Tektronix: A great success story

By RICHARD KOE

Tektronix history "came alive" on March 13 at the Oregon Graduate Center when Dr. Marshall Lee, associate professor of history at Pacific University and author of a soon-to-be-published history of Tek, traced the first 10 years of the company before an attentive audience of almost 100 persons.

The talk was the third in a series of lectures on "Washington County's Perspective: History in Focus", sponsored by the Washington County Historical Society and Pacific University. Marshall's talk was titled "High-Tech History: A Local Perspective."

Jim Castles (Tek board member and retired vice president) introduced Marshall by calling attention to his work in building the corporate archives at Tek and the writing of the company's history. Marshall, a consultant in corporate records and archives, has worked on other corporate history projects with Standard Insurance Co. and Equitable Savings in Portland.

(A videotape of the lecture, produced by the Metro Area Communications Commission, will be shown on Storer Metro Cable, Channel 12, the week of March 30. For information, call 641-0218.)

Marshall's talk consisted of excerpts from the first five chapters of his book, starting from 1935, when Jack Murdock opened a radio and appliance store in Southeast Portland and Howard Vollum graduated from Reed College with a degree in physics, to 1957, when Tek's share of the oscilloscope market reached two thirds with sales of $22 million.

He touched on the environment in Portland in which Jack and Howard developed their values and beliefs, the state of electronics (radio) in the world and local area, the oscilloscope (oscillograph) and Howard's first scope.

"Howard built his first scope in 1934 which turned out to be markedly smaller than anything commercially

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Tekweek

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Second graders plant trees at Tek Wilsonville

Theresa Earle (Graphic Workstations Division), who has a daughter in the Cedarbrook second grade class, helps a student plant a tree.

By turning over the sod every five feet along the string, Lloyd Cook (Facilities) tries to get some order in the placement of trees. The occasion was a reforestation project at Tek's Wilsonville site March 13 with second graders from Cedarbrook school, West Linn, doing the planting. Seedling fir and spruce trees were donated by Reforestation International, and Frank Lockyear, president, supervised the project. The newly-planted trees are on a plot southwest of Building 63.

Plants re-certified in Wilsonville

The circuit board plant and the 4000 Series product plant of Graphic Workstations Division, Wilsonville, were recently re-certified as Class A MRP.

The circuit board plant got an A-plus rating for significant lead time reduction in addition to being 100 per cent on all other critieria. In the past year, they've reduced lead time from 13 to 8 days. They've also increased productivity 55 per cent and reduced inventory from $10 million to $5 million.

The product plant, with a service level of 99.5 per cent, has reduced lead time from six to four days, and has reduced inventory from $20 million to $12 million.□

Environmental Update

Underground storage tanks to be removed from Tek

Starting in late March, Facilities Support Services will remove a number of underground storage tanks from Tektronix property. These underground tanks have been used to store gasoline, diesel fuel, and solvents.

Recently, attention has been focused on underground storage tanks. As a result of this heightened interest, Tektronix has re-evaluated its continued need for underground tanks and assessed ways to improve chemical storage, which has led to this removal program.

Most of the tanks will not be replaced because they are no longer needed. Instead of storing fuel on site, fuel may be purchased directly from distributors. Emergency generators may be powered by natural gas. Some tanks will be replaced by more advanced containers, such as double-lined underground tanks with leak detectors.

After removal, the tanks will be drained, vacuumed, and made inert. Then the tanks will be transported to an authorized disposal site where they will be melted down for recycling.□

In this issue

Coming July 4th:

A time to celebrate!

Tekweek (53-078)

TEKTRONIX, INC.
P.O. Box 500
Beaverton, OR 97077
U.S.A.

Tektronix®
COMMITTED TO EXCELLENCE

Newsmakers

Shelli Spidal, daughter of **Raedene** (LID High Frequency Component Development) and **Norm** (M&CC Raw Materials Warehouse), and granddaughter of **June Cannon** (retired employee), has been named to the Oregon high school all-star soccer team which will travel to China over spring break. Shelli is a member of the Forest Grove High School soccer team and plays midfield. The team leaves March 21 on the 10-day trip, sponsored by the International Sports Exchange, with games against Chinese teams of similar skill levels. Stops will also be made in Japan and South Korea.□

Bill Luce (PID Flow Solder, C1) will be master of ceremonies and play the banjo at the seventh annual Rose City Banjoliers cabaret show and sing-a-long on Saturday, March 22, 8 p.m.–12 midnight in St. Ignatius Parish Hall, S.E. 43rd Ave. and Powell Blvd., Portland. His wife, **Pat** (Employee Benefits), will be in the singing and dancing group and also play the washboard. Tickets are $5 (donation) available at the door or from Bill, 253-5277, and Pat, 627-8034. This year's show theme is "Do You Remember?".□

Employees recognize Dave Coreson

When Engineering Computing Systems ceased operations at Wilsonville several months ago, Dave Coreson, who was ECS Manufacturing manager, moved on to George Rhine's staff. But Teks who had worked under Dave's guidance since he started the group three years ago didn't want him to leave unrecognized. Jim Yeager (Senior Manufacturing Engineer, 6000 Series) left, on behalf of the group presented Dave a "Class A" Manufacturing Manager plaque, along with a certificate signed by 65 employees in appreciation of his management style.

Statistics

Births

Rachel Louise, 7 lbs 4 ozs, to **Connie** and **Richard Rodgers** (IDG Terminal GCP IBM Coax Engineering), on February 9.

Megan Allane, 7 lbs 5 ozs, to **Cecelia** (Field Administration) and **Frank McElheran,** on March 9.

Anniversaries

Gary Neher (C1 Operations T&O) and **Lawrence Lowe** (C1 Operations) will celebrate their 20th anniversary with Tek today, March 21, 2 p.m., in Building 45 cafeteria. For more information, call Mary Flanagan, 627-1004.

Jim Smiley (Environmental Lab) will celebrate his 25th anniversary with Tek on Monday, March 24, 2:30 p.m., in Building 50 cafeteria.

Roger Holm (CDG Industrial Engineering) will celebrate his 20th anniversary with Tek on March 26, 2 p.m., in the Building 78 cafeteria. For information, call 627-5211.

Deaths

Roy Gilliam (retiree), died March 11, 1986, from heart failure after a long illness. He retired from Tek in September, 1982. Roy is survived by his wife **Susie** (400 Series).

Virginia West (retiree), died March 11, 1986. She started at Tek in 1979 and retired in 1981. Virginia last worked for Wade Trine as an inspector, before she retired due to a disability. She is survived by her husband, Bennie.

Thank You

Thanks to each of you who attended my 10–year anniversary party. I was very surprised and happy to see everyone. All of you helped to make my day really special. I have enjoyed working with all of you very much. **Carol Lydell**

I appreciate your thoughtful words, the donations, cards and plants following the loss of my mother. Thank you all very much. **Fred Hughes**

Image, style EISA topics

"Image, Charisma and Self Projection" is the program theme for the Electronics Industry Secretaries Association (EISA) dinner meeting on Tuesday, March 25, at the Valley Conference Center, Conference Room, 9368 SW Beaverton-Hillsdale Highway.

Dr. Alberto Cereghino, speech and drama voice coach and owner of Alberto Cereghino Seminars will discuss communications, verbal and non-verbal.

Social hour begins at 5:15 p.m., followed by dinner at 6 p.m., and program at 7 p.m.

Send reservations indicating menu selection (Carbonade of beef, chicken Gascony, or vegetable plate, $12; non-members add $3), to Ronnie Augustynovich, 50-477, by 4 p.m., Friday, March 21.□

Benefits

ESPP announces 610 share price

Employee Share Purchase Plan share price for Accounting Period 610 is as follows:

Purchase date	3-05-86
80% Employee cost	$48.60
20% Discount	12.15
100% Price	60.75

The Employee Share Purchase Plan sets the price the last Wednesday of the accounting period. Participants who have accumulated at least the 80 per cent cost in their ESPP account will automatically purchase shares. The shares are posted to each participant's account within two weeks of the purchase date.□

Get claim forms for reimbursement

Claim forms for the Reimbursement Accounts under BeneChoice are now available from stock, with a limit of 50 forms per request. The part numbers are:

001-0676-00 Medical Care Reimbursement account and

001-0677-00 Dependent Care Reimbursement account.

Employees should complete the appropriate claim form each time a claim is filed for reimbursement.

A total of 2,468 employees enrolled for the Medical Care account and 507 for the Dependent Care account.□

Education highlights

Software metrics by video

OCATE and OSU Department of Computer Science will offer CS 569, Software Complexity Metrics, on site during spring term via one-way video, two-way audio from Corvallis.

Software complexity metrics measure ease or difficulty a programmer experiences when testing or maintaining a program. Curtis Cook, OSU professor, will examine software complexity metrics and metric uses. Warren Harrison, Ph.D., computer science in the software metrics area, will be Tek facilitator.

Tuition is $300 and estimated book cost, $26.95. The course will be held Tuesday and Thursdays, 4:30 p.m., April 1–June 12.

To register, return a TEP registration card and OCATE registration form to Laura Allen (Corporate Education), Y6-047. For information, 627-8471.□

College advisors scheduled at Tek

College representatives will visit Tek Beaverton in April to counsel with students. They are:

Bob Garrison (PCC General Counseling), Wednesday, April 2, afternoon. For appointment, call Maycell Nuttelman (PCC On-Site Secretary), 627-8473 mornings.

Jim Seal (University of Portland Business School), Friday, April 18. For appointment, call Mary Bagley (Corporate Education), 627-8470.□

Tekweek

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Big Brother program detailed

Information on the Big Brother and Big Sister Volunteer Program will be available at a brown bag lunch meeting on Friday, March 28, 10:30 a.m.–1 p.m., in Wilsonville Building 60, room S1. Walk in at any time.

The job of a big brother or big sister is to bridge the gap between a child's loneliness and a feeling of self-worth.

For more information, call Bill Kephart, 685-2043.□

40th birthday celebration

World class bicycle race set

One of the hottest events of Tek's July 4 party is a world class bicycle race on the Beaverton campus. It's tentatively scheduled to get under way at 2 p.m.

The 40-mile race is sanctioned by the U.S. Cycling Federation.

It will serve as a tuneup for the World Cup finals in Colorado later this year. It's expected to draw some 175 racers, using $2,000 bikes, and going through the closed course at speeds of up to 30 miles per hour.

The event will also feature "races within a race" in which riders compete for lap prize money, announced on the spot, with no advance notice. As the announcement is made, racers make a dash to the finish line, and the first competitor across the line wins a special cash bonus.

Thousands of spectators are expected to be on hand for the race and for the many other events scheduled for that day to mark Tek's 40th birthday. Among the other events: a 10K run in the morning, live bands (including the Oregon Pops Orchestra), local talent, family-oriented fun and games, interdivisional competition, and a spectacular fireworks show.

The celebration is still in need of volunteers (see coupon).□

Count me in as a volunteer for Tek's 40th anniversary celebration July 4. I'm interested in helping with:

_____ **10K Run**
_____ **Bike race**
_____ **Fun and games**
_____ **Safety**
_____ **Food**
_____ **Entertainment**
_____ **Stage Construction**
_____ **Other** _____

Name _____ **Mail Stop** _____

Phone _____

Clip and return to Tek's 40th, m.s. Y3-401. For information: 643-8256.

Area Rep Report

Work options offer flexibility

Gayle Whitehurst, Group Manager
Human Resources, Corporate Staff

I'm going to talk about three areas of changing work and alternatives at Tektronix. They are: job-sharing, flexible work hours, and the people involvement kinds of things that are being done within my own department to help meet the needs of our customers.

Job Sharing

A job-share is two people sharing one job. That means they are permanent part-time employees. In my department the secretary position is shared by Brenda Guthmuller and Vicki Loyacano. As individuals they need to make some sacrifices in order to have the benefits that the job-share provides.

One of the things that is important to me as a manager of a job-share is I need to have the position viewed as one position even though it is shared by two. I need to ensure that the two workers have good communication between them. In other words I don't want to have to go to either one of them to talk about something that wasn't on their shift. They work really hard to make sure they have a good communication process to ensure that if I went to one of them, or if one of our customers went to one of them, that either could answer the question.

They have a lot of notes that go back and forth. They have a file set up on their desk where they categorize what they do each day. Then Brenda can pull out a file that Vicki was working on yesterday and know exactly where she left off.

Each is able to focus on her own specific projects while helping the other. Each is aware of what the other is doing. While each has her own special projects they at the same time take care of the daily on-going projects.

There are some real advantages to Tektronix, to the employees and to me as a manager having a job-share. One, I strongly believe that the productivity of the group is increased. I have two people who are always fresh and alert. They don't get as tired by the end of the day as some of us who are putting in eight or nine hours do. Each of them knows they have a "good thing going" and they do everything they can to ensure that the job-share can continue. So, they continually help each other and reinforce each other. They cover each other when they are sick. They cover each other for vacation. I always have someone there that is trained and knows what is happening in the department and can cover immediately in case of emergency.

Another advantage is quality. Brenda and Vicki constantly check each other's work, just by the nature of being involved, and they don't have as much of a problem with accuracy as some of us who are working alone.

Also they have the opportunity to constantly share ideas. If one has a problem, you have two people who look at that job as a single job and two people who can brainstorm on how they can better get to a solution.

When someone comes to work in my department I want them to have fun—and they do. They're able to pursue their personal needs and desires and at the same time have fun with their job.

Another thing is the flexibility of the work hour and the work day. They can work longer hours, it doesn't cost the company extra money because we don't have the overtime expense if they haven't worked over 8 hours in a single day.

An example: when we went through the BeneChoice recently we needed to input more than 1200 forms into the HRIS system. Vicki was able to stay later at night and do that in addition to her four hours during the day and Brenda was able to come in early in the mornings. The potential was to have a twelve hour day put in but each individual only put in six hours. They don't get as tired or so bored sitting there staring at the terminal all day, and the company didn't have to pay the premium overtime for that extra four hours work.

A couple of disadvantages are: I have to always remember that if I tell one of them something I need to remember to tell both or ensure that the

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Motivation and communication

Job sharing: a 'good deal' for everyone

By CAROL KOVAL

Motivation, lots of communication, and reams of note paper are key parts of a successful job-share.

That's what Brenda Guthmuller and Vicki Loyacano (Corporate Staff Personnel) say. And they should know—they've been sharing the secretary job in Gayle Whitehurst's (Group HR manager for the Corporate Staff) area for the past three years.

It all started when Brenda, who was working full-time for Gayle, decided she wanted to work part-time and spend more time with her infant daughter, Elizabeth.

Brenda approached Gayle and her manager, John Heilman, told them how she felt and suggested changing her job to a job-share. Gayle and John agreed to the idea and put the paperwork in process to have the position approved and the Help Wanted Request cut.

Vicki was working in Ampac Operations but was interested in a job-share so she could return to school full-time in pursuit of a Bachelor of Science in Business Administration. When she saw the HWR in the Job Transfer Opportunity paper, she knew the job was for her. She applied, went through the interview process (both Gayle and Brenda interviewed her) and was hired. From there it's a major success story.

Motivation is a key reason job-sharing works for Brenda and Vicki.

"We have to be on the same side, and we have to want each other to succeed," said Brenda.

"If Brenda is successful, I am successful," added Vicki. That motivates them to work hard to guarantee the team's success.

"Another reason it works for us is that we tell each other **everything,"** added Brenda. "We write quick little notes on everything. And we route everything to each other."

"I'm always writing Brenda notes," said Vicki. "At least five or six a day."

The job is split into two four-hour shifts. Brenda works mornings and Vicki afternoons. They meet when necessary—maybe every two weeks or so, if only for a couple of minutes. They split up projects to take advantage of their individual talents, but make sure that the daily routine can be picked up by either one so no one in their group ever has to wait for one or the other.

"We like each other a lot," said Brenda. "I interviewed Vicki during the hiring process to make sure we could get along and talk well. If we didn't like each other and communicate so well we wouldn't be successful."

More and more surveys and articles are being published reflecting employees' and industry leaders' concern about child-raising in a time when increasing numbers of families must have both parents work just to make ends meet.

Industry is meeting this concern, in many cases, with flex-time, flex-place, day care facilities on campus, dependent care reimbursement accounts, and job-sharing so parents can spend some time at home with young children and still have a career.

At Tektronix job mobility is limited and on-the-job educational opportunities are rare. There aren't the manager training programs, fast promotions and on-the-job training programs which helped so many up the career ladder in the 60's and 70's. That makes it extremely important to be involved in innovative ways for employees to move ahead.

Brenda Guthmuller (left) and Vicki Loyacano are a key reason job-sharing works in Corporate Staff Personnel for Gayle Whitehurst (standing), Group Human Resources manager.

Both women are pleased that Tek is open to such things as job-sharing. Job-sharing gives them the flexibility to live their lives the way they want. Vicki has the opportunity to take advantage of Tek resources to gain the credentials and education needed to further her Tek career.

"This job has enabled me to return to school full-time while maintaining exposure to the business world and gaining experience in Human Resources," said Vicki.

"I wouldn't be able to live the way I want without this," echoed Brenda. "I was apprehensive about having children because I thought I wouldn't be able to spend any time with them. This job-share has made it possible for me to spend half-days with my daughter, which is very important to both of us."

It has also enabled Brenda to spend more time pursuing a singing career. She has a Bachelor of Music from Johns Hopkins University, Baltimore.

Tek is also getting a "good deal" from Brenda and Vicki job-sharing. "The company has an investment in us and we want to pay it back double," they said. The duo believes they are more efficient, work faster and smarter sharing the job. And that benefits Tek.

"We check each other, and that makes us more efficient, and much more accurate than if one person was doing the job," said Brenda. "And Tek has two people adding value, but is only paying the salary of one."

Brenda and Vicki work so well as a team that many people are unaware they job-share. "A few weeks ago we got a letter addressed to Vicki Guthmuller," said Vicki. "I'm sure a lot of people think we're one person."

That doesn't bother them. They're a team, they're successful, and their group is successful. That all adds up to the ultimate goal: A group of highly successful people, pulling together to make Tek a winner.□

Area Rep Report

Continued on page 3

other one does. For the most part they take care of that but once in a while one of them will not hear about something.

There are two people in the job so it does add an extra person to the Tektronix payroll, increasing the overhead and the burden as far as benefits go. The person is going from a permanent full-time status to a permanent part-time status and therefore a lot of their benefits are pro-rated. Their medical and dental are at full benefit but their life insurance, LOS, vacation, sick time, are all pro-rated on their work hour base.

So if you are interested in working part-time, check into it real thoroughly to see how it affects your overall benefits.

The standards and expectations are the same for both people in the job-share. The only place that they are different is in their performance plan. Each of them has certain projects that they work on so they're a little different there. In addition, the education or future development potential is different for each.

As a manager it take extra time at focal point to do two performance reviews and performance plans. Other than that each of them is a real important part of the department. It's fun when Vicki comes in at 1 o'clock, we joke about the shift changing. She's enthusiastic and ready to start the day new.

We've had the job-share position for 2½ years. We feel strongly that we've been able to fill our customer needs which is very important, as well as fill the needs of the individual employee. As a department we feel that we've really benefited from that.

Flex-Hours

Flex hours are defined in a variety of ways and not all departments are able to implement them. Some alternatives would be four-day work weeks, 10-hour days, 3 day 12-hour work weeks, or flexible starting times. Those can be positive and negative.

To work a flex-time schedule you first must have management approval and support. Not all areas are able to implement these kinds of programs based on needs of the organization. An example: When I was in production I had to be at work at 6:30 a.m. to relieve the graveyard person on a machine. That machine had to be kept running. I didn't have the flexibility to not be at work at 6:30 a.m.

Flex-hours have been implemented in some areas of Tek and in some of those areas it has been successful. In other areas, however, the employees tended to settle back into routine start and stop times.

Tektronix has tried shorter work weeks in some areas. We found that although people really liked the longer weekends there were some disadvantages. People felt they were more tired because of the longer days and it took longer to recover during their days off. Others felt they became bored being home for a long time, so they started spending money. It was expensive for the company because the company had to pay the premium overtime for anything over eight-hours.

Each option has positives and negatives. I suggest you research each option thoroughly and then talk with your manager if you feel one of the alternatives would apply to your work.

People Involvement

As we move towards a People Involvement kind of organization we have realized the need to move from the specialist to the generalist. My group now focuses more on the work that needs to be done to accomplish the needs of the customer rather than on specific skill areas.

Three people on my staff came to the department as specialists—Paul Oler in Training and Development, Terri Timberman in Staffing and Employee Relations and Bill Hiatt in Compensation. As they began to cross train and help each other they began to grow, develop and increase their own skill levels. And, they had fun.

Recently our group was expanded to include Staffing. We will begin to include them in our cross training efforts also.

Our area is very open so that we can share ideas, concerns and problems, and then help each other to new solutions. We will often scoot our chairs into a circle to discuss a problem or help someone to a solution. With all of this each employee becomes more of a value to the department and to Tektronix. As a team we all work to the end result—what do we need to do to accomplish the results for the customer.

I think almost everyone feels the future opportunities will be limited. But, there will be opportunities. You need to be prepared for them when they happen. By increasing your knowledge, skills and abilities now you'll be prepared to meet the challenges of the future. Your work will be more exciting, challenging and rewarding. I strongly believe that the willingness of the individual to be flexible will be directly related to their ability to earn money in the future.

Another area I want to address is how my job as a manager of this group has changed. I no longer control, direct or assign like I used to. I no longer manage five people. Now I manage a team. I find I facilitate, coordinate, coach, support and delegate more.

I need to take the back seat and be there when my team needs me and be out of their way the rest of the time. I need to let them learn, experience and try new things. If they need the support I am there to help.

It's a different kind of management. I let them know the expected end result and then turn them loose.

Listening is important also. If one of my employees comes to me I need to be careful not to jump in too quickly. I need to let them have a chance to learn from their mistakes and experience the sense of accomplishment from meeting a goal, then recognize them for their achievement.

Recognition is important to each of us. It doesn't take long to say 'you done good' or thank you. As individuals the more positive strokes we receive the more we want to continue to take on the challenges and opportunities that face us.□

Gayle Whitehurst, Group Manager, Human Resources, Corporate Staff

Technology, competition force changes

Tektronix reflects new nature of work

Eddie Ward, Director
Corporate Development and
Personnel Relations

Change. We hear a lot about it at Tektronix today. In fact each of us has personally been impacted by one or more of the many changes that have occurred at Tek in the past few years. The purpose of this talk is to help explain some of the forces causing these changes and the implications for each of us in response to them. To understand these forces, however, requires some understanding of the context they operate in. And to understand the context accurately we must go back to the beginning.

For the first 25 years of its life Tek operated in a relatively predictable and sheltered kind of environment. Economic growth in the United States, and the world, was relatively stable. The electronic markets improved each year, and the competitive environment was significantly different than it is today.

Starting in the early 70's this pattern began to change. Tektronix began a period of significant and dynamic change.

In the early part of the 70's Tek was a $160 million company, with 10,000 employees. Ten years later we were a $1.3 billion company, with 25,000 employees.

We also diversified during this period. In the early 70's we were primarily a one product company. We made the best oscilloscopes in the world. Today we market 800 products with a variety of different thrusts.

We also decentralized during the 70's and early 80's. New technologies and new markets became very important to us, and new and more aggressive competitors entered the marketplace.

So we found ourselves in the early part of the 80's as an organization struggling to adapt to the changes that had occurred. The economy was growing very slowly compared to the first 25 years of our history and profitability had deteriorated significantly. Most important, the needs of our customers had changed. Our response in products and services as an organization had to change as well.

So we find ourselves in 1986 in a world of change. For Tek four of the most significant forces for change are: rapid technology change, slow economic growth, increased global competition and demographic shifts.

Rapid technology change

In the electronics business people have been accustomed to change for a long time. It is the nature of the world that we live in. But people who look closely at technology change are predicting that the volume of change we will see in the future is significantly greater than the volume of change we've seen in the past.

One cause is the blurring of boundaries from industry to industry. Somebody in one industry develops something peculiar to that industry and someone in another industry decides to try it in theirs. Velcro is a good example of that. It was originally designed for use by NASA, but is now common in several industries.

The traditional mass production orientation in the United States, and here at Tektronix, has declined as a result of this force. Large centralized manufacturing is giving way to the smaller more flexible kinds of manufacturing capabilities that can respond to the technology changes which are producing more products more rapidly than in the past.

We've also seen increasing software content in almost everything that is built today. Most of our products are very software dependent. We have over 2000 engineers at Tek and more than half of them are software related. The reality is that as our customer needs have changed and the demand for software has increased, we have responded.

The changes have caused us to focus on the need for early profitability. Since the technology is changing so rapidly the products are not going to last as long in the marketplace so it's increasingly important to be profitable sooner. To do that we recognize that we have to get to the marketplace faster than we did in the past. In 1980 the average new product introduction was somewhere between three and five years. Our objective now is 18 months, and we are trying to reduce that, through various initiatives, by 50 per cent over the next three years. Many of our competitors are already working on standards of 1 year or less. We have examples here in Tek of 12 months and even as short as 6 months from the time an idea is conceptualized and defined to the time it can be delivered in the form of a product to the customer. We recognize that products are not going to last as long as they did in the past, that some new technology is going to come along and replace them.

Slow economic growth

If you combine the rapid technology changes with slow economic growth you get an increasingly more complex equation to deal with.

For the first 25 years of Tek's history the economy grew pretty regularly and we were used to stable growth in our economic cycle.

What we're seeing now, particularly in the last five to ten years is a much flatter, or at best, a far slower growth than in the past. No longer can we expect the three to four per cent growth; it's more like two to three per cent. And the economic cycle has become more volatile.

We are challenged by the economies of the Pacific Rim which are growing at 4-7 per cent on an annual basis. The implications for that kind of growth for Tektronix is increased pressures on our products, and increased pressures for profitability. We have to be careful about our investing because in a slower growth environment it takes longer to recover from mistakes than in a faster growth environment.

That has caused a lot of energy to be focused on the term "Value Added"—adding more value to the product that you provide to the customer. This really forces attention on the profitability issues for the company. It requires all of us to get smarter about the economics of our businesses.

Area Rep Report

Increased global competition

If we compound the above forces with the third force, increased global competition, we find ourselves in an even deeper mire.

Most of Tek's markets have become global markets. They are no longer national markets. Some people suggest one of the reasons that markets and industries have become global is because of labor rates. A dollar's worth of labor in the United States goes for 44 cents in Japan and even less in Mexico (22¢) and South Korea (11¢). I don't think that is the only reason.

There are other issues that impact this increased global competition. Chrysler recently announced an inventory turn of 11, which is substantial for the automobile industry in the U.S. Toyota's inventory turns, however, are 86.

That isn't labor; it's a way of doing business. It's a way of approaching the basic task of getting the work done.

We have learned some bitter lessons by observing some of our competitors in the marketplace. The Japanese have been particularly good teachers for some of those lessons. Many of us can remember when "Made in Japan" was a joke. Not many people laugh at those words anymore. A good example is the automobile industry. When the Japanese first began to make automobiles, their automobiles were considered "junk". But while they were making that "junk" they were establishing the basic infrastructure of doing business on a global basis. They were establishing the financial networks, manufacturing presence, distribution techniques, and engineering know-how to build automobiles. As they grew, learned and developed they stopped making "junk", and, all of a sudden, they were making very good small cars. Before long they were making very good medium sized cars. Then very good large automobiles. That lesson has been repeated over and over again and we are seeing that occur right now in oscilloscopes.

Right now the Japanese are impressively taking over the lower end of the oscilloscope market. We are very rapidly responding by learning how to make what we call low end oscilloscopes.

To be successful in this competitive world requires a real sensitivity to customers, a focus on long-term customer relationships. To do that you need lean, tough, responsive organizations that can adjust to technology, economic and competitive changes that reshape the marketplace.

One of the best ways of doing that is through decentralized structure. Our divisionalized organization structure is designed to provide the small entrepreneurial initiative centers that can respond to the market niches we have chosen to defend without requiring the entire organization to change its structure.

Demographic shifts

The fourth major force is the demographic shifts that are occuring in this rapidly changing world. Not only are we finding increasing numbers of women and minorities entering the major professions (an ever increasing percentage of the graduating computer science and EE engineers will be women), but also we have, for the first time in most of our lives, an aging workforce. The workforce is getting older because there aren't as many babies being born now as there were when most of us started working. Birth rates, in fact, have slowed down in many countries of the world. As the birthrate declines there is fierce competition for quality workers.

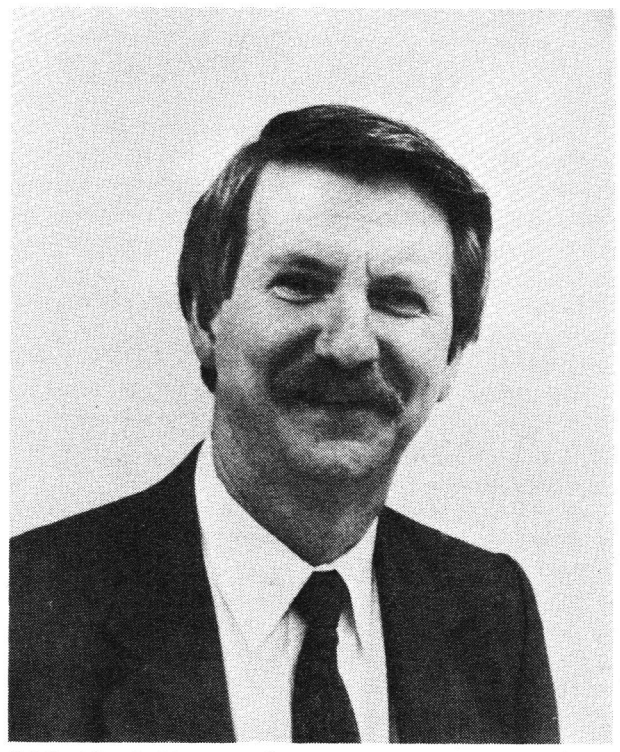
We've had a good model of that in California's Silicon Valley for a number of years and that kind of model is emerging here in the Silicon Rain Forest of Oregon. We have 250 or so electronics companies in the Northwest, and there's a lot of competition for quality workers. There is no reason to believe that the pressure will not continue to increase.

This may seem like a gloom and doom picture but we do have strength at Tektronix that we bring to this battle. We're not without assets.

When I look at what made Tektronix great there is only one answer for me—the collective potential of the human being. Tek has always believed in people. And that belief has made us strong. Today that basic belief takes many forms. It is called People Involvement or High Performance High Commitment, among other things. But it is the same basic belief that Tektronix was founded on.

Our challenge today is one of removing some of the barriers to accessing what is inside each of us. These barriers have grown up with Tektronix and removing them will not be easy. It will require changing some of the ways we think about work.

For example, in the next three to ten years I believe we will see the word "job" disappear, to be replaced by the word "work." After all work is what we're here to do. Expressions like 'It's not in my job description' will also disappear. When the technology is changing, the economy is not growing very fast, and competitors are snapping at our heels, a variety of responses are required to remain viable in the marketplace.



Eddie Ward, Director, Corporate Development and Personnel Relations

Some good news is that Tek is going back to some extent to the basic principles toward work that this company was built on. Those principles focus on the basic integrity and dignity of people. People are the magic—they really are what made Tektronix great. It is the magic that is contained in each individual person. Our challenge as a corporation is to fully utilize that magic, to once again move back to a simpler orientation to work.

To do that effectively as an organization we've got to increase both the speed and the effectiveness of our ability to adapt to change. We've got to do it better and faster than our competitors. Every one of us has to be more alert to the signals of change. We cannot be alert to the signals of change without good information and no one individual can have all of the information that is necessary. That requires us to network all of our information together, to pool it, to work together effectively and collaboratively in real time to respond more efficiently and effectively than our competitors do. To do that I think each of us has to begin to understand the end market result of what we're here to do.

Learn what happens with the product or service that you provide or produce. What is it designed to do? And, are you doing your contribution to that end result in the most effective way that it can be done, in the most efficient way that it can be done, and in the most cost-conscious way?

We have to do all of this without compromising any of the quality standards that made us successful. We have to do this with flexibility. And remember that no matter how much work you put into gathering information and planning for the future, things are going to happen that you didn't think about.

If I could change any one thing about Tektronix culture, I would encourage us to spend less energy playing "Ain't it awful" and more energy responding to the changes that move us forward.

We need to stop saying "Ain't it awful" and say "Hey, it didn't work out, what are we going to do next?" You can bet that companies like Toyota whose inventory turns are so far superior to the inventory turns that are being achieved by their competitors are not spending a lot of time playing "Ain't it awful."

Strategic survival in this emerging world is not guaranteed. It requires better ways of sensing, better ways of understanding, and better ways of adapting to change. It requires **habits of continous improvement.** Encourage people in your organization to ask questions. If you don't understand something, ask questions. It is one of the ways that you can most effectively understand the changes that are occuring and therefore better align yourself to them. And if you don't find an immediate answer continue asking even if you have to help develop the answer.

Tektronix' future lies in you. You are the greatest strength that we have as an organization. You will make the difference in our future as you have made the difference in our past.□

Questions from the floor for Gayle Whitehurst and Eddie Ward

As the nature of work changes some job skills are becoming obsolete. Is Tek determining what skills are going to be needed far enough in advance so that those who don't have the skills can go out and get them? And, what is your group doing to help people?

We as individuals have been working really hard to upgrade our skills. Part of that is the cross training in our group and the internal people involvement.

For any individual, even if you've chosen not to become a generalist, it is very important to continue to upgrade your own personal skills constantly.

As far as what my group does to help our customers, we are always in the process of providing employee career counseling and coaching classes. We help to identify what skills will be needed in the future and then help people to understand what they need to do to increase their skills to be more competitive in the future.

I suggest you talk to your HR department or your manager about what kinds of things you should do to upgrade your skills to be more saleable in the future. I also encourage you not to wait. Each of us, no matter what our job is right now, can expect our job to change over the next three to five years. Don't wait until it happens. Begin a process of thinking about how you can begin to continuously improve your ability to add value to the work that's being done in the organization. The process is really a process of making choices. The more choices that you can make to continue your own development, regardless of the particular skill area, the better off you will be in the future.

If a manager has 20 people and needs to relocate 14 of those employees, what would your group do to help those employees.

Recently we've had a lot of people in the pools and we've worked hard to try to coach those people and assist them in getting retrained. The only limit that we have is the willingness of the individual. If the individual is willing to train and learn and pursue a new career I think you can have fun being retrained as well as having some new opportunities.

How many people took advantage of the offer of the 20 per cent voluntary severance offer?

Just over 100 people across the organization have accepted that offer.□

Topic Questions

What steps has Tek taken to prepare its staffs (management) for the changes in working (changing nature of work)?

Actually the changing nature of work is not a new issue at Tek. The nature of work has been changing here for some time. Initiatives like MRP and divisionalization, for example, have resulted in very broad and significant changes in work at Tektronix.

More recently, this issue has received much attention through processes like Just In Time and People Involvement. These efforts, which were initially focused at Manufacturing Excellence, have more recently been expanded to include more generally the fundamental ways we think about work.

These changes in the nature of work have been the focus for efforts like the Manufacturing Excellence Forum and People Involvement workshops. They are also areas of focus in the recent Engineering Excellence Forum and the upcoming Marketing Excellence Forum in August.

As well, Earl Wantland and Wim Velsink are in the process of meeting personally with each Corporate Council Member and their staff to review some of the forces impacting work at Tektronix and some of the ways we are responding to the changes caused by these forces. In part, the March Area Rep Conference grew out of this effort.

Altogether, a lot of effort is being directed at this ongoing change in the nature of work. Each of us can contribute to this process by discussing the changes going on, and understanding the context these changes are taking place within.

Once you have an understanding of the context for the changes, it is much easier to understand/predict/or plan responses to the probable impacts these changes will have on our work. For as our technology, products, business, or customers needs change, so also must the nature of our work change to enable us to continue to be a leader in the electronic marketplace of the world.

What plans have been made to help (non-management) workers cope with the changes?

Since the changes you are asking about are ongoing/continuous rather than a specific event, there are no single events planned to respond. On the

Continued on page 6

Area Rep Report

Continued from page 5

other hand, there are many efforts going on around Tek to help people understand the changes, the context they occur in and the probable impacts on work. Many of these efforts are orientational/educational. Some are more specific and goal oriented.

Again, initiatives like the Manufacturing Excellence Forum, the Engineering Excellence Forum and the upcoming Marketing Excellence Forum have as a part of their objectives to meet this goal. Also numerous Tek Education Program courses have been refined and implemented in anticipation of our changing world, as well as numerous *Tekweek* articles.

In addition, this issue of change has been a regular agenda topic across Tek for some time. Staff meetings, Area Rep group meetings, etc., have had this as a topic. In fact, many Area Rep Conferences over the past years have focused on some of these changes. One of the expectations/intents of these efforts is that they are helping to better prepare employees to understand the changes and therefore respond/cope with them more effectively.

What can employees in general do to prepare themselves for such drastic changes in their lives?

In general, all of us are best served by understanding the changes both by the context they take place in and the impact they will/are having on us. How will the changes affect the work I do? What changes will my organization make? What changes must I make as a result? Answers to questions like these are important in today's continuously changing environment.

One of the advantages of working for a company like Tektronix is that you are encouraged to ask questions, to strive for understanding, and to take responsibility for the effects on you—to work toward excellence.

I believe that one of the most significant contributions we can make individually is to assume responsibility for "me". One of the ways we demonstrate that responsibility for ourselves is by asking questions. Tektronix was founded on the principle of self responsibility and asking questions. Questions like those above and others more specific to your situation are valuable preparation for change. Understanding the change is one of the best preparations.

One of your first actions might be to take advantage of the Area Rep meetings in your work area, then make it a practice to read *Tekweek* and discuss the articles with your work grouop. And when there are things occurring that you don't understand, ask questions about them until you do.

How does the fact that headcount is so important for budgeting affect the job-share program? (i.e., If an organization is only allowed 75 people, putting 2 on the same job just gets less work done—only leaves 73 to cover other jobs rather than 74).

First of all let me state a personal bias: I very much dislike the term **headcount.** What we really mean is **people!** On the other hand, I'll be the first to admit that this is indeed a much used term; and it is an issue that gets attention when job share situations are discussed. The basic issue, however, is not so much one of "number of people" as it is one of "productivity vs. cost".

The way we account for job share situations—such as two employees sharing one job—is that each employee receives half of their regular salary, but in most cases each employee also receives full benefits—the same benefits they received as a full-time employee. (Some benefits, for example vacation and TEP, are pro-rated according to the work hour base.) In general, benefits amount to about 33 per cent of base pay. That means that Tek must absorb a 33 per cent increase in employee costs for each job share situation.

To make this a good business decision, the manager has to consider whether there will be an equal or greater improvement in productivity or whether some other offsetting benefit justifies this added cost. In cases where this judgment is positive, there is seldom a problem getting an exception to the "people count" guideline.

The main trend I see in U.S. manufacturing is to move it out of the country to places where wages are lower. Tek management seems to be saying it will compete with this by cutting overhead and making manufacturing more efficient. I appreciate the way this preserves our jobs for now, but I wonder if it will succeed in the long run. What will happen to our jobs when foreign operations get to be just as efficient as Tek, yet have lower wages? For example, is IDG still planning to move part of its manufacturing to Mexico?

Your question focuses at the very heart of one aspect of the changing nature of work at Tek. It is true that many industries and companies in the United States have moved their manufacturing operations to countries where the labor rates are considerably lower.

Unlike many of these companies, however, Tek is not "labor intensive" (for example, lots of direct labor in our products). In fact, over the last few years much of the direct labor in our products has gradually been decreased.

Some of this change has occurred through improvements in technology; others through improvements in product design and manufacturing; and still others through the redefinition/structure of work and people productivity improvements.

The end result of these changes (that are continuing) are that fewer and fewer hours of direct labor are required to produce our products. This will continue to change the nature of work required to build products and provide solutions to our customers.

It also means that there is less benefit to Tek in moving our manufacturing operations to countries where direct labor is cheaper.

The bottom line, however, is that Tek must **continuously** improve at a faster rate than our competitors. That means that each of us must develop habits of continuous improvement.

In that regard, there are no plans to my knowledge to move any part of IDG to Mexico.□

Rocky Luttrell, Conference Chairperson

Management Questions

Who now controls the Tek stock that Howard Vollum owned, and what person or group controls the largest block of Tek stock?

(Allan Leedy, Vice President, Secretary and General Counsel) At the time of his death, Howard Vollum was Tek's largest single shareholder, with over 16.3 per cent of the outstanding shares. The shares now belong to Howard's estate, which is administered by three personal representatives: Jean Vollum, Jim Castles and U.S. National Bank of Oregon. By the end of the probate period (probably two or more years, but it is a variable time), the shares and other property in the estate will come into the hands of the beneficiaries under Howard's will. It would be difficult to say at this stage just how the shares will be distributed among the beneficiaries.

There appeared to be widespread disappointment regarding forced vacations during winter months. Will the Group Operations Council be making any decisions in anticipation of FY700 results so people can take advantage of warmer weather?

(Wim Velsink, Executive Vice President and Group Operations Manager) The decision was made to require employees to take all vacation earned in FY600 because it was a relatively painless and equitable way to reduce expenses for this year.

At this time in the planning and budgeting cycle, it is too soon to tell if we will need to use this particular method of reducing expenses in FY700. Although the decision is not final, the current order outlook indicates that we may have to continue this policy next year.

There is dissatisfaction with the claim service of Bankers Life. What prevents Tek from hiring another company which will do a better job?

(Ed Nieubuurt, Employee Benefits manager) While there are occasions when an employee is dissatisfied with some aspect of the claim service provided by Bankers Life Company, those instances seem to be infrequent. In fact, we tend to hear more often from employees who are very pleased with Bankers' services, especially as it compares to other companies they have dealt with. But, we are most anxious to hear from any employee who has a problem of dissatisfaction with any of our claim processors.

The Employee Benefits staff is here to help resolve such problems and we need to hear from employees to monitor the performance of our service contractors. Should we determine that such services are not consistently of the highest quality, we would immediately require corrective action by the contractor. Should that corrective action be inadequate or inconsistent, we would look to replace the contractor.□

Questions from the floor for management

(Answered by Management Representative, Ken Knox, Treasurer).

What percent of our accounts receivable are non-collectable?

Our actual losses are less than one-tenth of one per cent.

When does the wage freeze end?

There has not been a decision made as to how long the wage freeze will be necessary.

How much will the 40th anniversary celebration cost?

$41,000 has been budgeted. That works out to about $2 per employee.

In view of our strong financial position, does management have any concerns about another company taking us over?

Tektronix management is not interested in combining with another company at this time.□

From Region 8

John Johnston chosen for Manager of Year

John Johnston (DDO Quality Assurance) was named Region 8's Manager of the Year at the March 10 Area Rep Conference.

John started at Tek in 1968 as a Reclaim/Glass Fab operator in CRT. He served as an Area Rep in the early 1970's. He took on his first management position in 1974 and today manages quality documentation and general services for DDO.

John is married and has two sons. He is Lt. Governor for the Active 20/30 clubs, a community service organization, representing Oregon and Washington clubs. Activities of the club include coaching handicapped basketball, track and special programs.

John also enjoys family oriented activities including cross-country skiing, hiking and camping.

The Manager of the Year Award is given to region managers who, in the opinion of the local Area Reps, best support the Area Rep activity.□

John Johnston, Manager of the Year, Region 8.

Employee anniversaries

92 receive awards in February

February service awards included one 30-year employee—Dick Pooley (Design Engineering), who joined the company in 1956.

In addition, 18 Teks observed their 25th anniversary, 28 completed 20 years, and 45 reached 10 years for a total of 92 service awards in the second month of the new year.

Those completing 20, 25 and 30 years with Tek had lunch with President Earl Wantland in the Tech Center (50) dining room, with Earl presenting a variety of service awards from tie bars and stick pins to necklaces and bracelets.

Teks receiving service awards for February, as compiled by Employee Benefits, were as follows:

10 years

Thomas Alexander, Dominic Capriole, Robert Fesmire, David Stubbs, Bruce Blair, Linda Green, Janice Haney, LeRoy Cavil, Harriet Frank, Herbert Giffin, Brett Nelson, Elizabeth Dayton, Mary Feeback, Keith Billings, Janet Rider, Beverly Stock, Elizabeth Kennedy, Jung Jin, Debra Benson, Kay Nielsen, Kiyoe Yang, Sherrie Rice, Paula Wilson.

Robert Lloyd, Mary McCambly, Bette Press, Ronald Bryant, Barbara Robinson, Barbara Hill, Maria Locke, Janet Almy, Andres Coll, John Eichsteadt, Larry Haga, Eileen Larson, Marilyn MacLeod, Hortencia Arguelles, James Williams, Shelly Moore, Cheryl Huegli, Shirley Jamerson, Bobbie Hammitt, Judy Enstrom, Gail Bean, Darlene McCain.

20 years

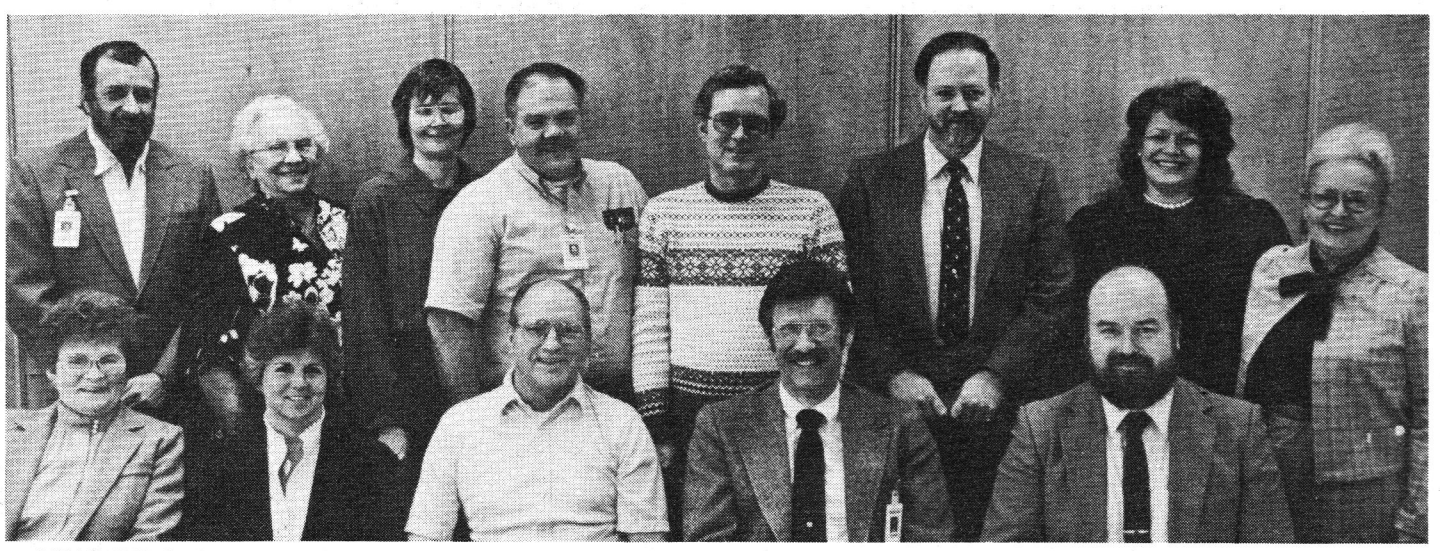
Jim Proebstel, Buddy Beauchamp, Jeanette Bowden, Dennis Braatz, Josephine McCourt, William McConnell, Willie Crowell, David Miller, Donald Farnham, Lois Booth, Robert Costley, Kirk Hedges, John Rudnick, Barbee Williams, Daphane Gipson, David Hildebrandt, Maureen Key, Raymond Kusch, James Mohr, Judy Schonhard, Spence Plummer, Janice Reitan, Susanne Hardueser, B.R. Christiansen, Doris Force, Marlin Lovelin, Viola Finck, Stanley West.

25 years

Norman Malone, Marvin May, Robert Twigg, Bud McElfresh, Josef Merz, Michael Croft, William Donaca, Larry Frost, Daniel Randolph, Burton Nielsen, Allan Robinson, William Gilbert, Duane Kintz, Michael Welton, Myron Bidiman, Vernon Isaac, Donald Vellenga, Judy Vanloo.

30 years

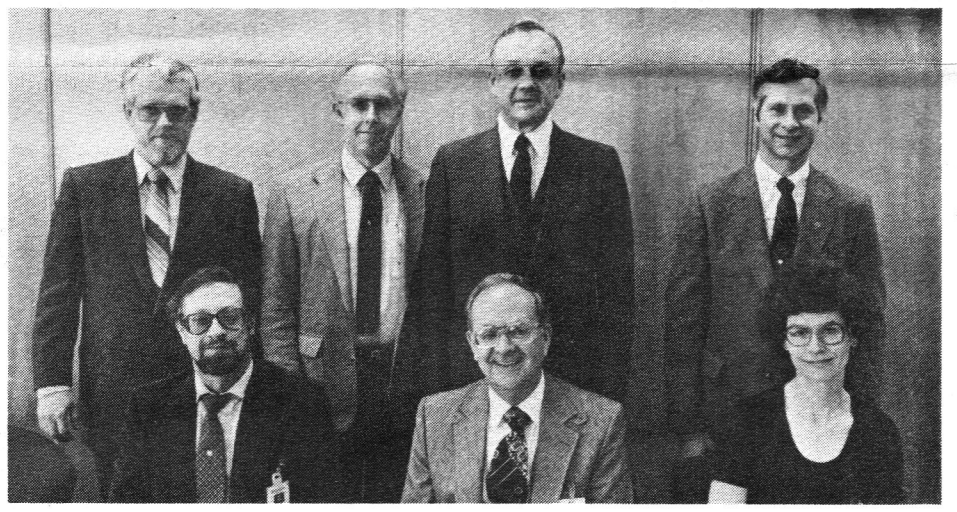
Richard Pooley.



20-YEAR TEKS, February—Seated from left, Debra Christopherson, Janice Reitan, Ray Kusch, Jim Mohr and John Rudnick; standing, Spencer Plummer, Daphne Gipson, Judy Schonhard, Kirk Hedges, Don Farnham, David Miller, Barbee Williams and Barbara Sanchez.

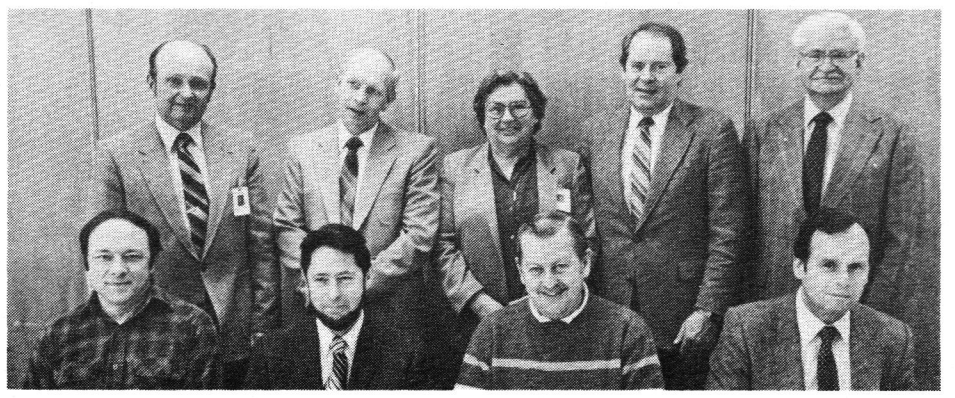
20-YEAR TEKS, February—Seated from left, George Malin, Marge Wallace, Elmer Batalgia, Stan West and Viola Finck; standing, Bill Lamb, Ivar Saul, Gail Silvis, Doris Tobler, Terry Biggs, Marlin Lovelin, Rod Christiansen and Wayne Krenz.

30-YEAR TEK, February—Dick Pooley.



25-YEAR TEKS, February—Seated from left, Don Vellenga, Bill Gilbert and Gina Bellarts; standing, Mike Welton, Dennis Askew, Vern Isaac and Duane Kintz.

20-YEAR TEKS, January—Seated, from left, Dick Osterman, Jean Keller, Anita Hicks, Mary Meyer. Standing, Bill Jackson, Ellnora Soule, Mike Thrush, Caroline Stevens, Barbara Waldow.



25-YEAR TEKS, February—Seated from left, Bill Donaca, Bob Twigg, Marv May, and Joe Merz, standing, Mike Croft, Tom Thayer, Julianna Schonek, Larry Frost and Burt Nielsen.

20-YEAR TEKS, January—Seated, from left, Mike Zoucha, Dorothy Bail, Willie Crowell, Sue Wilkins, Judy Morgus. Standing, Raymond Cappelli, George Criswell, Len Garrett, Dennis Braatz, Jim Kleve, Terry Barlow, Doris Force, Carolyn Rogers, Conrad Odenthal, William McConnell.

More milestones in January

Historian tells audience

Tektronix: A great success story—

Continued from page 1

available," Marshall noted. "It was a box-like affair, roughly a foot wide and a foot high and almost two feet deep, encased in a metal box which accounted for most of the 35 pounds that the instrument weighed."

Howard's scope impressed the professors at Reed College which influenced them to accept him as a student. The scope, which was still in use at Reed as late as the mid-50's, was more sensitive than other commercially available models.

As for Jack's success at his store, Marshall said he was a master salesman, attentive to the needs and wishes of his customers. "He never rushed, pushed or tried to persuade his customers into buying a particular item or brand."

Jack's dedication to serving his customers, his pleasant manner, and his passionate desire that no one leave his store unhappy were values that would translate directly into his work and his contributions to Tek.

Marshall also covered World War II—early radar development, the electronics industry, Howard's involvement in the Signal Corps, Jack and the Coast Guard gang (which became the same people who founded Tek after the war).

Next came the groundwork for the electronics business venture with Jack meeting with his friends, Milt Bave and Miles Tippery, followed by the birth of Tekrad (Tek's original name) and the return of Howard from the war. On January 2, 1946, the articles of incorporation were signed by Jack, Howard, Glenn McDowell and Miles Tippery.

World War II created an immense supply of surplus parts and Tek took advantage of them in the 511 scope to undercut the market. As for the first Tek scope, Howard laid circuitry out on a piece of plywood (breadboard), making use of surplus parts and striving for a design which would surpass anything available on the market. As his work progressed, he integrated a triggered sweep circuit in his design which wasn't available in commercial scopes.

Marshall said the initial model was christened the 501 (5 for the five-inch CRT and 01 for the first model). It was a "monster," standing several feet high and several feet deep and roughly 18 inches wide. It took up Howard's entire workbench and there wasn't room for anything else.

Marshall Lee, associate professor of history at Pacific University and author of a history of Tektronix, gave a local perspective of high-tech history at the Washington County Historical Society lecture March 13.

Milt Bave, a mechanical genius, came to the rescue and played a key role in repackaging the 501 into the more compact dimensions of the 511 and even influenced the faceplate to a significant measure.

"Nobody made much money, but they seemed to be having fun," Marshall continued. The company in 1946 paid a total of $1492 in salaries and neither Jack nor Howard drew any salary that year, leaving the rest to draw what was needed for living expenses.

Next came the move from Foster Road to a new and much more "commodious building" at the corner of S.E. 7th and Hawthorne Blvd. in Portland. The building, close to transportation and other facilities, was nothing fancy and cost $5000 to construct.

Meanwhile, demand for the first Tek scope grew, and the company began to grow. By late 1948, the partners all agreed that perhaps the ideal size of Tek would be as high as 70 to 80 people. Jack said such a size would still permit everyone to know their coworkers by first names and to participate directly in company decisions.

Scope production began the end of spring, 1947. Both Jack and Howard underestmated the demand for Tek scopes because no one could foresee the almost infinite variety of uses which they could be used for. Even Parker Pen bought two scopes (shocking everyone) and no one else found out what they used them for.

Marshall said a production bonus was instituted to increase production of the 511, based on how many were shipped each month. But once Tek began to produce more than one model of scope, the payment of a bonus became more difficult. In 1949, the board decided to begin paying profit share. Jack wanted to share with employees a substantial portion of the company's profits.

By the end of 1951, Tek had over 300 employees and parking was a problem at Hawthorne as was the heat in the second floor production area. As Tek was bursting at the seams, board members considered the need to move to more spacious quarters. The decision was to move west, eight miles out of Portland on the Sunset Highway where four acres were acquired for $9000.

When the Korean War broke out, Tek had problems constructing its Sunset building and had to secure proper certification to get shipments of restricted material more rapidly. In the meantime, the Signals Corps wanted Howard back in uniform, but was persuaded that he was more valuable if he remained at Tek.

Marshall said the five years between 1949 and 1954 constituted the most daring stage in Tek's growth. As it became known as the leading manufacturer of scopes, it also became known for its innovative management and employee relations. Within a short time, Tek was producing its own CRTs, adding more engineers, opening field offices and training field engineers. Howard also came up with the plug-in concept for scopes.

By the end of 1957, Tek's share of the scope market was two-thirds with sales of $22 million, compared to one per cent of the market and sales of $32,600 in 1947 when the 511 was introduced.

With the rapidly expanding company, Jack and Howard tried desperately to salvage and preserve the Tek values they had established when the company numbered only 55 to 60 employees.

In response to questions from the audience, Marshall said a company writes its own history when there's a major anniversary. In Tek's case, it was important to preserve a record of what it was like as it moves out of its first generation. "We need to get the actors when they are still around," he added.

Marshall said Tek "turned the corner" in the first decade. "Tektronix couldn't make enough oscilloscopes for market. The company enjoyed an enviable position—it made a better mousetrap and everyone was beating a path to its door."

Bill Webber (retired vice president) added that Tek was fortunate because the competition (RCA and Dumont Labs) was not very strong.

Marshall's history of Tektronix will be published in June for distribution to employees, retirees and the public as part of the company's 40th birthday celebration.□

Successful start-up

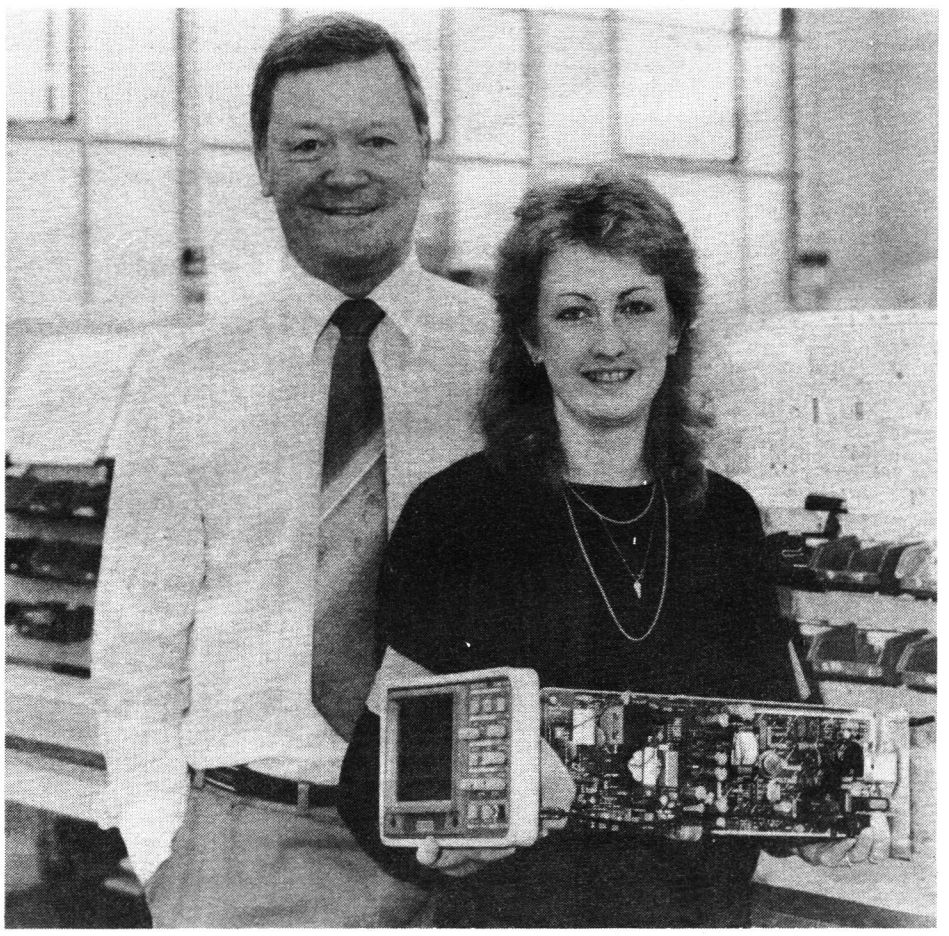
UK produces TV monitor

Highly successful. That's how to describe the start-up of the Television Waveform Display Group at Tek UK in Hoddesdon, England in January.

Production of the 1711 Waveform Monitor began virtually flawless in Week 04 (January 27) with the first instruments rolling off the line with no errors. Within two weeks the instrument thru-put times were as low as those in Tek Beaverton.

TWDG presently consists of the manager, Ron Newman, and a two-member crew—Paul Ballam-Davies and Sue Perren. This small group makes multi-tasking an absolute necessity.

Production start-up of the 1711 Waveform Monitor should provide Tek with a more competitive position in the European market.□



Paul Ballam-Davies (left) and Sue Perren form two-thirds of the start-up Television Waveform Display Group at Tek UK in Hoddesdon, England, making multi-tasking an absolute necessity. Ron Newman is group manager.

Latest from EMCG

M&CC group goes 'outside'

Tek's Mechanical & Chemical Components (M&CC) Operation is now offering its services to outside customers.

Jim Madison (M&CC general manager) says their 25-year experience as a component supplier to Tek product divisions enables them to provide outside customers advanced technological expertise and capabilities not otherwise available.

M&CC offers research and development, prototyping, and custom products. M&CC is a Class A MRP operation with just-in-time delivery techniques that allow delivery of polytetrafluoroethylene (e.g. Teflon) high-frequency circuit boards, flexible circuitry and Hypcon connector prototypes within two weeks from receipt of approved filmwork.

Metal processing services available through M&CC include full-service support for product engineering from design concept through developed prototypes, and total manufacturing capability from raw stock to completely assembled metal components products delivered directly to the customer as needed.

M&CC is the latest group within the Electronic and Mechanical Components Group to announce outside marketing. Other EMCG groups now selling to outside customers include the Hybrid Components Operation, Integrated Circuits Operation, Display Devices Operation, Etched Circuit Board Plant, Magnetics & Switching Components and the Avionics Displays Strategic Program Unit (SPU).□

ISI to evaluate IBM RT computer

IBM's RT Personal Computer will be available for evaluation purposes March 24-28 in Building C1 under the care of ISI Division.

In addition, IBM will present and demonstrate the equipment and selected applications on Tuesday, March 25, 3–5 p.m., in Building C1, Room T1/2; and Wednesday, March 26, 9–11 a.m., in C1, Room T3/4.

For information, call 253-5701.□