.



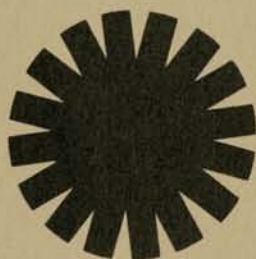
Career Center Plans High School Program

Weak in basic math and science skills? Never received a high school diploma? Here's your opportunity to resolve these educational deficiencies conveniently.

The Fairchild Career Center is working with the Mountain View - Los Altos Union High School District to structure a program of high school study leading toward a diploma, a general education development (GED) certificate, or to conduct refresher courses in specific high school subjects.

Based on employees' level of interest in any or all of the programs, classes will be conducted at the Career Center during hours convenient to the greatest number of employee registrants.

If you want to learn more about the high school study program, drop a note to Ron Miller, Career Development Manager, mail stop 13-117.



Summer league swings

Every Thursday evening, beginning May 1, some 60 golf clubs wielded by Fairchild employees will swing at Spring Valley Course in Milpitas to signal the start of weekly play in the 1975 Fairchild Summer Intra-Plant Golf League. The Fairchild golfers will play nine holes to compete for weekly prizes. Point leaders at the end of the season will play off for the Fairchild championship at a Saturday tournament that will be capped with a banquet and appropriate awards presentations.

Officers of the newly-organized league are Bob Hageman, president; Bob Fitch and Mike McIntyre, sharing vice presidential duties; and Ron Nakaguichi, secretary-treasurer.



Lunching with Lions

Picnic companions for Fairchild employees and members of their families in 1975 will be dolphins and whales; lions and tigers; elephants and rhinos. You won't have to share your lunch with the denizens of the deep and the beasts of the wild, but they will share their talents with you.

That's right, the 1975 Fairchild picnic will be at Marine World - Africa USA where six shows and 50 attractions offer a full day of entertainment for the entire family.

Recreation Council party

planners have made arrangements for a picnic area to be set aside for the exclusive use of Fairchild families. It's a bring-your-own-picnic-lunch outing, with roaring barbeque fires available for families who plan to cook-out.

Your schedule will be your own from 9:30 a.m. until the park closes at dusk on Sunday, September 14. Cost for the outing is \$1 per person.

Tickets will be available from Recreation Council representatives well in advance of the picnic.



Sales award - Rich Parker

Univac Corporation, Rich's one-and-only customer. "My friends at Univac were almost as proud of the award as I am," Rich says. "After all, they helped me to earn it with their orders."

Rich, who worked at Univac in that company's purchasing organization and as a sales engineer for Medtronics before coming to Fairchild two years ago, believes his experience in purchasing has been helpful in creating his success as a salesman for Fairchild. "My work in purchasing developed my understanding of what customers want and need from a supplier. This knowledge of Univac's needs and the ability to respond, has made Fairchild the major supplier of semiconductor devices to Univac operations throughout the United States.

Rich earned his recognition as the outstanding Fairchild field salesperson during a year which tested the resiliency and creativity of every member of the field sales force. In a period when most salespeople

had to report declining orders from their major customers, Rich was able to hold order rate steady at Univac maintaining almost the same volume of business during the difficult months of late 1974 as in the comparable period of the previous year. This and the efforts of other Fairchild sales personnel in Minneapolis, earned the 1974 Sales Booking Award for the Minnesota sales office.

After receiving the most distinguished recognition any Fairchild salesperson can achieve, what do you do for an encore? "I'll have to do bigger and better things in the future to live up to the award."

In selecting the annual outstanding sales professional, nominations for candidates are solicited from regional managers. The nominees are evaluated and the sales professional of the year is selected by a committee made up of top management members of the Semiconductor Components Group.



The Sherman Fairchild Award for sales professionalism which is presented annually to a field sales engineer and a member of the inside marketing support staff.

Microwire

Published for the Employees of the Fairchild Corporate Headquarters and Semiconductor Components Group — Mountain View/Palo Alto

June 1975

George Wells elected corporate vice president

What does enhanced corporate status earn you? Absolutely nothing on the soccer field. That has been the experience of George Wells, who, on Friday, May 30, was elected a corporate vice president. On Sunday, June 1, he took his place on the Transistor Division soccer squad to face the Diode Division team on the Marin Academy field.

Fairchild's newest vice president received the same rough treatment that the managers, engineers, and technicians who make up the balance of the soccer squads encountered. And what is more disconcerting, George doesn't demand respect in soccer play because he is a vice president, but he would appreciate some deference in his role as Fairchild's chief soccer coach. Most of the players on the Diode and Transistor teams learned the sport through George's tutoring.

A native of Scotland where soccer is the national sport, George began coaching youngsters in Marin when he was manager of the Diode Division in San Rafael. But coaching wasn't enough. He interested many members of the division in soccer, and he led their training at nearby fields. Accustomed to regular basketball defeats by the Transistor Division's semi-pro team (led by avid basketball player, Greg Reyes, who was then vice president, general manager of the Discrete Products Group and who recently moved to a similar position with the newly-formed Consumer Products Group), Diode recognized that there were potential victories in soccer, a sport with which the Transistor Division was not familiar.

The challenge was extended. Transistor bit. The two teams met, and Diode walked away with the game, regaining its sports stature in the competitive inter-divisional rivalry.

Then corporate fortunes moved in. George was transferred from the Diode Division to head the Transistor Division in Mountain View, leaving behind him a team of trained soccer players. The management style that has earned George rapid progress within Fairchild was put to work guiding Transistor through the difficult days of the recession. What little energy was left over was directed toward organizing and coaching a Transistor soccer team. Both the Transistor Division and its soccer team have benefited from George's leadership.

Confronting declining orders over the past nine months, Transistor was able to identify

its strengths, pool its energies to direct them in the most rewarding direction, and today the Division is stronger than ever before in its history. Coming from behind on the soccer field, the Transistor Division claimed a tie on Sunday, June 1, against the tough Wells-trained Diode team. The tie was appropriate. Two weeks before, George's list of objectives contained win for Transistor in soccer. By Sunday, he was facing a dilemma because in mid-May, he was named Discrete Products Group manager, with overall responsibility for the Diode Division. His loyalties were split.

For soccer, George prescribes continuing regular practice for both teams. For Diode and Transistor he advises members

(continued page 2)



A NEW HOME FOR LINEAR is underway in San Jose. The first shovelful of earth was moved on June 4 on the Fairchild site in San Jose on Bernal Road to mark the start of construction for a 265,000-square-foot facility to house the linear integrated circuits operations. San Jose Mayor Janet Gray Hayes (foreground) joined Chuck Smith, vice president--Central Operations; Bill Evans, director of facilities; Stanley W. Twardus, economic development officer, City of San Jose; and Doug Sullivan, general manager--division vice president--Linear Integrated Circuits, at the ground-breaking.



June Graduates: Tuesday, June 3, was graduation day for 46 assembly operators in the Transistor Division. Diploma certificates were gratefully accepted from Oz Viva, creator of the grueling "Basic Semiconductor Knowledge" course which took the fabrication employees through the labyrinth of semiconductor science and terminology. The course was created by the engineering staff of the Small Signal section of Transistor to give

operators an overview of the entire fabrication process, circuit design, and general applications for products manufactured in this area. Oz was assisted by guest lecturers: Mike Powell, Gus Voyk, Walt Rau, Frank Chien, Godfrey Fong and John Leith during the 19 1-1/2 hour classes. Registration for the course was open to all operators in the Small Signal area.

CAREER CENTER SUMMER SCHEDULE

Language is getting new attention in the Career Center's summer schedule. Classes in English as a second language will be open to all employees, and a special class on this subject will be held for employees who have an Oriental language as their mother tongue.

Recognizing that the company's European headquarters office is in Germany, the Career Center will begin offering classes in Conversational German this summer.

High school classes for employees who wish to work toward a diploma, a GED certificate, or to take classes in high school level math or science will continue to be offered by the Center indefinitely. Registration is June 24, 3:45 to 4:45 p.m.

Registration for Foothill

classes will continue through the first session of each of the programs. They are: Survey of Electronics (4 units), beginning at 4 p.m. June 30; Introduction to Semiconductor Processing (3 units), beginning at 4:45 July 1; and Personnel Policies, beginning at 4 p.m. June 30. All of the Foothill classes will be held two days each week through late August.

Sessions of the Management GRID, an executive development program, will be conducted over the summer in Syosset, South Portland and Mountain View. Registration in this program can be made by contacting your industrial relations manager.

Details on any of the programs can be obtained by writing or calling the Career Center, mail stop 13-117, Ext. 3815.

New child care center available

A non-profit child development center, the Tyrella Children's Center, was opened recently at 425 Tyrella Avenue, Mountain View. The Center, which offers extended day care in addition to development programs led by graduate teachers, operates daily from 6:30 a.m. to 6 p.m. Fees for child care are scaled to family income with a maximum charge of \$30 per week.

Tours of the center can be arranged by contacting Betty Long, 964-0487.

GEORGE WELLS

(continued)

of management to build on the obvious attributes of both organizations. "These divisions have weathered difficult periods and emerged stronger than ever. Cost reduction campaigns conducted throughout the Discrete Products Group have paid off in highly versatile, lower cost products-- devices which are capable of capturing a greater share of the available market. That is the direction in which we're headed. While many transistor and diode manufacturers are beginning to stage funerals for some segments of their business," he says, "because they believe some products have peaked and are on the downward side of the maturity curve, we know that there is increased business out there."

Marketing strategy to increase Fairchild's share of the highly competitive transistor and diode markets includes pioneering new applications for products, making Fairchild standard products the most desirable in the industry and moving into emerging markets in countries which are now developing their electronic industries.

A vice presidential title may mean nothing on the soccer field, but in the Fairchild world it recognizes, in George Wells, a person who has made significant and increasing contributions to the management of the company over his six years of service.

Exercise isn't only sweat suits and sit-ups



Sure you know that regular exercise is necessary for optimum health. But, what if you can't stand the thought of sweat suits, sit-ups and jogging? You try. You push yourself. If the effort is too great, you decide to let the muscles sag, acknowledging that traditional exercise programs don't fit into your life style.

Or, you do what Betty Barber, senior control clerk, Central Data Systems, did. You find a form of exercise that is enjoyable.

The atmosphere in Betty's Tuesday night exercise class is that of an ancient Turkish bazaar. The music of zels, bell-like finger cymbals, fills the air. The participants go through their routine dressed in yards of chiffon, accented by hundreds of bangles and sequins.

If you could ignore the children's drawing on the walls and the youngsters entertaining themselves while their mothers dance, you might be able to forget that you are in the auditorium of a grade school and let your imagination drift to some exotic middle-Eastern casbah. Yet, the intensity Betty and her fellow classmates demonstrate in their study of the classical movements of the belly dance denies the abandonment usually associated with this ancient art.

The belly dancing students concentrate on duplicating the movements of the instructor--subtle, sinuous motions that demand complete muscle control. It's apparent why this form of dance has been tagged "belly" because that is the part of the anatomy that is most evident in the traditional costumes, and a great deal of the action centers around mid-torso. However, this is a distortion of the original name for the art, *Beledi*.

"Most of the movement," Betty says, "occurs in the legs. You find that you call upon muscles you never knew existed. The benefit to the body tone is evident after only a few weeks in a class." Betty, who has been studying belly dancing for more than two years, except for a brief respite, has increased her stamina to the point that she takes two 1-1/2 hour classes back-to-back on Tuesday evenings.

The costumes and concentration of the students lead on-lookers to believe that these are women preparing for performance. "That's not so," Betty says, "the classes are an end in themselves. Most of the students will never perform for anyone but their closest friends. The classes are a pleasurable experience... and you forget that you are exercising."

As the students progress, they are allowed to begin building a costume, adding one traditional garment at a time to their contemporary clothing. Advanced classes, such as those Betty participates in, are filled with dancers in full, traditional costume.

In casual discussion with fellow Fairchilders, Betty has found that she is not alone in using belly dancing as an enjoyable journey toward physical fitness. "There are dozens of women at Fairchild," she says, "who are involved in classes for personal and physical development. As you study the dance, you become interested in the middle-Eastern philosophies and the origins of costumes and music. It, therefore, becomes intellectual as well as physical exercise."



Fairchild Receives "E" Award for Excellence in Exporting -- Wilfred J. Corrigan (center), president and chief executive officer and C. Lester Hogan, vice chairman of the Fairchild board of directors (right) raise the President's "E" flag presented to Fairchild by the Department of Commerce in recognition of the company's expansion of its export business. Mr. Tilton H. Dobbin (left), assistant secretary for Domestic and International Business, U.S. Department of Commerce, made the presentation at the Fairchild headquarters in Mountain View on May 15. Fairchild was the first manufacturer headquartered in Northern California to receive the "E" award in 1975. From 1971 through 1973, the period the award covers, Fairchild increased its international sales from \$35 million to more than \$88 million. In 1974, international sales were more than \$113 million.

Prizes for photos

Awaken your imagination, get out the camera and capture a winner in the annual HORIZONS photo contest. Nine prizes will be awarded to photographers who submit the winning entries in each of three categories: People, Animals and Scenic.

Mark your entries, either slides or prints, clearly with your name and Fairchild location and send them to the Employee Communications Office, mail stop 20-2260, Mountain View. Deadline for entries is August 15. Winning photographs will be published in the fall issue of HORIZONS.

Sello sells to benefit KQED

San Francisco Bay Area employees tuning into the lively KQED Auction May 31 to June 8 were likely to see a familiar face touting the virtues of donated items up for bid. The face and persuasive voice are well known at Fairchild as belonging to Dr. Harry Sello, manager of international business development. Harry was doing his regular stint on the educational channel's annual fund-raising event, a sought-after assignment as the KQED Auction has gained in stature and exposure for its auctioneers over its 21 years of existence.

Harry is among the veteran hawkers for the marathon sale which has carried products ranging from fine art to pizzas. He was asked to appear on the screen describing items for bid shortly after the auction scheme was devised to help support the public broadcasting station. His success as creator and instructor of a basic science course aired over KQED for 52 weeks in 1960, drew the auction committee's attention. Anyone who has ever met Harry realizes that his approach to any subject, even basic science, would be tempered

by humor. This style and his ability to handle difficult situations with light-hearted poise made him a prime candidate for the rank of auctioneer, a task that tests the ability to think and talk fast while encouraging the home audience to call in bids on things they never before knew they wanted to own. And the real test of an auctioneer's talent is maintaining a pace of patter that would strain even a professional performer.

During his lengthy experience as a KQED auctioneer, Harry has confronted some products and situations that have shaken his natural composure. Imagine his chagrin when he successfully forced up the bids on a case of salad oil well beyond its stated retail value only to discover the carton contained motor oil. The mistake was realized in time to clarify the carton's contents on the air and to prevent unexpected additives from going into a local household's salads.

Then there was the year that Harry was assigned to the high-ticket items and sold an elaborate home audio-video recording system for \$4000...or thought he did. He received a call from an irate wife who disagreed with her husband's decision to purchase the recording equipment. Harry juggled calls between the two, attempting to



Harry Sello

soothe both parties, while smiling broadly each time the camera panned him. He was finally worn down and reopened bids on the system.

There are also unusual hazards and risks associated with KQED auctioneering such as the unexpected pie-in-the-face Harry received during a respite in this year's auction as part of a Mack Sennett type routine to liven up the show. Harry took it with good humor and announced "delicious" as the pie dripped from his face.

Harry says he has watched the most unflappable auctioneers silenced in their efforts to describe some of the odd-ball items and services donated to the auction...and yet they return each year to face the cameras. "It's all for a good cause," he explains.

Employee opinions sought by Transistor Division

Almost all of the employees in the Transistor Division spent up to an hour with pen and questionnaire in the past month as they participated in a climate survey to discover how members of the division perceive their work and their relations with supervisors and the company. The climate survey is aimed at giving management insight into the opinions of employees to encourage remedies for dissatisfactions and reinforcement of the positive aspects of employee attitudes toward the company.

The questionnaire asked employees' views on supervision, management, job content, benefits programs and opportunities for advancement. "A survey of this type," says Ron Miller, Director of the Career Center,

who supervises the survey program, "creates a composite profile of the organization as employees see it. It surfaces problem areas, but it also tells us what is being done right." In addition to the written portion of the survey, employees were selected at random to participate in group interviews which are used to further substantiate opinions received on the questionnaires.

The responses will be processed by computer, and a full report highlighting key concerns of employees will be submitted to members of Transistor Division management within five weeks. The results of the survey will be discussed with all division employees in group meetings. George Wells, vice president, general manager of the Discrete Products Group,

who has supported the use of the survey in the Transistor and Diode Divisions, the two organizations which he heads, says, "From the survey results we should be able to establish a concrete set of objectives for enhancing employee relations. Without this simultaneous poll of employee attitudes, many of our actions which relate to employee policies and benefits were based on subjective management judgment of what employees want. This, I believe, will provide us with a substantial base of information to use in forming future directions for our organization."

Similar surveys are planned for other Mountain View organization as administrative time allows.

Microwire

Published for the Employees of the Fairchild Corporate Headquarters and Semiconductor Components Group — Mountain View/Palo Alto

August 1975



Fairchild Watches:
On the top, left to right, are the men's F1002/1003 watches; the F1040 (gold); the F1042/1043; and the F1520/1521 for women. On the bottom, from left to right, are the men's F1041 (rhodium); the F1020/1021; the F1030/1031; and the F1510/1511 watch.

Timely entry in consumer market

Fairchild on July 25 entered the consumer end-product market with the introduction of a full line of LED (light-emitting diode) solid-state digital watches, ranging in retail price from \$115 to \$195.

Initially offered in six men's and three women's styles, the five-function Fairchild watch is less than 3/8 of an inch thick, slimmer than any previously available digital watch. The thinness is a result of recent advances in miniaturized circuitry, combined with a new approach to module design which permits use of smaller batteries than in other digital watches.

Greg Reyes, Fairchild vice president and general manager of the newly formed Consumer Products Group, said, "Announcement of this new watch line marks a definitive move by Fairchild into the consumer electronics field."

"The company has for some time supplied semiconductor components, modules, and displays to digital watch companies. With our recent additions to the Consumer Products Group—particularly the Exetron Division—we were able to focus major resources in bringing to the marketplace a line of watches worthy of bearing the Fairchild name."

A total of 18 model combinations in gold, stainless steel and rhodium will be available in designs ranging from classic

to the contemporary. Emphasis was placed on providing a number of viewing windows from elliptical to hexagonal, all in cases with the new slim elegance of the Fairchild watch. Lenses are made of a special ruby-colored mineral glass for scratch resistance and viewing ease.

The five watch functions are grouped in three separate operations. For the hour and minutes, the single button is pressed once and released. Another press displays the month (numerically) and the date. A third press provides seconds. Each LED readout remains visible for 1.5 seconds, with the seconds display continuing sequentially when the button is held.

The Fairchild watch, which carries a three-year warranty, has no moving parts and the batteries need be replaced only once a year. The watch is accurate to 60 seconds a year. Each solid-state watch module, comprised of semiconductor components integral to its operation, replaces as many as 70 moving parts found in a standard mechanical watch.

The watches will be distributed through fine jewelry stores and jewelry sections of major department stores, Reyes said. Fairchild will have local representation throughout the U.S. with a large consumer products sales and service organization.

Earnings of \$3+ million in 2nd qtr.

Fairchild on July 24 reported 1975 second quarter earnings of \$3,287,000, or \$.61 per share, on sales of \$68,964,000.

This compares with year-earlier earnings of \$7,673,000, or \$1.46 per share, on sales of \$105,811,000.

For the first half, the company earned \$6,542,000, or \$1.23 per share, on sales of \$138,721,000. Net income in the comparable 1974 period was \$18,085,000 or \$3.43 per share, on sales of \$209,628,000.

In the first quarter of 1975, the company earned \$3,255,000, or \$.62 per share, on sales of \$69,757,000.

The second quarter earnings of \$3,287,000 reflect the reduction of taxes on income earned by a foreign subsidiary as the result of a legislative change, amounting to a reduction of \$890,000 (\$.17 per share) in the company's provision for income taxes.

Be a winner

Spend a little time with your camera this weekend and you may earn a cash award and recognition for your efforts. Entries are being accepted in the HORIZONS annual photo contest through August 15.

If you have a winner among your photographs you'll claim a first, second or third prize in one of three categories: People, Scenic and Animals/Miscellaneous. Prizes are \$25, \$15 and \$10 with nine awards in all.

Send your entries clearly marked with your name, Fairchild location, and mail station number to the Employee Communications Office, 464 Ellis Street, Mountain View, Ca. 94042, mail station 20-2260.

Winning photographs will be published in the Fall issue of HORIZONS.



Security analysts listen to Fairchild officers describe Fairchild performance.

Education and entertainment were on the agenda for the annual Fairchild seminar for security analysts held at Rickey's Hyatt House in June. More than 100 representatives of the nation's major banks, insurance companies, stock brokerage and mutual fund investment firms attended the meeting to hear, from Fairchild officers, facts about Fairchild and its prospects for the future. The security analysts, most of whom specialize in the electronics industry, advise their clients and companies on the purchase of corporate stocks based on their knowledge of the performance of individual firms and projections for the industry.

The educational portion of the morning meeting was provided by Fairchild speakers Wilf Corrigan, president and chief executive officer; Greg Reyes, vice president - Consumer Products Group; Doug Norby, vice president - finance; and Dr. Tom Longo, vice president - Integrated Circuits Group.

Significant changes in the company profile since this group gathered last year, Mr. Corrigan noted, are Fairchild's proven ability to manage through a very difficult economic period and the company's increasing strength in technology and

manufacturing ability. "We are involved in a cyclical industry and we feel that we can manage a cyclical business," Mr. Corrigan said. "We are coming through a very difficult period under control and in a very strong financial position."

Mr. Corrigan also emphasized that the company, over the past two years, has established itself as a technological leader with manufacturing capability. He commented that, in the past, the company's strengths were found in either technology or the ability to manufacture.

Doug Norby retraced the company's financial growth over the past five years

ducts Group which incorporates Exetron and Princeton Materials Sciences with the Optoelectronics Division. Outlining marketing plans for consumer products, Mr. Reyes said that Fairchild intends to pursue other consumer products that have a high semiconductor content, in addition to wristwatches, but that future products for consumer markets will be introduced after the company has established itself firmly in the watch market. (A story on the introduction of the Fairchild line of digital wristwatches is elsewhere in this issue.)

Thomas Longo, vice president integrated circuits group, led the security analysts through the complex subject of Fairchild advanced technology, revealing that the company maintains an important position in all of the semiconductor technologies that address current and emerging markets. He described the company's efforts in state-of-the-art technologies such as bipolar, MOS, CCD, CMOS and Macro Logic. Dr. Longo covered the Fairchild history in each of these technologies and described company products in the marketplace and in the research laboratories that respond to virtually every application for semiconductor devices in every major market.

The entertainment of the morning meeting was provided by an electronic black jack game which demonstrates the capability of the Fairchild F8 microprocessor. Security analysts took turns attempting to outwit the electronic dealer. However, few turned away from the screen which displayed the action in the card game having increased their allocation of gaming

Analyzing Fairchild

stress the increasing contribution of international sales and profits over that period, and Fairchild's heightened financial posture as the result of greatly increased cash reserves as well as almost doubling the company's working capital to more than \$100 million from five years earlier.

Greg Reyes' presentation, which was augmented by slides of the company's new digital watches with light emitting diode displays, drew applause from the analysts. Mr. Reyes described the formation of the company's new Consumer Pro-

Fairchild officers (left to right) Wilfred Corrigan, president; Fred Hoar, vice president - Communications; Dr. Tom Longo, vice president - Integrated Circuits Group; Douglas Norby, vice president - Finance; and Greg Reyes, vice president - Consumer Products Group; were major speakers at the June meeting for security analysts.





Jean Peterson, secretary to Warren Bowles, vice president-industrial relations, enters Fairchild corporate row.

Through the corporate doors

At the start of each work day, hundreds of Fairchild employees enter the doors to 464 Ellis Street, Mountain View. Most will head toward production areas or offices to immerse themselves for eight or more hours in the pressing concern of today's production or engineering objectives.

A few, however, will go up the stairs and through the walnut doors to the east side of the building where there is rarely a semiconductor device to be found.

Here the language is different. Instead of the Iso-planar, integrated circuit, bipolar and MOS terminology that punctuates most discussions within the building, in this small group of offices the conversations center around balance sheets, facilities footage, employee benefits, new product introductions and the legal implications of every action the company takes.

All activity in this cluster of second floor offices concerns itself with the numerous support activities that are necessary to keep the company running now and into the future. Today's work in the corporate offices shapes plans that will influence the pace of life and production at Fairchild five and more years into the

future.

Many of the offices that line this corporate section are occupied by persons who carry the title of vice president. Many of these same individuals have held numerous other titles at Fairchild, having served as engineers, accountants and operations managers during their Fairchild careers. Now they use their cumulative experience with the company and in the industry to map out future paths for Fairchild. Some are specialists in a specific discipline such as law or finance; others are management generalists who are responsible for directing the overall performance of the company.

In one office, an inch-thick sheaf of papers describing the condition of an acquisition may be under review. In the next, lengthy written and graphic descriptions of a new product may be under development in preparation to file for a U.S. Patent application. In another, employee compensation and benefits may be the focus of attention. In still another, tables of financial data may command

the attention of company experts as they analyze figures of the previous week or month. Two doors away, the progress of a new plant in a country outside of the United States holds the attention of a small group of Fairchild people. Down the hall a hundred feet, an animated discussion is aimed at determining the best way to launch a new product through coverage in newspapers and magazines.

The answer "corporate" to the question: "Where do you work at Fairchild?" is usually a guaranteed conversation stopper. Employees in the product divisions have a vague idea of what goes on in the offices and aisles of corporate row, but are more comfortable discussing the trials and triumphs of semiconductor processing. And that is probably the way it should be as the future of the company is determined in the engineering labs and on the production floor...with the specialists in corporate providing the support and planning that allows engineering and manufacturing to concentrate fully on product and production.



An absence of production equipment is noticeable but the level of activity in corporate matches the pace set on the production floor.



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money. (The black jack dealer is now in the lobby of 464 Ellis providing amusement for visitors and employees.)

A preview display of the new Fairchild digital watches drew the greatest crowd. Nine models of men's wristwatches in gold and rhodium received thorough scrutiny by the analysts. Competing for attention with other Fairchild products were an Industrial Products Division's rear screen projector which played continuously a film on golf and the Space and Defense Systems Group's CCD television camera which photographed the activity in the room and displayed it on a closed circuit television screen.

At noon, the security analysts began collecting sheaves of notes they had taken during the morning and returned to their offices or hotel rooms for some quiet analysis of the information they had received. From this information, combined with their knowledge of the semiconductor industry, the analysts drafted reports for their companies and their clients covering the advisability of investment in the stock of Fairchild Camera and Instrument Corporation.

Fairchild product displays including the Space and Defense closed circuit television camera drew questions and comments from the analysts.



Design of new linear plant represents hundreds of years of experience

Hundreds of years of semiconductor manufacturing experience went into the design of the production layout for the new Linear Products Division facility in South San Jose. As long as a year ago, members of Division management were drafting preliminary plans for the production flow in a new facility; even though the site had not been selected.

Dozens of persons with ten or more years of familiarity with semiconductor processing participated in the design of the production area; a rendering of which currently hangs on Peter Weiler's wall in Building 20. Experience with the tunnel production layout gained at Fairchild plants in South Portland, Maine; and Wappingers Falls, New York, also influenced plans for the new facility. "We drew on our collective knowledge of semiconductor manufacture combined with the experience of the most productive plants within the Fairchild system. The result is a production design that will greatly improve cleanliness and significantly increase yields over that possible in current linear fabrication," Pete Weiler says.

The present layout plan for the new plant (no one is willing to guarantee that further modifications won't be made between now and the move-in date) represents a 12th generation design. Every department had a voice in developing production flow.

"We started with wafer fab," Weiler reveals, "because that is the heart of the oper-

ation. Working with Jerry Sera's LIC Production group and Geoffrey Ming's process engineers, we arrived at what we believe to be the most efficient work flow taking into consideration the ability to maintain a high level of cleanliness and work stations that provide the greatest operator comfort and efficiency, we began designing those operations that support wafer fab." The result is a neatly detailed drawing designating the placement of every piece of equipment in the production area. All of the machinery to equip the new wafer fab will be new; however, much of the support equipment such as that used in testing will be moved from Mountain View. Existing linear wafer fabrication equipment will be put to use by other product divisions in Mountain View.

All that remains to bring the ambitious San Jose production plant to reality is months of diligent work by Hank Johnson, who is responsible for the overall coordination of the project; Jim Murphy, Hal Edelstein, Jerry Statbucher, Ivan Wheeler and Larry Faber, facilities engineers; and Ray Phillips, who will supervise the installation of supply systems for chemicals and DI water; and many more.

Target date for the move to the facility is February 1976. Currently, all that is evident on the San Jose site is a very large hole in the ground. However, the visionaries in Linear see, in their mind's eye, the beginnings of one of the most efficient production facilities in the world.

Bowlers roll

Fairchild Bowlers will start their fall/winter league at 6 p.m. on Monday, Sept. 8, at Cherry Bowl in Sunnyvale. Interested? Call Clemie McGee, Ext. 4315, Mt. View; Mark Wilson, 3345, Mt. View; Lenny Erskine, 2569 or 2158, R&D; or Marian Oswald, Ext. 219, Systems. Spots are open for individuals, couples and/or teams. Sign up now because only 12 lanes are available.

Members must be Fairchild employees; however, spouses are eligible.

49ers field day

The first evidence that fall is definitely on its way: The Recreation Council has reserved a block of tickets for the 49ers-Rams game September 28. Priced at \$8.50 each, the tickets include the cost of bus transportation from Fairchild to Candlestick.

Game time is 1 p.m. Buses will leave from the Bldg. 20 parking lot at 11:30 a.m. Tickets are available from Dee King, Ext. 3930, on a first come, first served basis.

"The KV-100 has performed beyond expectations"

He turns the key in the ignition. The engine starts quickly and silently. Even after six months, Dennis King maintains his amazement at the improved performance of his 1967 VW bus as a result of the installation of one of the Fairchild KV-100 ignition modules. Today, his boat ignition system contains a KV-100 and friends have installed the modules on their automobiles as a result of Dennis' enthusiasm about the product.

"I haven't seen a dramatic increase in gas mileage," he admits. "Maybe ten percent improvement. But, even that is greater than the KV-100 advertisements promise."

Dennis, an accounts manager in the Business Development Department, has become so proficient at the installation of the Fairchild ignition modules that he claims, under pressure, he can install one in nine minutes flat. "In 6,000 miles of driving with the KV-100, I have not had a single problem that would indicate a tune-up is needed; and that's unusual with my bus."

Hank Johnson, who is coordinating the entire San Jose facility construction and the projected move from the Linear Products Division, is particularly sensitive to the performance of his automobile during this pressure project. He makes the Mountain View-San Jose run frequently and relies on a smooth-running automobile to cover the miles without hassle. "The KV-100 has performed beyond my expectations," he says. "We're now a KV-100 family with the Fairchild ignition modules on all of our cars. Performance--faster starts and smoother running--are the noticeable changes the KV-100 brought about. I haven't seen much change in my gas mileage, but I didn't replace other ignition components at the time I installed the KV-100--that might make a difference."

Dennis' and Hank's experience with the KV-100 accounts for the brisk sales of the Fairchild ignition module at the Fairchild Credit Union. Word-of-mouth



Dennis King (left) and Hank Johnson - KV-100 boosters.

advertising among employees keeps the ignition system moving over Credit Union counters at the special employee price of \$19.95. The Automotive Products Unit, which produces the module, reports increasing sales activity in parts outlets in all of the areas in which the KV-100 is marketed.

Jim Hazle, general manager of the Automotive Unit, explains why some KV-100 users report improved gas mileage while others don't. "The Fairchild system doesn't actually change gas usage; what it does is maintain the automobile in peak tune-up condition over a longer period. As the points in a car wear and corrode, gas performance decreases. The ideal time to install a KV-100 is immediately following a tune-up. The automobile will be operating at peak efficiency and that level of operation will be maintained."

The Automotive Unit appreciates the business created through sales to employees and is equally grateful for the feedback that has been received from employee-customers. "We have made some changes in the KV-100 as a result of employees' comments that have made it a more universal system. We discovered, only after employee sales, that the original model didn't work efficiently in all cars. Minor adjustments in the product have broadened our customer base for the KV-100."

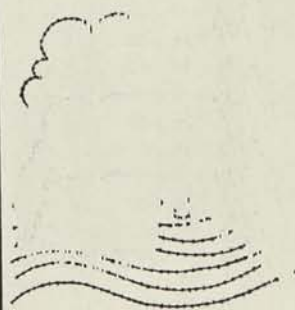
A picnic with a plus

Traditional picnic pleasures won't be the highlights of the day at the Semiconductor Operations annual outing for 1975. Baseball and hot dogs will take second billing to the attractions at Marine World. And what attractions they are: Water ski show, safari rides, elephants and rhinos, lions and tigers, talented whales, and performing dolphins.

However, the old-fashioned aspects of picnicking have not been forgotten. The Marine World green will be reserved for Fairchild families from 9:30 a.m. until the park closes at dusk on Sunday, September 14. Bring your own picnic lunch and use the barbeque fires which will be lit most of the day.

Cost to employees and members of their families for the outing is: \$1 for entrance tickets for employees and members of their immediate family, aged 5 and older. Children under five years of age will be admitted free of charge; however, they will require tickets. The Credit Union will sell tickets beginning August 11 on a first come, first served basis. A limited number of tickets will be available. Ticket sales will stop when the supply is exhausted.

Beer will be on sale at the park at 35 cents a cup, and soft drinks are priced at 15 cents for a 12 oz. cup. The admission tickets offer Fairchild employees and their families entrance to all Marine World attractions with the exception of the elephant ride. Separate tickets can be purchased at the park for that entertainment.



Apprehension or adventure depends on the attitude

The prospect of a move to a foreign nation draws anticipation or apprehension depending on the individual's level of adventure. Leaving the familiarity of home might be viewed as a sacrifice for some, but for Cheri Belcher, wife of the manager of the Fairchild Hong Kong plant, there was no doubt of her enthusiasm when she learned that her husband had been offered the assignment as manager of the Fairchild plant in that city. "It was like going home," she remembers. The Belchers had, two years before, returned to California after living in Hong Kong for three years while Dick worked on the Fairchild staff.

At the time she learned of Dick's initial opportunity to work in Hong Kong, Cheri was beginning her final year of undergraduate studies at the University of California. The move meant postponing the completion of her work toward a degree, but there was no hesitancy in her decision. "I knew that I could always finish school; but couldn't be sure that I would ever have the opportunity to live abroad again, and our children were young enough to easily make the adjustment to life in a new culture."

Cheri learned to speak Chinese fluently during her first stay in Hong Kong "with the help of a very patient teacher." She is able to shop in local stores and stalls which are virtually off-limits to those who do not have facility with the local language. Home, which was a suburban, single family house in California, became a large flat with a view of Hong Kong harbor in a huge complex of similar dwellings. Though the Fairchild expatriate families in Hong Kong get together occasionally for dinner or luncheon, Cheri reports that they are all intent on widening their acquaintances outside of the Fairchild group. Through their interests and those of their children, the Fairchild families have developed many friends in this cosmopolitan



Cheri Belcher

city and have become established members of a very exciting community. "Friends I have made in Hong Kong have moved to other parts of the world, but we still keep in touch. I'm currently corresponding with friends in Morocco, England, Australia and Germany.

"You can find almost anything you could possibly want in Hong Kong," she assures. "Imports from throughout the Pacific and Europe are readily available; however, the cost is a direct reflection of the miles the product has travelled. For a very special occasion, our dinner table may contain wine from France, beef from

Australia, potatoes from the United States, and vegetables from New Zealand.

"Living abroad can be a very appealing adventure for adults," Cheri says, "while children might not view it in the same way. My son entered school during our first stay in Hong Kong and my daughter will go into the first grade in September. They, therefore, did not confront the major adjustment that might have occurred had they transferred from a U.S. school. The American School in Hong Kong is very advanced, so our son had no difficulty in settling into his California classroom when we returned. In fact, he was about six months ahead of the rest of his class." Cheri also returned to school when the Belchers resettled in the United States. Between the two Hong Kong assignments, she completed her undergraduate work and applied for entrance into law school. Again, her studies were interrupted by the prospect of the return to Hong Kong. "I never looked upon this as a sacrifice," she says. "Sacrifice implies that you are giving up something. I believe that I have gained through my opportunity to live in Hong Kong."



MEETING OUR GOALS SAFELY: Doug Sullivan, Linear Products Division manager, proudly accepts an engraved plaque from Warren Bowles, vice president - Industrial Relations, which recognized Linear's outstanding safety record of the past year. Each division annually sets goals to reduce its incidence of employee injury and those organizations that exceed objectives receive the president's award for safety. Doug accepted the plaque on behalf of the Division at a ceremony held in June. At the same time, Clay Wilson of the MOS Division accepted a similar award for that organization.

Microwire

Published for the Employees of the Fairchild Corporate Headquarters and Semiconductor Components Group — Mountain View/Palo Alto

September 1975

On Thursday, October 23, in the main dining room of the Cabana Hyatt House in Palo Alto which will be crowded to capacity, Georgia Washington will be honored as Fairchild's Distinguished Woman of the Year.

Every year for the three years of the program's existence, Fairchild has named one or more employees to receive this distinct honor. The annual Distinguished Women's program recognizes women living or working in San Mateo or Santa Clara

non-technical personnel involved in the industry in the basics of semiconductor technology. In a single year, Georgia has instructed up to 800 persons in classes at Fairchild and the San Jose Regional Vocation Center.

As training supervisor for the Bipolar/ECL Division, Georgia has been responsible for creating and managing training programs for operators

Woman of the Year

counties who have made significant contributions to their companies and their communities. The Program is conducted by the Girls' Club of the Mid-Peninsula with proceeds from the awards luncheon going to help support educational and recreational activities for young women in the two counties.

Georgia, training supervisor for the Bipolar/ECL Division, was selected as Fairchild's Distinguished Woman for 1975 based on her efforts at Fairchild and in the community.

Georgia, who joined Fairchild as an assembler 15 years ago, has been responsible for training virtually thousands of persons in semiconductor processing techniques in classes held at Fairchild and outside schools. In courses which she helped to create, she has been influential in encouraging many young persons to enter the semiconductor industry, in aiding others in making career changes, and has instructed

in that organization. As well as being a teacher, Georgia is a student. She is currently working toward a BS degree in management, attending school at night. She returned to the classroom as a student at the time her two eldest children entered college.

Georgia, along with other women representing other companies and community service organizations in San Mateo and Santa Clara counties, will be recognized for outstanding contributions to industry and society at the October luncheon.

Georgia Washington



Longo and Wells named group vice presidents

Organizational changes in two key product groups were announced September 11.

Thomas A. Longo, group vice president, will head the newly formed Memory and Logic Group, comprised of the Bipolar Memory, MOS Products and Digital Products divisions. He also has the charter to enter into end product areas utilizing Fairchild's memory and logic technology. Dr. Longo previously was vice president and general manager of the Integrated Circuits Group.

George Wells has been named group vice president of the Analog and Discrete Products Group. It will consist of the Linear Integrated Circuits Division, the Diode Division and the Transistor Division. Mr. Wells previously was vice president and general manager of the Discrete Products Group.

The Memory and Logic Group includes Fairchild's component assembly plants in Singapore and Jakarta, Indonesia, as well as domestic fabrication facilities for the respective divisions. The research and development laboratories, headed by James M. Early will continue to report to Dr. Longo.

The Linear Integrated Circuits and Automotive divisions were previously part of the Integrated Circuits Group, while the Diode and Transistor divisions comprised the Discrete Products Group.

The Quest for Power

Much like a general and his army in pursuit of deciding territory, Ed Browder and the staff of the Power Strategic Business Unit of the Discrete Products Group is in unrelenting quest of a deserved position in the market for power transistors.

In the power struggle over a large territory in this desirable product area, Fairchild has demonstrated admirable vigor and stamina in addressing its foe, today's top three suppliers of power transistors.

The campaign strategy for capturing a larger share of this market began to take form in June at the time the power section of the Transistor Division was spun off as a quasi-independent organization with the status of a Strategic Business Unit. This organization structure gives Power people relatively free license to control their own destiny. They prefer, however, to create their own destiny through an aggressive battle staged at the product design boards and in the production trenches. In the past year alone, Power has added 27 new products to its ammunition, more than tripling the Fairchild offering of these devices over 18 months ago.

The product-by-product combat waged with other semiconductor manufacturers, isn't simply muscle flexing. The SBU's strength is backed by a finely-tuned manufacturing machine that is on the alert to respond to virtually any demands power customers can make.

Power's transformation from its relatively complacent posture of a year ago to an aggressive combatant in its marketplace was triggered by the promised bounty of a rapidly growing market for these devices. Power transistors can be found in every electronic product from automobiles to computers. Where there is an integrated circuit, there is a power transistor flanking it. A single television set needs an average of 15 power devices in various wattages. It doesn't take a mathematician to figure out the potential income that awaits the company that can



POWER TO THE PEOPLE who deserve it. The management of the Fairchild Power SBU believe that they are deserving of a greater share of their market and they are out to get it. That's Ed Browder, Power SBU Manager, at left. At right, front to back are: Ron Friedenthal, Bob Austin, Jack Bradley, Finn Wilhelmsen and Ron Kovacs. Bill Carrico, marketing manager, is missing from this Power staff photo.

stake out a generous share of that domain. What it takes is marketing tactics similar to a battle plan. Fairchild hopes to outpace its competitors in the great power surge that is underway and it has the attack forces to realize its objec-

tives: the broadest power line in the industry, cost advantages in virtually every product area, and manufacturing capacity prepared to launch an offensive where ever there is a weak spot in a competitor's front line.

Throughout the current lull in the industry, the Power SBU has been turning its strategic plan into action. Designers have been dedicated to the drawing boards mapping out device plans and the roar of assembly equipment has reached the pitch of a fleet of tanks. The tough Power team is ready for attack. However, like any successful battle strategists, Power people are holding some of their tactics top secret, depending on the element of surprise to catch the enemy off guard.

They are, however, willing to talk about some of their tactical weapons: full production on 3" wafers, management by Fairchild veterans of five or more years, and continued investment in their bases of operation while others on the battlefield were withdrawing. Poised to pounce on every opportunity, Ed Browder reports that his troops will be in full movement beginning in October.

Edith Karush memorial scholarship established

Fairchild friends of Edith Karush have established a scholarship fund in her memory at Stanford University. The scholarship will be awarded to a student of the humanities. Edith, who died of cancer on August 29, requested that no memorial services be held for her. Edith received a PhD in Romance Languages from Stanford while working at Fairchild.

She joined the company in 1969 and her final position was as secretary in the Transistor Division industrial relations office. Tax-deductible contributions to the Edith Karush Memorial Scholarship Fund should be sent to Stanford University, Office of the General Secretary, 301 Encina Hall, Stanford, Ca. 94305.

Barney heads industry United Way drive for Mountain View

Roger Barney, director of personnel administration and security, has been appointed commerce and industry chairman for the Mountain View chapter of United Way of Santa Clara County.

Roger will be responsible for soliciting contributions from commercial and industrial companies in the Mountain View area to aid United Way with its annual fund-raising campaign which begins September 3.

Money collected during the fund-raising drive supports 69 human care agencies and additional services throughout Santa Clara County.

Global warehouses mark 3rd phase of industry development

Most Fairchild products, while still in their formative days, travel around the globe as part of their development. But, there is a plan afoot to put an end to a great deal of this international travel.

An example of the path a product follows might begin at the Healdsburg materials plant where it becomes a wafer. It might then move to the Digital Products plant at South Portland, Maine, for die fabrication and sort. Its next port-of-call would be Singapore where its leads are attached, it is mounted on a frame and packaged. Then the product makes a return trip to South Portland for testing, marking and warehousing to await a customer order from, perhaps, Scotland--demanding still another journey across an ocean.

Warren Davis, who is masterminding the plan to cut down the amount of travel a product must experience in its evolution from wafer to finished device, says that this was the logical and only practical way to handle semiconductor manufacture... until recently.

"The semiconductor industry, to date, has gone through two distinct manufacturing evolutions and is entering its third," Warren says. "First was the development of initial technology when everything that surrounded the manufacture of a device was accomplished close to the lab in which the product was created and under the direct supervision of engineers and scientists. The second phase, assembly away from development labs, began to occur when the technology was stabilized to the point that products could be transferred to remote locations for assembly. Fairchild's establishment of a facility in Hong Kong in 1962 marked the beginning of this phase. In short order, manufacturers throughout the industry followed Fairchild's lead in opening assembly plants abroad for their established product lines. However," Warren says, "they were just that--assembly plants. Manufacturers pulled their products back to the home fabrication facilities



Worldwide distribution system evolves on Warren Davis' black-board.

for final testing and warehousing.

"In the past few years, the employees at Fairchild assembly plants abroad have become as proficient at manufacturing, engineering, assembly and test as their counterparts in the United States. During the same period, many of the company's commodity products have stabilized and test demands have become relatively routine."

Marking the start of the third manufacturing phase in the semiconductor industry was Fairchild's recent opening of a test and finish facility in Singapore. Returning to the product path example, you will realize that this move cuts at least one journey out of a device's early life. Products assembled in Singapore will be tested and marked there. In addition, they will be warehoused in that city in a facility that is to be one of Fairchild's two major centers in its worldwide distribution program. The second center will be located in Hong Kong to benefit from the assembly and test capabilities of the Fairchild plants in Seoul, Korea as well as Hong Kong. That customer in Scotland who places an order through the European marketing organization will receive devices from the shelves in Singapore or Hong Kong. The Singapore center will house digital integrated circuits, while Hong Kong will act as the central distribution point for discrete devices.

Vital to the success of this new distribution concept is a computer communication system which will carry product messages from, for instance, Mountain View to Wiesbaden to Singapore, leaving adequate follow-up and billing paperwork along the way. "We are currently testing our

global communications lines to assure that our computers are speaking the same language and that all paperwork bases are covered before we switch over totally to the new worldwide distribution systems," Warren says.

The two major distribution centers augmented by much smaller warehouses strategically located in major market areas should more than halve the time it requires to fill a customer order and, at the same time, greatly reduce the inventory levels the company must maintain to assure satisfactory customer service. "The great benefit of large distribution centers serving worldwide markets," Warren states, "is that we need not maintain a deep inventory of every device type. Instead, we can sustain die banks which allow numerous different products to be assembled from the same die inventory."

"Fairchild has used this lull in the industry to create and refine its worldwide distribution system in order to be prepared for the phenomenal demand for semiconductor devices that is projected for the industry in 1976 and 1977 and beyond. Companies which are successful in adapting to the third evolution in the industry will be prepared to more fully satisfy the increased demand for product. Cost saving in transportation, inventories, and the elimination of redundancies in warehousing will be reflected in product price, improved customer service and profits, and will allow the capital tied up in unnecessary inventories and facilities to be put to better use, perhaps financing new product development. This, in turn, will begin a new product cycle. Most major new technologies, such as Fairchild's charge-coupled devices, remain close to the laboratory in which they are born for their first few years. They, too, will experience the history of some of Fairchild's more established devices that are now being assembled and tested abroad. As a result, new technology will take CCD's place in the laboratory in the never-ending wave of product development."

st for Power



THE PEOPLE who de-
The management of
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are deserving of a
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e out to get it.
rowder, Power SBU
left. At right,
ck are: Ron Frieden-
ustin, Jack Bradley,
msen and Ron Kovacs.
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from this Power

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What it takes is
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Friends of Edith
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tives: the broadest power
line in the industry, cost ad-
vantages in virtually every
product area, and manufactur-
ing capacity prepared to
launch an offensive where
ever there is a weak spot
in a competitor's front line.

Throughout the current
lull in the industry, the
Power SBU has been turning
its strategic plan into action.
Designers have been dedicated
to the drawing boards mapping
out device plans and the roar
of assembly equipment has
reached the pitch of a fleet
of tanks. The tough Power
team is ready for attack. How-
ever, like any successful bat-
tle strategists, Power people
are holding some of their
tactics top secret, depending
on the element of surprise to
catch the enemy off guard.

They are, however, willing
to talk about some of their
tactical weapons: full pro-
duction on 3" wafers, manage-
ment by Fairchild veterans of
five or more years, and con-
tinued investment in their
bases of operation while
others on the battlefield were
withdrawing. Poised to pounce
on every opportunity, Ed
Browder reports that his
troops will be in full movement
beginning in October.

Barney heads industry United Way drive for Mountain View

Roger Barney, director of
personnel administration and
security, has been appointed
commerce and industry chair-
man for the Mountain View
chapter of United Way of Santa
Clara County.

Roger will be responsible
for soliciting contributions
from commercial and industrial
companies in the Mountain View
area to aid United Way with
its annual fund-raising cam-
paign which begins September
3.

Money collected during the
fund-raising drive supports
69 human care agencies and
additional services throughout
Santa Clara County.

When Judy Signorino was an
accounting student at San Jose
State a little over seven years
ago, she remembers most of her
lessons centering around
idealized companies; unchanging
organizations which produced
X number of widgets a day, sold
X number of widgets a month
and the greatest challenge this
would present to an accountant
would be the neatness of in-
come-expense columns. "Truth-
fully," she says, "I did learn
a great deal of good solid
accounting theory in school,
but nothing...nothing prepared
me for the Fairchild experi-
ence."

Judy arrived at Fairchild
to interview for a job as an
assistant accountant. She
got the assignment and be-
gan a trip through the trials
and traumas of finance in a
company whose interests and
complexity tended to outgrow
any accounting system that was
superimposed on it. Her expos-
ure to finance at Fairchild
took her through cost account-
ing, profit planning, financial
analysis, product line financi-
al control and in April 1974,
to the assignment as the top
financial manager for the
Bipolar Memory Division.

When she graduated from
San Jose State, Judy had few
preconceptions of what industry
would be like and what her
career expectations should be.
Seven years later, she is able
to report that being in finance
at Fairchild has been more
exciting than she could have
ever imagined as a student and
her career progress has out-
stripped even the most ambi-
tious goals she might have
had.

"The professional devel-
opment I realized through
involvement in the dynamic
semiconductor industry could
not be reduced to a textbook,"
she believes. "It has been
a moving, growing experience
that hasn't remained static
long enough to document it for
use as a study guide."

Judy, at the rate of one
promotion every year for the
past three years, has been
handed increasingly responsi-
ble assignments within the
semiconductor finance opera-

tions. Her most recent pro-
motion, which occurred in Aug-
ust 1975, to controller for
Bipolar Memory, ECL and Linear
Products Division, places the
general financial management
of these large segments of
Fairchild business squarely
in her hands. Judy has be-
come acquainted, through previ-
ous assignments, with every
major task that will be part of
the job. "My new position does
not represent a radical new
job," she says. "It will
bring together all of my past
experience. My boss, Len
Murphy, has encouraged me to
take on more and more re-
sponsibility as soon as I
was capable."

The assignment of controller
is probably one of the most
delicate tasks in Fairchild
today. At a time when ideas
for new products and programs
outpace the organization's
resources to finance them, it is
the controller who must provide
the objective financial analysis
that aids in determining which
among the many projects pro-
posed represent the best use
of the organization's money.
One of the controller's respon-
sibilities is to evaluate pro-
posed expenditures and to assist
the other members of the manage-
ment team in understanding fully
the financial implications of
any project.

"When I was controller of
the Bipolar Division I dis-
covered that, at Fairchild,
the financial manager is not
simply a high level accountant,
he or she is a participative
member of management. I spend
as much time examining ideas
and proposals, as I devote to
maintaining financial records.
Our financial performance is
the one absolute measure of
our success as an organization,
so Bill Baker, general manager
of Bipolar, encouraged me to
conduct training for all
members of his staff to make
them aware of the influence
their organizations had on
the Division financial state-
ment."

Working with other managers,



Judy Signorino

Judy will be responsible for
forecasting sales and profits
for the Bipolar, ECL and Line-
ar product lines; analyzing
and controlling capital expen-
diture, budgets, spending, and
statements, and overseeing the
books and statements for the
two divisions. Asked whether
she'll develop an image as a
tight-fisted controller or a
more liberal manager, she
responded: "I'll be objective,
analytical, reasonable and
always keep my focus firmly
on the best long-term interests
of the divisions I serve."

Now, that's a woman in con-
trol.

to finished products.

Those figures are the production plan that will influence activity in small signal fabrication, assembly and test. Turned into action, the plan will move the necessary wafers into fabrication, the correct mix of circuits will be created to result in products that will match orders now in-house or those expected to arrive over the next few weeks. The wafers will be scribed, sorted, assembled, tested, stored and shipped. The plan that Judy holds in her hand determines the production activity for small signal devices at assembly plants in Mountain View, Hong Kong and Korea.

Judy has brought together all of the information that she has gathered from all small signal forecasting to create a master production plan that will fully utilize all available production capacity in an orderly fashion.

After only a month in her job as Production Control Manager of small signal wafer fabrication, Judy knows that she should savor her thoughtfully constructed plan for a few moments, because it is probably the last time she will see it in this state. New demands will come over the phone or across her desk in the next few hours that will force her to take another look at the way in which she has scheduled production. She will be asked to accommodate a rush order from a customer...or an unexpectedly high demand for a single product...or begin building another product in anticipation of an expected order. The figures on that chart will begin to move. Priorities will change. Products that would have headed for the inventory shelves will be displaced to make room for production to respond to a new order. "Flexibility," Judy says, "is probably the most necessary element in this job." These painstakingly constructed plans represents only a beginning.

Judy was well aware of the

demands of her new job before she was named Production Control Manager for small wafer fabrication. She has seen the Transistor Division production operation from every point of view since joining Fairchild more than nine years ago as an assembler. To Judy, those figures on that production plan represent tasks with which she is familiar. At one time or another, she has worked in virtually every assignment necessary to produce a transistor.

The few moments she spends reviewing the production plan is a rare period of quiet in her work day. "Though all of our plans are carefully plotted on paper," Judy says, "they are created in communication with people throughout our organization." At least three times each day, Judy makes the sprint from her office to some area of production to see her master plan brought to reality. She spends more time with people than paper in, as her title implies, factory planning for the production of small signal wafer fabrication.

Judy's rise from production operator to the person who maps out the plans which will determine the work priorities for hundreds of production operators came about because of her desire to learn everything about semiconductor manufacture. "Give me something more to do...something new," has been a constant request throughout her Fairchild career. As her responsibilities grew, her title changed. She moved from assembler, to programmer, to engineer, to business planner before assuming her current job on August 1.

When Judy was mapping out a career plan in junior college before joining Fairchild, she wanted to become a computer programmer. Her instructor, however, advised her to re-evaluate her study plan, because "women are not hired as programmers."

Obviously, Judy did not take the warnings about women's restricted roles in business seriously. If that instructor could see her today, he would witness a woman in control--Judy Stirton.



Judy Stirton

Judy Stirton pauses to review the neat, organized charts which represent the results of the past few hours of work by Production Control. Those figures describe the ingots, wafers and dice that will be required in the coming months for small signal transistors. The charts carefully trace the progress of numerous different devices produced by this organization as they evolve from silicon

Marine World's marvels entertained Fairchild picnickers



More than 5200 employees and members of their families looked, laughed, and relaxed at Marine World on Sunday, September 14... with one notable exception. Mike Wendt, engineer in MOS, worked throughout the day as guest performer in the park's water ski shows. Mike was a surprise addition to the Fairchild picnic, revealing a talent on water skis that left fellow employees gasping in amazement. Mike is a California State trick water ski champion and the skill that has earned his title made him a welcome addition to performances by Marine World's water ski professionals.

Fairchilders set their own pace at the park. Some employees and their families went on a

day-long, non-stop tour of Marine World attractions.

Energetic children roamed through the Park's exhibits and shows long after their exhausted parents had retired to the peaceful picnic green.

Though all available tickets for the event were sold out, sales went down to the wire with the final adult picnic tickets passing over the Credit Union counter just before 4 p.m. on the Friday preceding the event.

Almost everyone who wanted to attend the day at Marine World sponsored by the Recreation Council was able to purchase tickets for themselves and members of their family.



They took the trophies: Winning teams in the 1975 Summer Golf League were Fred Fernane and George Seltenrieck, first place; Mike McIntyre and George Wells, second; Ron Nakaguchi and Young Ha, third; and Murray Wilson and Jerry Tammi, fourth. The annual tournament was held at Spring Valley on August 23. More than 60 players were entered in the 1975 league. Watch bulletin boards for the first organization meeting for 1976 play.



HATS OFF TO BIPOLAR MEMORY TEST for that organization's sure-fire method to infuse some excitement into post-vacation days. Sandy Hinton, R&QA Inspector, has organized a series of contests to lend some lighter moments to this business of semiconductor manufacture. The first competition required contestants to create and wear the most outlandish hats they could imagine. With all the formality due a contest of this type, judging was held during the afternoon coffee break and

prizes went to the wearers of the largest, smallest, most original, funniest, most flamboyant, sexiest, cutest and most sophisticated head-gear. September's competition demanded equal creativity to be applied to tee-shirts. Home crafted insignia, messages and art work were emblazoned across backs and chests as contestants vied for the prizes in the contest. As the giggles and guffaws testified, "A lively contest does wonders for morale," Sandy says.



Fairchild scholarship applications being accepted for 1976

If you have a child in his or her final year of high school or in college who will not complete undergraduate studies in 1976, pick up an application for a Sherman Mills Fairchild scholarship award from your industrial relations manager.

Ten awards are made annually to children of Fairchild employees by the Fairchild Foundation to cover the cost of tuition, fees, room and board at the college or university of the student's choice.

The selection of award recipients is made by the Educational Testing Service of Princeton, New Jersey, based on the student's performance on Scholastic Aptitude tests, grades, extracurricular activities and potential as determined by the ETS committee.

Everyone has an opportunity to win these valuable scholarships. Don't let anything hold you back from encouraging your child to enter the evaluation.

Microwire

Published for the Employees of the Fairchild Corporate Headquarters and Semiconductor Components Group — Mountain View/Palo Alto

October 1975

Learning to read between the lines

More than 50 managers participated in an intensive introduction to corporate financial reporting in seminars held recently at the Career Center. The classes, led by Dr. George Parker, director of the Sloan Graduate Program at Stanford, took the managers through the labyrinth of corporate balance sheets.

Over three morning sessions, the managers examined the financial performance of five semiconductor companies to



determine their comparable economic position.

One manager who had little previous exposure to corporate finance, says the classes lifted much of the mystery that surrounds corporate financial management. "We

learned such things as what must be considered when an organization is contemplating major capital investment. We also discovered that the profit figure on a P&L statement doesn't tell the total story of company financial management."

The managers completed the classes armed with sufficient knowledge of corporate economics to conduct intelligent appraisals of any organization's financial posture.

The financial seminar is one of a number of programs sponsored by the Management Development Department aimed at developing the breadth of knowledge of Fairchild managers and potential managers. The finance seminar will be a continuing part of the management development program with seminars similar to the October classes staged as often as quarterly, if needed. Selection of participants in the management development seminar is made by division general managers in cooperation with industrial relations managers.

Finance is a lively subject when presented by entertaining professor George Parker.



3rd qtr. results

Fairchild on October 23 reported 1975 third quarter earnings of \$2,717,000, or 50 cents per share, on sales of \$71,453,000. In the comparable 1974 period the company earned \$4,818,000, or 93 cents per share, on sales of \$96,414,000.

In the second quarter of 1975 the company had income of \$3,287,000, or 61 cents per share, on sales of \$68,964,000. Earnings in the second quarter reflected a reduction of \$890,000, or 17 cents per share, in the company's provision for income taxes, due to the forgiveness of taxes on prior-year income earned by a foreign subsidiary.

Wilfred J. Corrigan, president and chief executive officer, said, "The third quarter provided increasing evidence that recovery from the prolonged recession is now underway. Sales improved modestly over the previous quarter and new orders continued to grow.

"The brighter outlook for business is broadly based. Geographically the United States has shown the greatest current advance, with moderate gains in Asia and Latin America. European business softened in the third quarter and no significant upturn is anticipated in the near future.

"Despite the effects of the recession, Fairchild during this period has completed a range of new product programs vital to the company's future. Total spending for research, development and engineering in the latest quarter amounted to \$10.4 million."

Xincom becomes part of Fairchild

Xincom Corporation of Chatsworth, California was riding high in 1974. Just four years old, the company had a line of memory test modules and systems that were receiving enthusiastic customer reception. It was operating from a smart, modern facility with available capacity for its anticipated expansion. Over the early hurdles of bringing a product concept into hardware and to the marketplace, the future potential for growth appeared unlimited.

The next major move for the young, ambitious organization was to obtain the financing needed for growth and to put a sales team to work to bring those great expectations to reality. The whims of an erratic economy were to thwart this potential, however.

Xincom's small covey of customers, in response to the economic downturn, withdrew or scaled down orders for Xincom products. Sources of potential financing, seeing the decline in orders, shied away from discussed plans for investment in the small company. Like so many other companies caught in an economic squeeze in this stage of development, bright futures turned uncertain as cautious customers asked for evidence of a solid customer base before offering the financing the company needed.

Xincom founder Brian Sear says the dilemma his company faced was one that many other young, under-financed electronics firms have confronted. Some no longer exist; others, like Xincom, made the moves that will allow them to realize the potential they contain.

A scientist-turned-entrepreneur, Brian had developed a product concept which was to have significant impact on the semiconductor memory test business. He, along with Mike Burd, left the security of regular paychecks in 1970 to begin Xincom in a single room which served as corporate headquarters, engineering lab and sales office. The efforts of the two men were backed by the financial support of

a small group of local investors. The company name indicated the organization's product interest: the "in" represents instrumentation, the "com" computer and the "x" the tie between the two. That was Xincom's product goal--to develop and manufacture semiconductor memory test instrumentation that would communicate directly with a computer. The key to Xincom's product design was a unique architectural approach that would allow customers to build, through selected modules, a test system that would address their specific needs.

As soon as the Xincom modules and systems appeared at industry trade shows, semiconductor memory manufacturers and users began to take note of Xincom's unprecedented ability to allow modular construction of memory test systems to address different needs without major design alterations. To the customer this meant lower cost test capability. The electronics industry demonstrated its confidence in Xincom's systems design with orders that grew from \$20,000 in 1971 to bookings of more than \$1.5 million in 1973, bringing Xincom management to the threshold of many decisions. To sustain this explosive growth rate, a sales force was needed. To finance the start-up of a marketing organization and accompanying needed production capacity to respond to additional orders, additional investment capital had to be obtained.

And that is when the

electronics industry and the world was rocked by recession. This was fateful timing for the young and hopeful company.

"The alternatives available to us," Brian says, "were to continually scale down our operations to match the dwindling orders for our products hoping to ride out the recession and virtually start again when the economy improved. Or, we could go in search of a larger, financially stable company to which our product line would represent an asset. We elected the second alternative because we had no concrete projection of when the economy would bottom out and knew we could not survive in our economic state over a lengthy period. Also, if we could become part of an established company serving our same

(cont'd Page 6)



Brian Sear

Xincom Division of Fairchild - Chatsworth, Ca.



Semiconductor engineers and trick water skiing demand similar talents

Balance, split-second timing, coordination and concentration--sound like the qualifications needed for a job in the semiconductor industry? These features apply equally well to the sport of trick water skiing. Unlike other forms of this water sport, trick skiing is a cult unto itself. "It's definitely not an exhibition sport unless the audience is familiar with the intricacies of trick ski maneuvers," states Mike Wendt, Bipolar engineer. And Mike should know. He is so proficient in the sport that he has, the last two years, claimed the first place in the California Trick Skiing State Tournaments. In the pressure-packed world of trick competition, performers are given two 20-second passes in which to execute intricate figures that demonstrate the skill of the skier. Standard competition rules call for an 180 degree turn beginning in a forward position and ending backwards; a 360 degree turn, one and one-half turns in a 540 degree arc and full turns to cover 720 degrees. In description, two turns on water skis sounds simple enough. However, the way in which Mike handles this trial is to begin skiing in a back position, head into the wake, jump, spin twice and land on one ski. The rapid action defies the ability of the uninitiated to follow his quick movements. "And this is why trick skiing is not an exhibition sport," he says. Audiences are usually made up of other trick skiers, potential trick skiers and

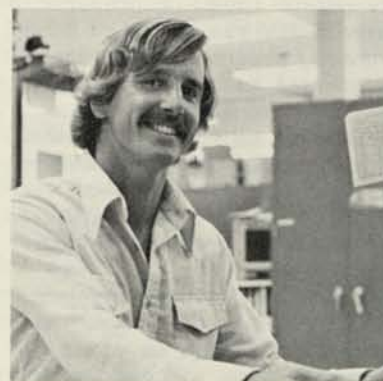
judges. Others can't keep pace with the action."

Fairchild employees and their families attempted to follow Mike's maneuvers at the company outing at Marine World in September as Mike made a guest appearance in the ski shows. "There are a few tricks that are crowd pleasers," Mike admits, "however, they are not the most demanding figures a trick skier is asked to execute." One such maneuver that draws applause is a 360 degree turn in the air over the boat wake.

Maintaining and improving his skill has found Mike on the Sacramento Delta evenings and weekends throughout the summer and early fall. Mike started water skiing while a teenager in Minocqua, Wisconsin, with a group of friends who specialized in exhibitions for tourists. After four years of fun, he decided to settle down to a serious pursuit. For the past three years he has devoted every available sunny hour to developing his skiing strategy. It is a lonely pursuit as most skiers prefer the free form fun of straightforward riding the waves instead of the disciplined motions of the trick skier. Because of the development of his skill on skies, Mike holds the lofty position of one of the world's ten top trick skiers. Before coming to California he was Wisconsin state trick champ in 1972 and 1973 and came into his own as a professional trick skier in the 1975 International California Cup when he claimed second place and \$600. Mike is equally at home on snow as water. He was a



Mike Wendt (left) on the waves at Marine World and (below) at the keyboard of a computer terminal.



free style finalist in a major competition last year at Squaw Valley and has claimed a first in ballet skiing in the Middle West.

Mike says the tragedy of trick skiing competition is that there are no second chances. A single fall eliminates any hope of a win in the fast-paced events.

As all performers, Mike is extremely tense before he begins a skiing trial or exhibition. "You have to be thinking every minute and an unfamiliar waterway or a distraction can throw you off," he reveals. The tension of performing for fellow employees at Marine World got him off to a rocky start and he fell on his first pass through Marine World's narrow ski channel. He regained his composure, however, and went on to perform in every show of the day without a single mishap.

The next challenge for a champ? "I will continue to practice," Mike says. "Enjoying the sport is an end in itself. It keeps me in shape, develops my coordination, balance, reaction time and stamina. These are skills which are demanded of a Fairchild Bipolar engineer."

nes part of Fairchild

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The company name
the organization's
terest: the "in"
instrumentation,
computer and the "x"
tween the two. That
's product goal--
and manufacture
tor memory test
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The key to Xincom's
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incom Division of Fairchild - Chatsworth, Ca.



electronics industry and the world was rocked by recession. This was fateful timing for the young and hopeful company.

"The alternatives available to us," Brian says, "were to continually scale down our operations to match the dwindling orders for our products hoping to ride out the recession and virtually start again when the economy improved. Or, we could go in search of a larger, financially stable company to which our product line would represent an asset. We elected the second alternative because we had no concrete projection of when the economy would bottom out and knew we could not survive in our economic state over a lengthy period. Also, if we could become part of an established company serving our same

(cont'd Page 6)



Brian Sear

Fairchild promotes digital watches with multi-media messages

If virtually everyone in every major population center throughout the United States doesn't know of the accuracy and beauty of the Fairchild line of digital watches by Christmas, he or she is not listening and looking.

The Consumer Products Group is using a multi-media approach to get its message across to the potential buyers throughout the United States. Sports fans heard the story of the Fairchild watches during the playoffs and World Series games of the Oakland As. Football fans from New York to San Francisco will hear about the Fairchild watches between play-by-play coverage of their favorite teams.

Major consumer publications such as Time, Sports Illustrated, Newsweek and Business Week will carry full color ads on the watches. Television viewers in New York, Los Angeles, San Francisco,

Denver and Indianapolis will see 30-second spot commercials describing the Fairchild watch line. Seven major game shows will carry commercials and contestants will have the opportunity to win the watches as prizes. Models of the watches will be featured on a Dinah Shore Show fashion special. Playboy's reader will be introduced to the Fairchild watch line through a full color ad; and you can't get away from the Fairchild watch message even in the air. Inflight magazines for several major U.S. airlines will carry the colorful watch ads. This broad coverage campaign is supplemented by one and two-page advertisements in major jewelry, consumer electronics and premium incentive trade publications.

You have to be a recluse to miss the Fairchild watch message.

An ad which appears in major incentive program publications. It is dazzling in full color--believe us.

A design of the times
by Fairchild



The Fairchild Timepiece is perhaps the most exquisite piece of jewelry ever to tell time. Here is a creation that is truly at home in the windows of any fine jewelry establishment. But it's more than that. That's why we think it's the ideal premium for even your most exclusive incentive program. The Fairchild Timepiece is wholly manufactured by Fairchild, one of the world's largest manufacturers of miniaturized electronics. So you can be sure of the expert technology and craftsmanship behind it. And since Fairchild is the leading supplier of integrated circuitry in the entire world, you can be confident that we'll DELIVER WHAT WE PROMISE, WHEN WE PROMISE. We back every timepiece with Fairchild's warranty, and we'll provide a full complement of promotional literature and outstanding advertising support. Nine beautiful digital timepieces, offering a full spectrum of styles and prices, make up the Fairchild jewelry timepiece collection. Each displays hours, minutes, seconds, month and date at the touch of one button; is accurate to within 60 seconds per year, is anti-magnetic, and has a history of proven durability. Reward your top performers with the top incentive from Fairchild. A DESIGN OF OUR TIMES.

Yes, the Fairchild Digital Timepiece can fit into any future program.

Get your own now! See PHIL CARMELIN, National Sales Manager, FAIRCHILD CORPORATION, 17000 N. 15th Avenue, P.O. Box 1000, DENVER, CO 80202.

Dick Martin named

to head Transistor Division

Dick Martin, formerly general manager, and divisional vice president for the Diode Division in San Rafael, has joined the Mountain View staff as general manager, divisional vice president for the Transistor Division. Dick is replaced at the Diode Division by Bill Kirkham who recently joined Fairchild from ITT.

Prior to managing the Diode Division, Dick was general manager of Fairchild's Hong Kong facility and before that general manager of the Fairchild plant in Mexico City.

Do your Christmas shopping at the Employees' Store

All models in the Fairchild line of digital watches will be available for employee purchase by the end of November. Reservations can be made for models which are not in stock in the Employees' Store by completing a reservation card. You will be notified as soon as the watch you want is available, or, if you have paid in advance, the watch will be mailed to you. Currently, the store has nine Fairchild watches available for immediate pickup; and eight models in the company's line of less costly promotional watches are available for immediate purchase and delivery.

Special flyers picturing the watches and listing their cost will be distributed at all plant locations.

Planning vital to comfortable retirement

Ann Martin has always been a planner.

Part of the reason she moved from assembler to her final job as Senior Specification Designer for the Transistor Division is attributed to her ability to plan ahead. "I always had a goal which I worked toward," she says. "The opportunities at Fairchild have been good, but it has been up to the individual to pursue them. I prepared myself for the next job I wanted, made sure everyone concerned knew that I sought advancement and always attempted to do a good job so that I would get recommendations from my supervisor."

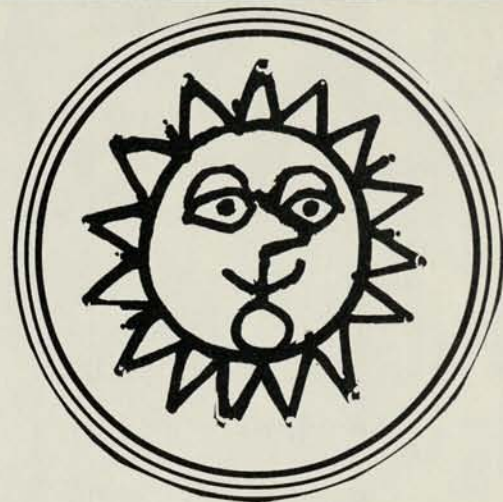
Ann's planning carried over to her preparation for retirement. Her final day of work was Friday, October 24. She elected to take an early retirement in order to have the time and energy she needs to fulfill her personal plans. Retirement wasn't a sudden decision for Ann; she had been preparing for it since before she joined Fairchild 16 years ago, and doesn't believe that she began her preparation a moment too soon.

"If you hope to have a comfortable retirement you have to begin financial planning while you are in your early 40s. Equally as

important, you have to begin psychological preparation. Work is a very important and fulfilling part of life; retirement should be equally meaningful and your time should be used well." For Ann, retirement means the opportunity for lengthy travel; something that was not possible while she was a member of the workaday world. She is planning her first trip to Europe and other excursions within the United States are part of her retirement schedule.

"If I find that I need more structure in my life, I can always become a volunteer for a community service agency," she says. "These options are open to me because I did plan early and carefully for the time when I would not work. I don't look upon retirement as an end; it is the beginning of a new adventure."

On her final day of work (below), Ann (right) received best wishes from: (left to right) Dave Reith, product marketing manager; Ursula DeVries, supervisor of specification control; Gordon Peterson, Discrete marketing manager; and Dick Martin, general manager and Transistor Division vice president.



Holidays ahead

Begin making plans for the holidays ahead. The balance of the 1975 holiday calendar is:

Thanksgiving Day, November 27—paid holiday;
November 28, Friday—paid holiday.

This year's Christmas schedule allows for a five-day break with:

Wednesday, December 24, Christmas Eve—paid holiday;
Thursday, December 25, Christmas Day—paid holiday;
Friday, December 26—unpaid shutdown day.

Employees who wish to use vacation or Paid Personal Absence time to receive pay for Friday, December 26, must make their request on the appropriate vacation or time card by December 10. If no request is received, you will not be paid for that day.

1976 Holiday Calendar

Thursday, New Year's Day, January 1—paid holiday;
Friday, January 2—paid holiday;
Good Friday, April 16—paid holiday;
Monday, Memorial Day, May 31—paid holiday;
Monday, July 5—paid holiday;
Labor Day, Monday, September 6—paid holiday;
Thursday, Thanksgiving Day, November 25—paid holiday;
Friday, November 26—paid holiday; Friday, Christmas Eve, December 24—paid holiday; and Friday, New Year's Eve, December 31—paid holiday. (This is a 1977 holiday because New Year's Day falls on a Saturday.)

Confused about a program or policy that concerns your job or benefits?

Talk with your supervisor or industrial relations manager. Current information on the administration of all Fairchild policies and programs is available in their offices.

Xincom (cont'd)

field we would have the benefits of that organization's sales force."

Xincom was assertive in its approach, contacting seven major electronics companies to which Xincom management believed they could bring something while obtaining the organization and financial stability the small Chatsworth, California, company required to realize its potential. All of the companies were interested and a few made firm offers to Xincom's stockholders. It was Fairchild's offer, however, that matched most closely the objectives of Xincom management and investors. "It was a perfect fit," Brian says. "We were known to Fairchild Systems Technology Division, our memory test systems broadened that organization's line, and Systems has the sales force that could, with little additional efforts, bring our products to the attention of a much broader group of customer."

So it was on September 17, that the Xincom Division of Fairchild Camera and Instrument Corporation came into being. Since the acquisition, few physical changes have occurred at the Xincom headquarters in Chatsworth, however, major attitudinal changes are evident. That future the small group of managers, engineers and assemblers envisioned for themselves and their organization has come back into focus. With the boost provided by Fairchild, aggressive marketing and product development plans have been revived and Xincom employees look toward the future with the assurance that they are backed by the solid financial, marketing and technical resources of their new parent company.



Ski Club prepared for snow

There's a purpose to the Ski Club's fall hustle. Its members want to get the organizational details out of the way before the first snow coats the Sierra slopes. In October, newly-named officers of the Club took over its management. They are: Dave O'Brien, President; Ray Ostrander, V.P.-Membership; Gus Voyk, V.P.-Cabin Arrangements; Gloria Kirby, Secretary; and Rich McCoy, Treasurer.

The Club's first meeting for the 1976-76 season will be Wednesday, November 12 at the Old Plantation, Sunnyvale at 7 p.m. The cabin will open Friday, December 5 and will be available to members and their guests throughout the ski season.

The Fairchild Ski Club was a co-sponsor of Nortic Day at Golden Gate park on November 2. Skiers receive a preview of ski fashions and equipment as well as a chance to win door prizes and participate in ski workshops.

In addition to the season-long skiing at North Tahoe resorts, the more adventurous Fairchild skiers can join other Club members on trips to major ski sites outside of California. A trip to Sun Valley is planned for the week of January 10 through 17. Cost is \$240 for Club members; \$255 for non-members. This price includes air and ground transportation, lodging and special prices on lift tickets. A trip to Aspen is planned for March 12-19. Prices will be announced well in advance of departure.

FEAA makes travel plans

The Fairchild Employees Activities Association, in cooperation with a local travel agency, is making plans for numerous trips which will offer entertaining cost savings to employees and members of their families. Initial trips covered in the FEAA travel program include excursions to nearby areas of interest such as a one-day tour of the Napa wine country.

Sportspersons will have the opportunity to help create weekend or week-long trips to places where they can pursue their favorite sport.

Air and sea travel to British Columbia, Acapulco, Mexico City, Mazatlan and Hawaii are also among the special excursions developed for the FEAA by experienced travel agents.

However, you will be able to shape your own dream vacation in cooperation with the FEAA by completing and returning a questionnaire that is being distributed in all Fairchild buildings.

Because of the benefits of group travel, trips organized through the FEAA can offer considerable savings over the costs available on similar travel to individuals. The FEAA program will contain complete tours as well as programs that will cover only transportation and lodging.

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