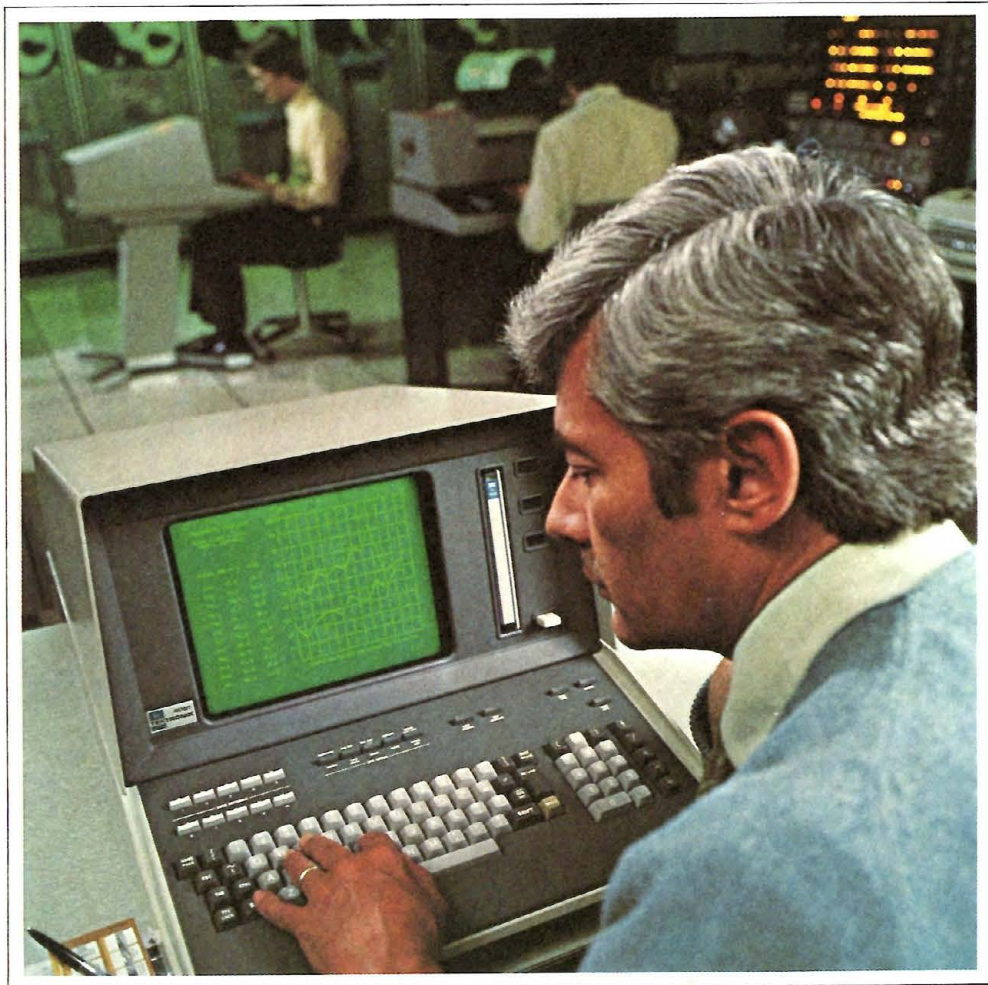


1976

Tektronix, Inc.



Annual Report • 30th Year • May 29, 1976

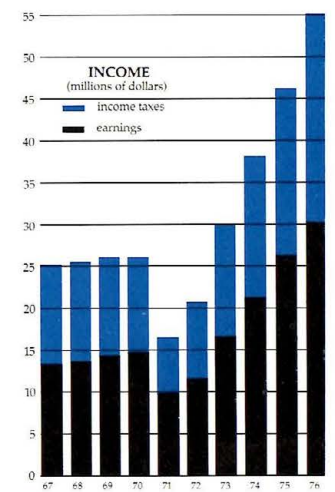
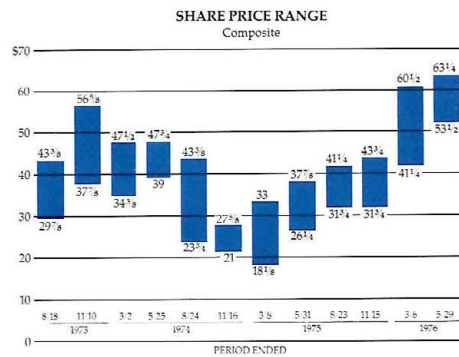
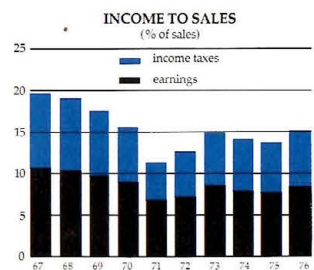
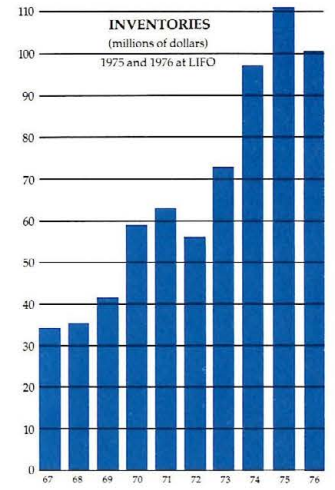
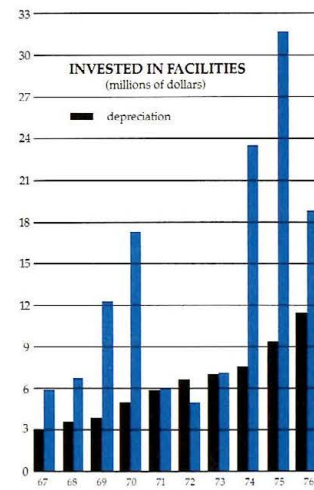
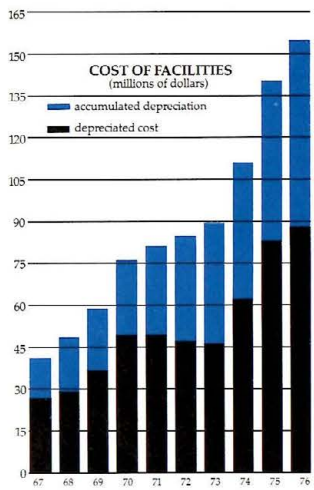
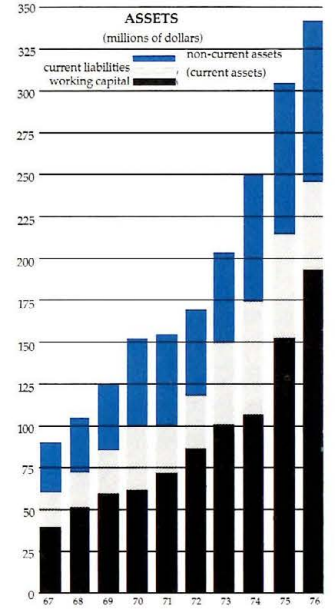
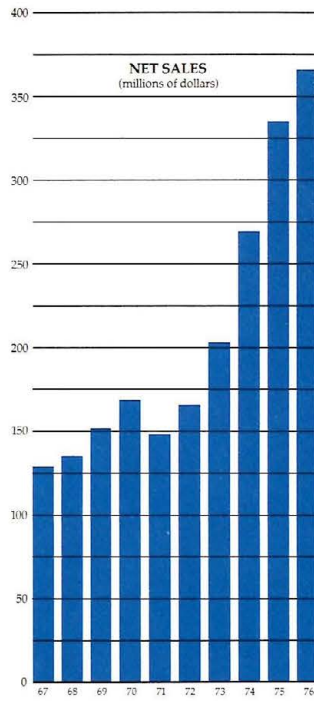
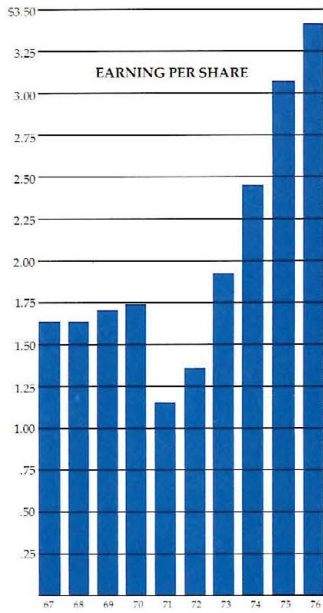
Tektronix 1976 Financial Highlights

The accounting year is the 52 or 53 weeks ending the last Saturday in May.

1975		1976		Increase		
\$336,645,000	100%	\$366,645,000	100%	\$30,000,000	9%	RECEIVED BY THE COMPANY For sale or rent of products
289,375,000 ^R	86%	303,021,000	83%	13,646,000	5%	TEST AND MEASUREMENT
47,270,000 ^R	14%	63,624,000	17%	16,354,000	35%	INFORMATION DISPLAY
310,316,000	92%	336,556,000	92%	26,240,000	8%	RELATED COSTS AND EXPENSES
121,112,000	36%	126,051,000	35%	4,939,000	4%	TO OUTSIDE SOURCES To pay for raw materials, purchased parts, rent, utilities, insurance, advertising, interest and other business expenses.
155,807,000	46%	169,449,000	46%	13,642,000	9%	FOR EMPLOYEES To pay the men and women who design, make, sell, and service our products—including profit share, commissions, employee benefits and payroll taxes.
9,388,000	3%	11,635,000	3%	2,247,000	24%	FOR USE OF FACILITIES OWNED To provide for depreciation in value of buildings, machinery and furniture resulting from use, wear and age, mostly computed by sum-of-years-digits method.
24,009,000	7%	29,421,000	8%	5,412,000	23%	FOR TAXES To pay U.S., foreign, state and local taxes.
26,329,000	8%	30,089,000	8%	3,760,000	14%	RESULTING IN EARNINGS Reinvested in expansion of our business after payment of dividends.
\$3.04		\$3.43		39¢	13%	EARNINGS PER COMMON SHARE Dilution if all outstanding share options had been exercised would not have reduced primary earnings more than two cents.
20¢		24¢		4¢	20%	DIVIDENDS PAID PER SHARE
329,000,000		376,000,000		47,000,000	14%	ORDERS RECEIVED

^R: Revised to give effect to reallocation of parts sales.

1975	1976	Increase (Decrease)	
\$217,075,000	\$248,347,000	\$31,272,000	Current Assets
63,623,000	60,540,000	(3,083,000)	Current Liabilities
153,452,000	187,807,000	34,355,000	Working Capital
82,620,000	88,563,000	5,943,000	Facilities—Net
30,365,000	39,139,000	8,774,000	Long-Term Indebtedness
202,321,000	232,003,000	29,682,000	Shareowners' Equity
61,000,000	70,000,000	9,000,000	Unfilled Customers' Orders
12,664	12,970	306	Number of Employees at Year End



NINETEEN SEVENTY-SIX

Tektronix moved into, through and out of the recession this year. After a subdued first half, as predicted, our business recovered faster than we'd expected in the last two quarters. The resulting earnings performance would have done credit in a boom year, earnings increasing more than half again as fast as sales.

Sales, orders and earnings all grew, and are at new highs. That's the way it's been for five straight years now. *Page 4.*

The world clearly wasn't set up to make it easy to run a business. Management (at least to those in it) seems sometimes to be a juggling act, with more and more balls in the air all the time: Social pressures; technological change; economic slumps and booms; currency values that won't stay put; taxes; dwindling energy sources; competitors that we treat with respect. . . . All of this with government as an increasingly present sidekick. Sometimes you feel like you're forging behind.

The factors must each be optimized; dropping any of the balls could be disastrous. We've shared with you some of the problem areas, starting on *page 24.*

Tektronix' silent ambassadors are its products, in continual contact with the user. This year they continued to earn wider acceptance and enhance the reputation of the company and its people. The current product line is discussed on *pages*

17-20, and some more-significant recent introductions are described on the pages that follow.

In trying to be comprehensive, there's some risk that an annual report will become a sort of Dagwood sandwich, a passel of unlike items garnished with words and served up between two slices of cover stock.

As we've noted over the years, a company can be understood only as a continuum. Annual reports, which for convenience saw up corporate performance into Presto-log-sized one-year segments, tend to focus on the separateness of a year rather than its continuity with what has been and what will be. When a year starts, not much really "begins." (Except on paper.) When it concludes, not a great deal has really "ended." (Except, again, on paper.)

To provide some historical and philosophical background to make more meaningful the year's activities, this report will share with you a bit of our corporate personality. The basic human values that have grown up with us have, together with our technical emphasis, largely determined the kind of company we are today: A strong one; a successful one; and, in some important ways, a different sort of place.

Like any company, Tektronix is unique. The 30-year heritage that embodies much of our distinctiveness is the subject of *pages 9-16.*



The storm warnings were out—had been for some time—as Tektronix' year began. Economic foul weather had already beset US businesses, flattening sales and earnings curves like a prairie gully-washer mashes the grainfields in its path. Most of industry had already felt the impact of the recession. Now, it was our turn.

Even in a better climate, our preceding year's strong performance was a tough act to follow. Having to do it during a recession only made the job harder. In particular, maintaining earnings in the face of slowed sales growth called for all the managing skill we could—well, manage.

Here's the problem in that regard:

A growth company must gear its developmental programs to its intended long-term growth rate. Those programs, and their costs, are pretty much ongoing; they can't be capriciously turned on and off. Also, a strong sales year (such as 1975 had been for us) brings about a buildup of not only production capacity but also support activities.

Then, too, inflation continues; pay goes up, as do material and supply costs.

In this light, the year's performance—an earnings increase of 14 per cent on a sales growth of 9

PERFORMANCE



per cent—is a cause for pride in those who design, build and sell; those who provide support; and, maybe most of all, the many who share the responsibility of managing.

THE RECESSION YEAR'S sales weren't quite as flat as had been expected. Flattish, for sure, particularly when you subtract the effects of inflation-spawned price increases. But product demand held up reasonably well, and accelerated in each of the last two quarters.

Sales, orders and earnings all continued through their fifth growth year in a row, and reached new highs for Tektronix—a performance not typical of US business recently, and certainly not of our segment of the industry, which had its troubles.

Sales totaled \$366,645,000, up 9 per cent from



\$336,645,000 a year earlier; the *international* portion went up 6 per cent, to \$148,714,000 from \$140,322,000; the *US* segment, 11 per cent, to \$217,931,000 from \$196,323,000.

Information Display sales showed a healthy growth, to \$63,624,000 from \$47,270,000, up 35 per cent, and accounted for 17 per cent of our total sales, compared to 14 per cent in 1975 and 8 per cent in 1974. Sales of test and measurement products accounted for the rest of our business.

Earnings went up 14 per cent, reaching \$30,089,000, compared to \$26,329,000 the year before. *Earnings per share* were \$3.43, up from \$3.04.

The respectable earnings performance in a moderate sales year was due in part to improved productivity. Ratio of cost of sales to sales continued to drop, to 45 per cent, down from 47 per cent a year ago. Also, we've gotten better at pre-

dicting the effect of economic downturns on our sales, and were able to curb expenditures accordingly.

Incoming orders totaled \$376,000,000, compared to \$329,000,000 the year before, an increase of 14 per cent. *Unfilled orders* increased 15 per cent, to \$70,000,000 from \$61,000,000.

By Country:

Sales were strongest in the industrialized nations, our traditional markets; and to the increasingly wealthy oil countries. We saw a substantial increase in business to Eastern European socialist countries. And, overall, sales were up in the world's less-developed nations.

Sales in Europe grew steeply in France, primed by government incentives to French industry. That country this year nearly overtook Germany as our number 1 non-US market. German sales also were strong. The UK, despite its annually deteriorating economic picture, surprised us for the umpteenth year with substantial sales growth, especially to technical education and to the printing industry.

Countries who have oil, or soon expect to, generally proved good markets for us. Sales were up in petroleum-rich Nigeria, Algeria, Saudi Arabia, Venezuela and Mexico, and in Norway, now out prospecting the North Sea oil fields. Those in Iran didn't increase as much as expected, that oil nation apparently having spent money last year even faster than its prodigious earning rate. (But our sales figure is deceptive; we've sold a lot of products to US companies for projects in Iran.)

In Japan, sales increased, but are only about back to what they were two years ago. In Italy, the problem is simply political jitters.

In most "third world" countries, business was up. It was particularly so in Taiwan, with its many electronic component manufacturers. Exceptions included Brazil; its coffee and sugar crops failures and its balance of payments highly negative, it clamped on prohibitive import restrictions. In Argentina, the per cent per day inflation effectively halted foreign business there. Sales were also down in Switzerland, as that economy tightened. In South Africa and Australia, sales dropped from the abnormal peak a year before, representing a once-only conversion to color television. Our business also decreased in Israel, although a lot of sales for that country were made indirectly, to Israeli buying missions in the US.

In Eastern Europe, business growth was very good, except in Yugoslavia; US export restrictions tightened on sales to that country.

By Product:

Information display products paced our sales: Terminals, hard-copy units, large-screen storage monitors and our newly introduced "intelligent" graphic systems, that can operate alone, thanks to built-in computer power.

Increased penetration of general-instrument markets maintained our sales level of test and measurement products.

Oscilloscopes themselves remain by far our most popular product. Sales into that maturing market held steady, both for plug-in laboratory scopes and for portables.

In its maiden year, our new low-cost scope line, the T900 series, met excellent response, especially from the industrial-service and education markets.

The TM500 line of modular instruments had its best sales year so far, thanks partly to introduction into that line of several higher-performance products.

Sales of spectrum analyzers also went up steeply, making Tek an even stronger second in that market. The secret was a combination of new products and an intensified sales effort.

In their first year, the 1502 and 1503 cable testers did excellently.

Additional effort in the medical market nearly trebled our (modest) sales in that area, notably of portable patient monitors. Sales are now *sort of* modest.

Television products had had an abnormal surge the year before, as several countries made a conversion to color TV. This year the sales curve adjusted to that peak, and TV products showed a slight sales increase.

A promising new product line is logic analyzers; Tek's first entries were very well received.

And, by Market:

Our basic markets, in order, were:

- *The electronic and electrical equipment market*, representing nearly a quarter of Tektronix business.

Included here are manufacturers of electrical motors, industrial controls, radio and television sets, telephone equipment, radar systems. . . .

Our laboratory oscilloscopes, TM500 products

and display monitors are widely used in industrial electronics, from small specialty shops to giant companies—for research and development, incoming inspection, in-process testing, quality control and field maintenance. Portable oscilloscopes also are extensively used, sometimes in the lab, sometimes in a mobile van, sometimes carried around by hand. Our automated test systems are popular for testing semiconductor memories and large-scale-integrated (LSI) circuits, key elements in building microprocessors and microcomputers.

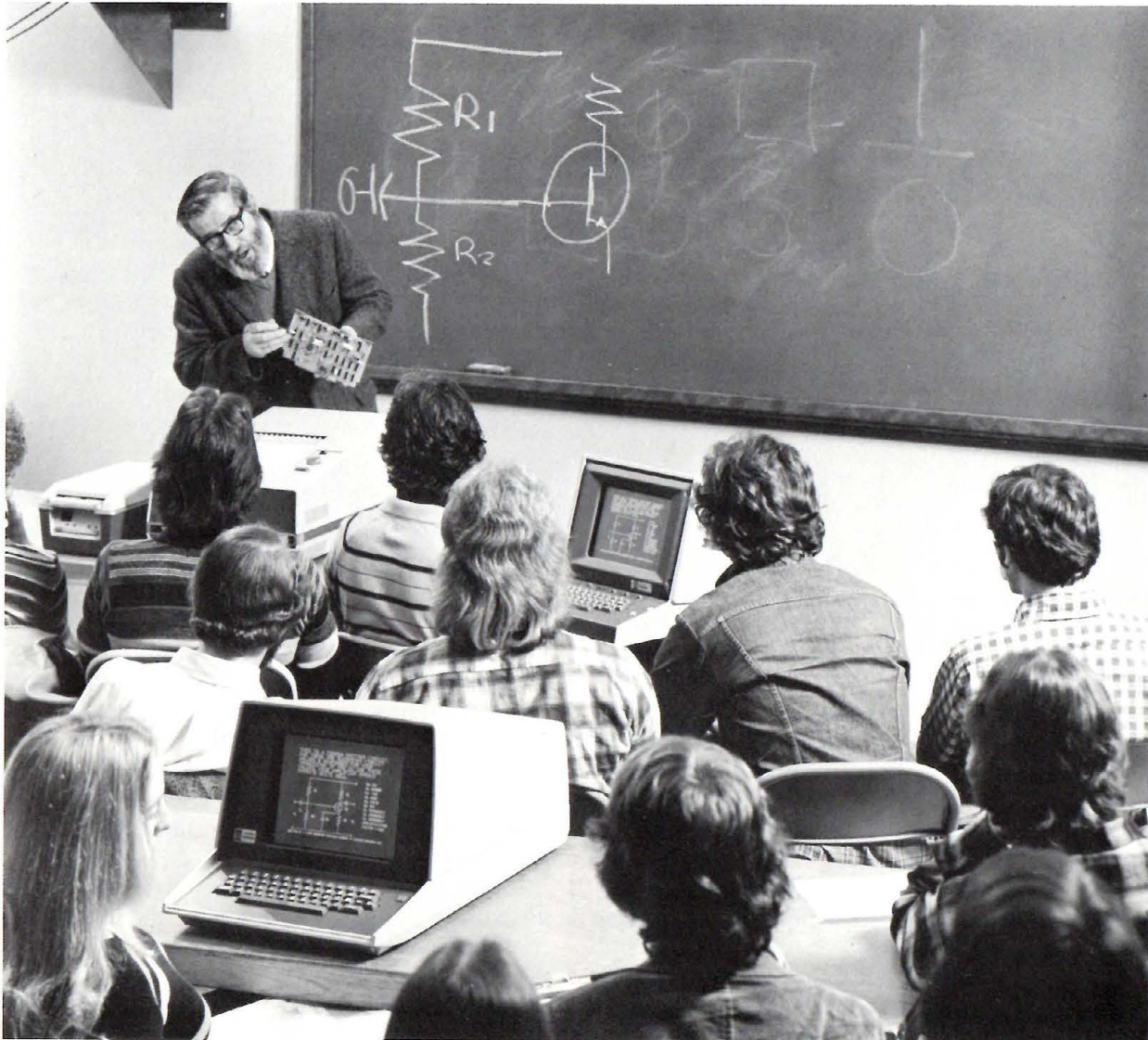
Terminals and hard-copiers are widely used in computer-aided design.

Spectrum-analyzer use in this market is widespread, in telephone, microwave and radar R & D

and maintenance, and in a range of audio applications from testing consumer hi-fi equipment to acoustics R & D to maintaining avionics gear.

• *The computer industry*, also representing close to a quarter of our business.

Tektronix remains the largest supplier of oscilloscopes to the computer industry world-wide, particularly portables for field servicing. Our graphic terminals are popular OEM units (that is, they're purchased by computer makers to build into their own products or systems). Our automated measurement systems aim at computer memory testing. Our lab scopes and test instruments are heavily used in product design and component testing.



TEKTRONIX GRAPHIC terminals are becoming more common in technical education, as the number of computers in schools increases.

In mainframe and peripheral manufacture, wide use is made not only of our semiconductor curve tracers but also of our computer-aided scope-based signal-processing systems (SPS).

- *The government market*, representing about 10 per cent of our business—direct sales to US, local and state governments.

What we sell here is standard commercial products. We accept neither R & D nor production contracts for non-catalog items.

The government is a major buyer of spectrum analyzers, for testing avionics equipment, airfield navigation and two-way radios.

A big non-military use of Tek products is in energy and environmental activity: Controlled-fusion research and other nuclear investigation rely on our signal-processing systems using the R7912 high-speed waveform digitizer.

Although we build no specifically military equipment, Tek products are broadly useful in national defense: Lab scopes, SPS systems and related instruments for laser testing, communications and aerospace applications; spectrum analyzers to test microwave relays; and rugged, high-performance field-service instruments.

- *The education market*, representing about 10 per cent of this year's business.

Because education has an influence well beyond the walls of the classroom or lab, this figure is deceptively low. Many an engineer got his or her first taste of Tek product quality while a student. And many research projects in a graduate lab pay off as new scientific or economic pursuits, that also will require instrumentation.

Our moderate-priced plug-in scopes do well in this market, as well as higher-performance scopes and systems for R & D. The lower-priced instruments are most visible in price-conscious classroom applications.

Low-frequency scopes are popular in medical schools; and TM500 instruments are finding rapidly increasing use in vocational and technical education.

Terminals and hard-copiers are increasingly common not only in graduate-level scientific and investigative work but also in undergraduate education, as the number of computers in schools increases.

- *The instrumentation industry*, representing over 6 per cent of our business. This figure should be larger; it excludes Tektronix, one of our own major

customers. It *does* include a lot of our competitors, though.

- *The broadcast television market, and other TV*, under 5 per cent of Tek business. We are by far the world's largest and most comprehensive supplier of video test equipment, and our Grass Valley Group is the premier producer of TV production and routing switchers. Spectrum analyzers are used in the R & D and manufacturing portions of broadcasting and cable television.

(Manufacturers of TV cameras, video-tape recorders for cable and closed-circuit TV and equipment makers serving broadcast television also are Tek customers, but were included in Electronic and Electrical Equipment, the first listing above).

The remaining Tektronix business is widely spread among an interesting group of customers. They range from the *petroleum industry*, which uses our scopes for "well logging," and graphic terminals for geophysical mapping and analysis; to the *chemical industry*, using terminals in process-monitoring systems; to *transportation*, which uses them for automated design (of automobiles, for instance); to *printing and publishing*, employing terminals for page layout; to *medicine*, which uses low-frequency, high-gain scopes (typically storage versions), to display and investigate biochemical signals typical of the human body, and portable patient monitors.

Fortune Smiles

One measure of relative performance came as Tektronix made its way well into the *Fortune* Top 500. This list, compiled annually by *Fortune* magazine, comprises the 500 US companies with greatest sales volume.

Tek had been high on *Fortune's* second 500 for some time. In the most recent listing, using fiscal-year 1975 figures, we moved up 62 places, to rank 457th.

Over 80 per cent of the companies in the *Fortune* 500 are Tektronix customers, including every one of the top 40. A similar listing of overseas businesses would probably yield the same proportion.

(In other, equally significant *Fortune* rankings, it's worthy of note that only 87 of the top 500 US companies exceeded our 10-year growth in earnings per share; and, measuring net income as a percentage of sales, only 65 companies did better than we.)



COMMUNICATIONS activities include hearing-impaired employees. Hand signer aids as Board Chairman Howard Vollum recalls Tek history.

HERITAGE

A new buzzword (as if one were needed) is QWL. It started in personnel journals, but you'll be seeing it around. What it stands for is Quality of Work Life, and it reflects the search by business for those elements that make work a rewarding experience. Someone, you see, has figured out that "A day's work for a day's pay" falls somewhat short as an ennobling philosophy.

Some companies, faced with low morale, absenteeism and stoppages, have been driven to try innovative "team" groupings and degrees of employee self-management to rekindle enthusiasm. In the search for higher productivity, the standard

answer has been more technology, more automation; now the emphasis is shifting to more-effective involvement of human beings. Today's work force is changing—younger, more educated, more insistent of a say in the decisions affecting them.

Externally, also, human pressures increase. Polls indicate that the public doesn't much care for Business. It demands a higher level of corporate morality. Pressures grow for safer products, and a safer place in which to build them; for removal of employment inequities and, in general, for a demonstrated corporate concern with a cleaner, safer, better world.

For these reasons (and the arbitrary one that we turned 30 this year), it seems appropriate to reflect on the human values that are a Tektronix tradition.

For, in a society seemingly bent on reducing people to units and human traits to numbers, Tektronix has managed to remain a very personal company. And that, it seems to us, has been a basic strength in any given year.

TEKTRONIX DIDN'T START in a garage, although local legend insists it did. Like many postwar enterprises, it did begin small, in the back of a southeast Portland radio and appliance shop.

The company incorporated in January 1946. Howard Vollum, now board chairman; the late M. J. "Jack" Murdock, and three associates were the founders. (Howard and Jack had been associated in business before the war. At 18 the youngest businessman in Portland, Jack had chosen to start his own business rather than attend college. His company, a radio and appliance store, needed a radio service man. Howard, a recent Reed College graduate in physics, took on the job.)

The scope business might have looked like a bad bet. It did, in fact, to many U.S. electronics companies, who were deciding *not* to invest much money in this product. What's more, the scope market was dominated by one company.

But the founders felt that the oscilloscope would become the most useful electronic instrument of all, if it could be made to *measure* waveforms rather than merely let you look at them, as existing models did.

Wartime radar development, with which Howard was associated, had provided many of the techniques to make this possible: Improved cathode-ray tubes, the all-important triggered

sweep, wide-band pulse amplifiers, stable power supplies. But these were not common in commercial instruments.

The first Tek scope, the type 511, used these techniques. It offered calibration, high performance, reliability, versatility, light weight and low price. It was an immediate success.

ALONG WITH ITS insistence on technical excellence, the small company was setting other precedents that would stick. Among them were informality, an open organization and an abiding belief in the dignity of the individual human being—a belief that governs our corporate behavior today.

Visitors often comment on the small-company flavor here. Certainly the informality is more typical of a company of 12 than one of 12,000. All employees are on a first-name basis. That's the way it started; people liked it; and no one has seriously suggested doing otherwise.

The company still bears the stamp of Jack Murdock. He was a modest, self-effacing man, reluctant to parade his own achievements. (When he died in a 1971 float-plane accident, his home-town newspaper found they lacked even so much as a photograph of the nationally known industrialist.)

Not that Jack was a recluse. A warm and genial man, he had great compassion and a keen interest in the individual's relationship with the company. That relationship, he felt, had to be a wholesome and participative one. If all it came down to was "eight hours a day," a relationship would not only fail, he felt, but would ultimately carry the free-enterprise system down with it, a system to which Jack was ardently devoted. He gave equally of himself to national business and mental-health groups.

Jack was our first general manager, and chairman of the board until his death.

The company today still reflects his unassuming personality. Our 300-acre, 24-building industrial park at Beaverton bears no large identifying sign; you sort of have to figure out you're at Tek.

Tek has had little use for status symbols. Our president and board chairman have no private offices; there is no board room; the only reserved parking spaces are for our handicapped employees.

"Your only real status," Howard Vollum comments, "is the status you earn, and when you've earned it, you don't need the symbols."

Stereotypically, corporate growth brings with it more structure, more distance between people, more impersonality. "Yet Jack's ideas have persisted here," believes President Earl Wantland, "largely because those who believed in them stayed and those who didn't like it (such as autocratic people) for the most part left."

Two particular factors have most strongly influenced Tektronix, and continue to do so today:

1. Profit sharing, as a substantial portion of employees' current pay; and

2. An informal organization, with free channels of communication and broad accessibility to each other. We get by, probably, with fewer rules than other companies, trusting instead to individuals to make sound judgments. Tek has few signs reading "NO" and none reading "PRIVATE." And we've never published a corporate organizational chart.

TO BE CANDID, this isn't everybody's idea of how to run a railroad. We've lost people, and good ones, who sought a more authoritarian structure. Consultants have thrown up their hands at our absence of classical management approaches; avoidance of organizational charts; minimal policies; lack of a rigidly enforced corporate-image program; open change boxes in employee cafeterias . . .

Relative absence of hard-and-fast rules, and great allowance for differences in judgment, sometimes combine to produce a fuzzy area that many companies would not tolerate.

Some managers have pointed out that managing at Tek is a hard job. And that's true; but, then, we never promised them a rose garden.

A Stake in the Company

In 1948, employees received bonuses tied to output. Then one of them suggested that it would make more sense linking incentives to profitability. Like many another employee idea, it proved to be a good one.

Profit sharing as a variable part of compensation began the next year. It then expanded to include retirement income, and later to cover overseas employees. Now most Tektronix organizations and the great bulk of employees receive cash profit share, but pension plans have replaced retirement PS in most subsidiaries and supplement it in the parent company.

Cash profit share amounts to 27½ per cent of



participating Tek companies' income before income tax. What this has meant to employees over the past five years is that 10 to 18 per cent of compensation has depended upon the company's profits.

(That 27½ per cent of income doesn't mean we're magnanimous. All it measures is the employee's *stake* in Tektronix' profitability, the extent to which he/she and the company have agreed that compensation should vary with the ups and downs.)

In the US, the 35 per cent of Tektronix income going to profit share (27½ per cent in cash, 7½ per cent retirement) is more than the tax man gets, and about the same as goes to earnings for shareholders.

Of course, as we've grown big, the connection between an individual's effort and a given month's profit is harder to trace. But we believe firmly that profit sharing remains a powerful force affecting your company's performance.

Here are some reasons we feel that way:

- *PS encourages looking beyond one's own immediate job.* The Tek employee *must* view "the job to be done" more broadly than someone working for a non-profit-sharing company. When your pay doesn't seem to depend on the work of others, what they do, and how, is *their* business, and you stay out of it. Here, that's not so; it's to both your advantage and theirs to evaluate what others are doing; to devise ways and spend time to help them do it better. The history of Tek is full of successful cooperative efforts unlikely to have occurred in a non-PS atmosphere.

- *It encourages open communication.* That's how you convey and receive helpful suggestions, critical comments and good ideas.

- *It results in better decisions.* Somehow you think differently about buying a desk, or attending a conference, when you realize that the money comes partly out of your paycheck (and when you know that others also will be aware of your actions).

- *It encourages the "right" kind of people to join us,* those willing to bet on their ability to contribute both individually and collectively. These true believers are the ones who can be best expected to make the kind of decisions, mentioned above, that weigh actual need against long-term effect on profits.

- *It is skewed toward higher profitability, which may*

be the main reason companies who share profits, on the average, do better than those who don't. Because the employee suffers the down times as well as benefiting from the up times, his or her emphasis will be on increasing the latter.

- *It provides flexible operating expenses.* When things go bad and some companies have their backs to the wall and must cut costs, they often have no choice but to reduce employee numbers. In a profit-sharing company, payroll costs go down automatically as profits go down. This may lessen the pressure for a layoff—or make less severe any one that does occur.

- *Regularly communicated, it tells how we're doing.* When employees are "told" in their paychecks that Tek needs to improve, they're able to respond fast. In a non-PS company, corporate fortunes are less apparent, which may delay the necessary corrective action (or the attitude of acceptance necessary for that action to be effective).

- *It allows every employee to have a direct and personal effect on company success,* and thus on his or her own paycheck. This effect may be by hard work, working smarter, helping others do better or setting a good example.

And it fits in well with our merit-pay system. As, through demonstrated merit, you earn greater responsibility, you also earn a greater chance to affect your own pay by making broader, farther-reaching decisions.

- *It helps employees accept change.* A change that's disruptive to an individual or work group may be resisted. But once it's seen as contributing to their own profits, that can be an incentive to its acceptance.

- *It reinforces our honor system.* Persons who violate that system are also "cheating on" themselves.

At Last: A Use for Flak

The stake in Tektronix created by profit sharing causes a lot of employee interest in what's happening. Open communications allow many ways for that interest to be expressed.

The resulting spotlight on just about everything that goes on has a healthful (if sometimes nerve-racking) effect on our style of management. Nothing keeps you on your toes more than to be accountable to all other employees for what you're doing. In a real sense, it's their company.

Companies typically build an insulation layer between top management and the broad em-



IN SMALL INFORMAL groups, President Earl Wantland will have met directly with nearly 2000 Tektronix employees this year.

employee base. This lets managers manage without having to be interrupted all the time to hassle the nitty-gritty of employee questions and complaints.

Well, we don't believe in that. Our choice from the word "Go" has been to live with very little insulation, and to develop an organization that fosters open and direct communication to and from all levels. It's a Tek tradition that each manager, each person, be accessible to anyone who needs his or her help.

Back yonder in the early days, all Tek people met together regularly to talk about how things were going. When the workforce outgrew the meeting space, those sessions could no longer be held. But the conversations had proved so valuable that a way was found to keep them going.

Over the years, with refinements here and there, those employee-management conversations have continued. They go on today in our Area Representative activity. In this voluntary, employee-run program, about 200 elected representatives of Tek work areas meet monthly with management people to discuss matters of concern. The conference includes a brief summary of current matters by a management person; a structured presentation on some Tektronix or Tek-related topic chosen by the Area Reps; oral answers to written questions submitted by employees before the meeting, and a free-wheeling Q and A session on any and all topics (except personnel grievances). Proceedings of the conference are distributed to all employees that week.

Coordinating the Wilsonville and Beaverton activity is the responsibility of a nine-person panel elected by the Area Reps and meeting on company time.

In addition, each work area may hold its own monthly meetings (also on company time), which may be devoted to a tour of a Tek area; a speaker or film, or one of a number of self-development activities.

Area Reps provide a continuing means of seeing that employee questions and suggestions are directed to whatever manager or other Tektronix individual is most able to respond, and of following up to see that the response has been obtained.

Openness also typifies Tektronix publications. Our employee newspaper, Tekweek, is the only weekly company eight-pager we've heard of; and our managers' newsletter, AGENDA, may be unique in industry in that it has no top-management review or censorship. People can ask, or say, whatever they wish.

Let us say—before you do—that, yes, an atmosphere of open communications *does* take up a lot of management time; it *is* sometimes a nuisance; it *doesn't* work perfectly; and it *does* generate a lot of flak.

But it has resulted in an uncommonly informed, aware, eager workforce. And we've even found a good thing to do with flak: *Use* it. The upshot of many an employee suggestion or criticism has been to improve something we otherwise wouldn't have known needed improvement.

NOT ALL OUR communications avenues are flak generators. "You Done Good" awards are an in-



formal, easy way of passing out compliments.

Tek reading racks are kept filled with these simple, attractive YDG certificates. Any employee, at any level, who wishes to give a backpat to another, at any level, anywhere in the company, simply fills in the form—name of receiver, name of sender and what it is that's being commended—and drops it into the interplant mail.

The extent of usage—some 12,000 YDG awards were sent in the first two months of the program—suggests that Tek people are very proud of one another.

'Basic Honesty' Key Belief

The personal quality of Tektronix has allowed the human values deeply held at the outset to be transmitted, largely face to face, in a way that could hardly have happened in a more traditionally structured company.

"At the start," Howard recalls, "we put a lot of effort into getting people who had a lot of talent, not just competence for the job at hand. Of course, you can't legally do so much of that now. But I believe you can tell a great deal from a person's hobbies, interests, involvement in other activities and other signs of personal enthusiasm. We hired people, even into assembly jobs, with the idea that we were growing so fast they wouldn't be there long. A lot of our managers today are people who started at the bottom level.

"And there was a lot of self-selection, too, of confident people who wanted to join us and who believed in our way of looking at things."

The core of that "way of looking at things" is the Tektronix honor system.

"In structuring a company," Howard once noted, "I suppose you can go about as far as your true feelings about people will let you go. Our enterprise is based on some very strong feelings about human beings:

"The individual has dignity and importance.

"Each person wants to do a good job.

"No one has ever really found the limits of human ability.

"People are basically honest.

"Once you believe these things, then trust in the individual's integrity and confidence in his or her judgments both flow naturally."

This is not to deny that the system is open to abuse by a few. A system can be either geared to the abusers (fence the property, hire guards, put

away the open change boxes, punch in, punch out) or to those who behave honorably. Our choice is the latter.

The honor system is far more than open change boxes, or lack of time clocks and fences. It is a permeating influence on many aspects of behavior, from understated product claims, to strict pay-on-time business practices, to conservative and straightforward accounting, to honoring of contracts.

Most of all, it influences what employees expect of *each other*.

Long Service Valued

An important Tektronix goal is *long-term* employment. We've rejected hire-and-fire as a solution to economic downturns, preferring instead to rely on conservative hiring; use of overtime pay; internal transfers (as a non-union company, we've had the flexibility to use this option); the cushion of variable payroll resulting from profit-sharing, and a policy of shouldering the tough times together (through shutdowns for all employees) rather than penalizing the few.

Howard sees three main reasons why Tek values longevity:

1. Importantly, it helps maintain the character of the organization. An employee needs to be around a while to assimilate our values, then a while longer to transmit them. Short-term employment works against this benefit.

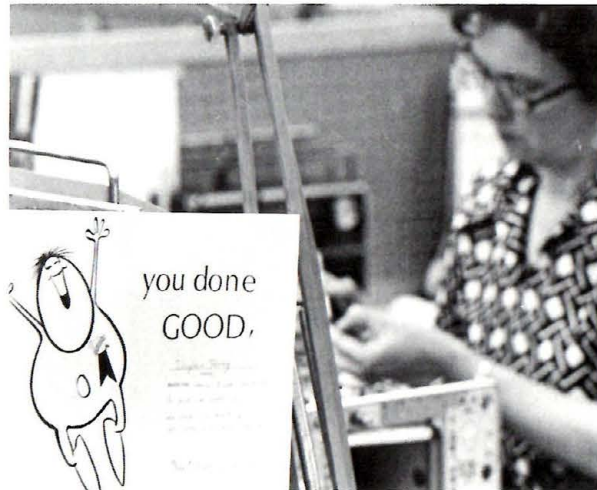
2. It can build a growing bond between employer and employee—particularly in a profit-sharing company, where you go through ups and downs together.

3. Tek thus has, at any given time, a large supply of experienced and promotable people, wise in the company's ways and able to make sound judgments.

Tektronix Turns Thirty

It's stretching a bit to call ourselves a young company any more, inasmuch as we became 30 in January. There's nothing geriatric about that age, certainly, but we *are* older, more mature, larger and, like the world around us, a great deal more complicated.

The problem with wearing mismatched socks the day you strike it rich is that you may think the socks *caused* the good fortune. Similarly, a company must continually appraise its behavior to



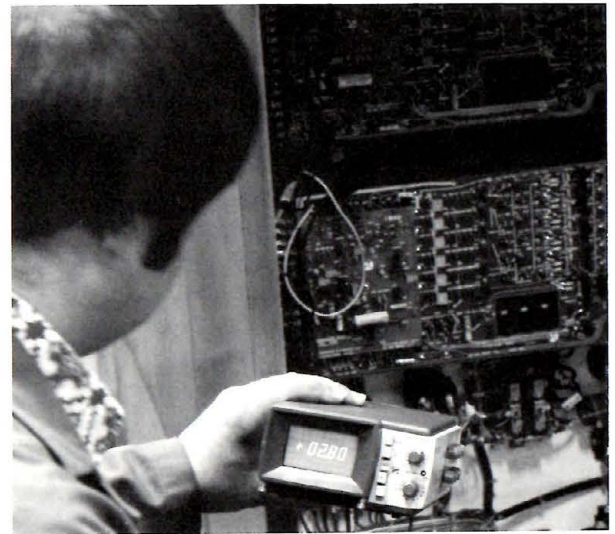
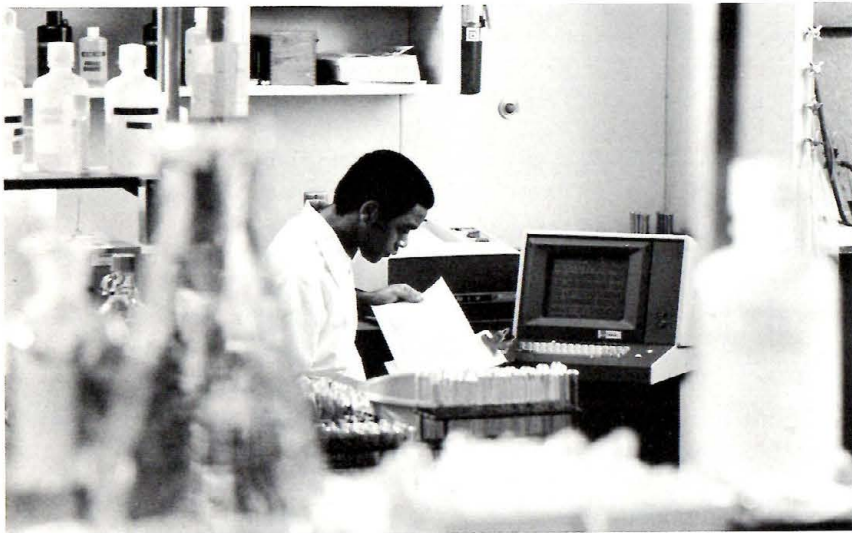
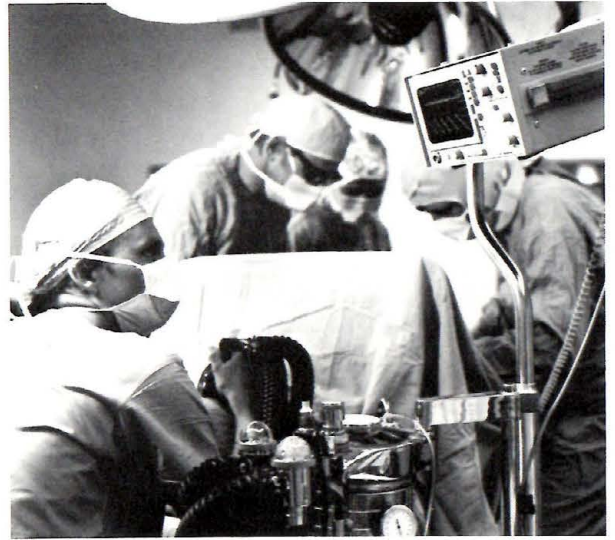
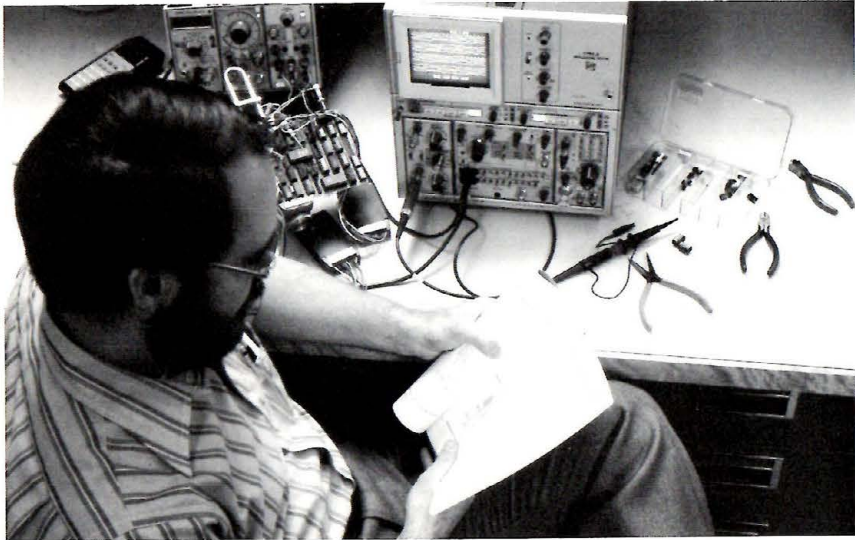
separate the factors that cause success from those that merely accompany it.

So our value system is always on the line. And there will always be things working against it: Size, complexity, expediency, external pressures. All these forces push toward conformity and against uniqueness; toward being just another large company.

Certainly growth may cause practices to become outmoded, and even policies to change. But when it comes to basic values, it seems that you can't "get too big." Far from our honor system having been outgrown, it is now—in our jaundiced, distrusting age—of more critical importance than ever. Far from employee individuality needing to be restricted in the name of efficiency, the need is to allow more and more freedom and honor more and more personal differences; where else can creativity come from?

A practical question: Does our value system "work?" Well, over the years we've seen unwavering personal dedication by employees, not only to their jobs but also to company welfare as something not apart from, but *a part of*, their own efforts. It seems from here that—despite the imperfections and the flak—people here share the excitement of our enterprise; they're proud to work at Tektronix.

So, hand in hand with pioneering new technology and new markets, our efforts will continue toward maintaining our system of human values; to remain open, informal and personal—to be "the place," as Jack and Howard called it, "where our best friends work."



For every Tektronix employee, there are more than three Tektronix commercial customers.

Our customer base exceeds 45,000, no one of them accounting for as much as 4 per cent of our business. These companies span science, industry and education.

Tektronix is one of the world's two largest test-and-measurement-instrument manufacturers. For roughly two of our three decades, we've led the world in development and production of cathode-ray oscilloscopes. There's really no close second, even on the horizon.

Tek also leads in graphic computer terminals, having spent a great deal of time talking up particularly low-cost graphics back when few others

were much interested. Graphic terminals are not a large part of the total terminal market, but they're a very fast-growing segment.

In television test instrumentation, our long and close attention to the needs of the TV industry has given us a commanding position also.

Tek has few product lines that are not strong factors in their markets, typically ranking first or second.

This product strength stems partly from continued heavy investment in research and development. Our R&D expenditures, about 8.1 per cent of last year's sales, place us in the top US companies in that respect.

Our products figure in the research, design,

WARES

measurement or testing of pretty nearly anything you can think of.

Oscilloscopes

The oscilloscope is the most common electronic instrument. Its markets span almost all human disciplines. It's about as ubiquitous as the microscope and, like it, extends man's abilities by letting him see something he otherwise could not.

What you see on the oscilloscope screen is the graph of some electrical "event"—or any of the wide variety of phenomena that can be converted to electrical signals: Heat, sound, pressure, strain, velocity, nuclear events, biochemical signals, acceleration . . .

The graph is produced when a focused beam of electrons is fired at great speeds against the sensitive phosphor screen of the scope's cathode-ray tube (CRT), lighting the spots it hits.

The beam sweeps left to right, at speeds as "slow" as seconds to well under a hundred-millionth of a second. Except at very slow speeds, the moving spot is seen as a solid line, graphing the waveform. Its up-and-down movement measures the event's voltage.

Phenomena that rapidly and regularly repeat produce a stable image on the CRT. *Storage* oscilloscopes can also graph events that happen slowly, randomly—or once only, like a fracture or explosion—by retaining the image on the tube's screen.

Some oscilloscopes use interchangeable *plug-in units* to vary their ability to acquire signals, usually

by controlling either the left-to-right or up-and-down beam movement.

Most *vertical* plug-ins can either amplify small signals or reduce larger signals so they may be graphed. Others let the scope draw more than one graph at a time. Still others do arithmetic, comparing two points in a circuit and presenting the voltage difference to the CRT, or canceling out a large unwanted voltage segment and expanding the small portion you want to look at.

Horizontal plug-ins let you widely vary the beam's range of sweep speeds.

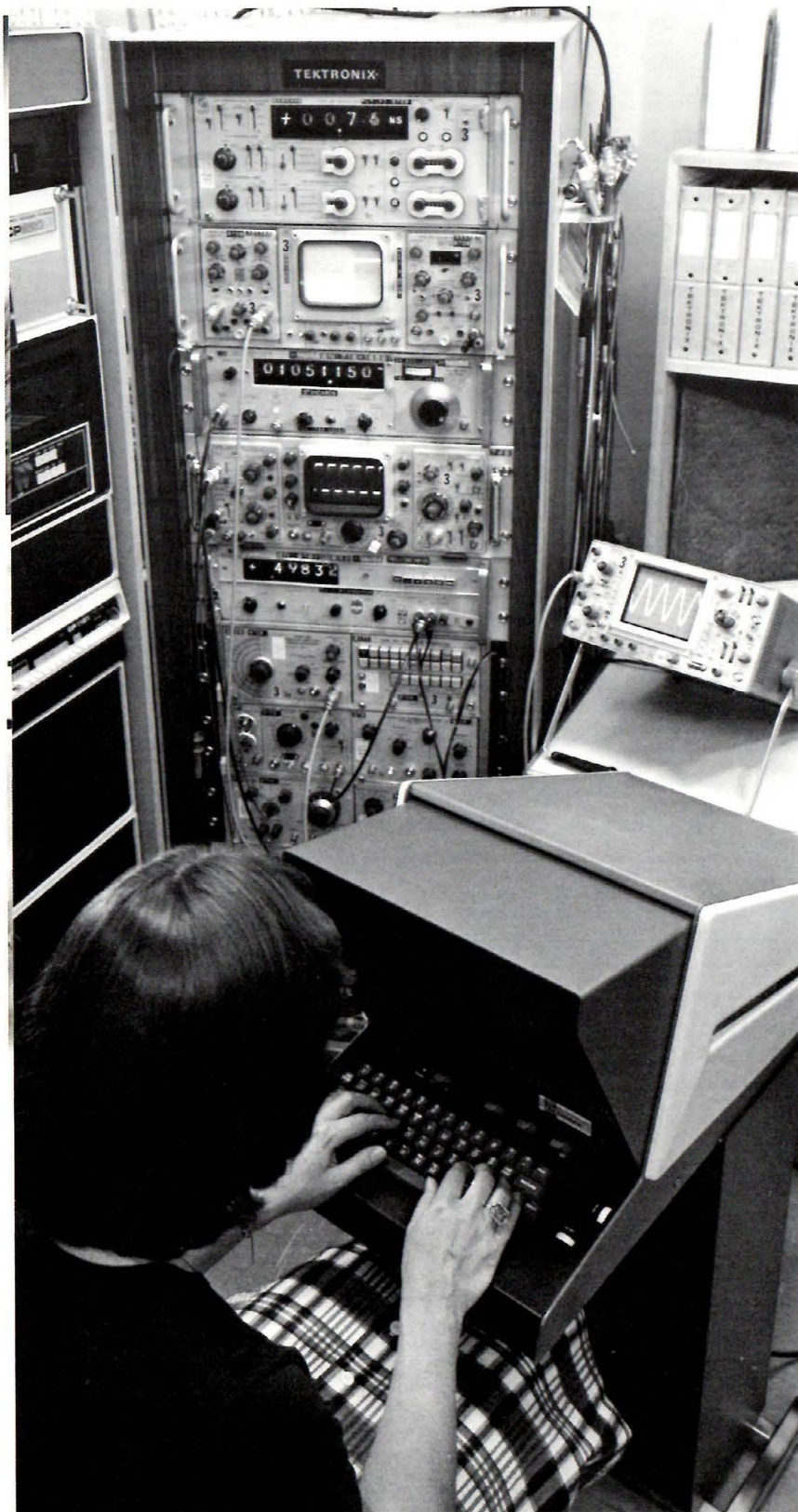
Other plug-ins are *counters* or instruments that digitally measure current, voltage, resistance, temperature and frequency. Still others let you picture an electrical change that occurs too fast for conventional scopes, by sampling successive bits of a repetitive signal and reassembling the samples into a graph of the waveform.

Some scopes offer readout (often on the CRT screen), giving signal information in numbers and letters as well as waveforms.

Some scopes are portable, optimized for easy carrying-about. Some even are small enough to be hand-held while in use.

Some advanced models contain what's come to be known as "intelligence"—built-in computer power—allowing complicated mathematical processing that an unaided scope wouldn't be able to do.

Other specialized plug-ins turn the scope into a *spectrum analyzer*, by converting the CRT display from a time to a frequency base. This allows an



equally useful analysis of complex signals, separating them into their component frequencies.

Information Display Products

When man interacts with a computer, it's often through a *terminal*, which provides him a way to put in information, or take it out, or ask questions and look at the responses.

Most terminals—ours included—insert coded information from a keyboard and get word-and-number (alphanumeric) answers, on a picture tube or paper.

To this capability, most of our terminals add graphic attributes. They let the user interact with pictorial material—charts, diagrams, maps, graphs—often more meaningful than alphanumerics.

Our storage CRT holds the computerized information in place while it's looked at. The user's input is made on a keyboard, or with devices that let him "write" on the screen. He can then change the display or enlarge part of it.

Add electronic "intelligence" to a storage terminal, and you have a *graphic computing system*. It extends human brainpower in two ways: By employing the kind of high-speed data manipulation associated in the past only with large computers, and then by enabling pictorial renditions of that processed data.

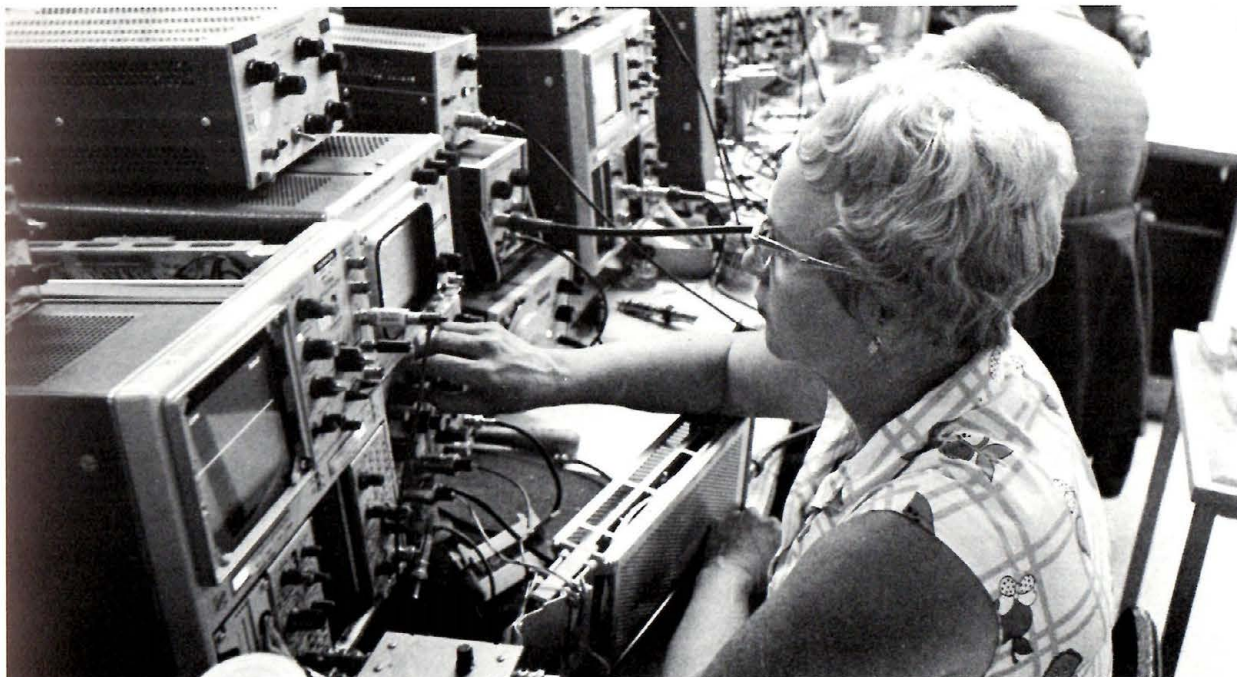
Related products include *hard copiers*, which quickly make paper duplicates of the CRT screen contents, and *display monitors*, which receive and picture computer output but do not have keyboards.

Television Products

The kids play a game called Gossip. In it, a story is whispered around a circle, from one player to the next. By the time it gets back to the originator, of course, it's all wrong, causing giggles.

Except that no one would think it funny, the same kind of distortion could easily happen to television signals as they pass through hundreds of points on their way to your home. That they *don't* deteriorate is largely a credit to Tektronix TV instruments, which catch and correct video transmission errors.

Our products improve transmission quality in several ways. They include *signal generators*, which assure that video signals are synchronized, or



produce patterns and signals allowing detection of even the smallest transmission flaws; *waveform monitors*, which enable detailed analysis of TV picture signals; *picture monitors*, which let quality measurements be made while the TV image is being viewed; *vectorscopes*, which produce circular graphs of transmitted color video-signal components; *controlled-correction amplifiers*, which rectify color-transmission errors, and *demodulators*, used at the TV station to assess transmitter imperfections.

Our Grass Valley (California) Group develops and manufactures *production* and *routing switchers*. The former are used in the studio to compose the final program you see, by editing and combining a number of video sources through fades, cuts, dissolves and special effects. The latter move video input from one location—such as an on-site news pickup—to the network or to studios.

OTHER PRODUCT LINES include: Automated test systems, used for testing integrated circuitry and semiconductors, including computer memories and microprocessor chips; counters; programmable calculators; digital multimeters; digital photometers; display monitors; physiological monitors; semiconductor curve tracers; generators; trace-recording cameras, and a wide variety of oscilloscope accessories.

Some of the products that contributed most strongly to the year's sales increase, or whose introduction generated special excitement, are described in this section:

People Like the No-Frills Scope

The low-cost T900 oscilloscope line, introduced in September, offered a price/performance value intended to increase our market share in industry, education and government. It outdid our sales estimates, and drew customers from pretty much across the board.

Competitors had been poking away at the Tek scope line, and saw the low-price area as a likely chink. The T900 is our counter-punch. However, not only did it meet this price competition head-on; it also pulled customers away from products in both higher and lower price ranges.

Largely because Tek's approach to product specs has always been conservative—35 MHz is the "official" T900 top bandwidth—we've been able to sell these scopes against up to 50MHz competitors. Also, some customers, drawn by the extra value for just a few dollars more, have stepped up from lower-priced products.

Sales into the industrial-service market have been heavy, including for computer servicing. Education also is a large user.

To our first five models, we've added a



A HIT IN THE low-price scope market, the T900 series combines performance, ruggedness and compactness. One use is computer servicing.

rackmounted scope designed for oil-well exploration.

Are we "competing with ourselves?" That is, taking sales away from more-expensive Tek instruments? That may happen from time to time. But, as we noted, there are other low-price competitors seeking to do just that. If a potential buyer is thinking of something less costly, we'd rather have that "something" be ours, too.

Storage Terminals Get Smart

You could have seen the 4051 and 4081 coming down the pike . . .

Tek's storage-tube knowhow has given us a commanding lead in low-cost computer graphics. Acquisition of a small California business several years ago allowed entry to a new (to us) technology, that of programmable calculators. Meanwhile, computer power was shrinking in both cost and size, finally resulting in speck-sized microprocessors, now available as off-the-shelf "brains" to add to a variety of products.

Mix these ingredients; it was only a matter of time until Tek produced its first two "intelligent" terminals, introduced this year.

The 4051 and 4081 are alike, yet unlike. Both are graphic computing systems. Both use the Tektronix storage tube for displays. Both may be used either as stand-alone systems or coupled to a host computer. Both offer more performance for less cost than competing systems do.

Now, the differences:

The 4051 may be looked at as a programmable calculator with graphic display added, or as a storage terminal with brains. It combines a calculator keyboard with an 11-inch storage tube, and gets its brainpower from a set of microprocessor chips. Its users for the most part will develop their own software programs.

It may be used in three ways: As a personalized desk-top computer, all by itself; as a terminal with intelligence, able both to do computer work alone, and to interact with a host computer; and as an intelligent controller of electronic instruments, competing with minicomputers in that particular respect.

Its keyboard uses the simple, powerful, English-like BASIC computer language, enhanced with instructions that produce a variety of graphics.

The 4081 is something else. In the stand-alone mode, its brains are a powerful minicomputer. An interactive graphic system, its forte is complex picture manipulation, aided by sophisticated software programs developed by Tektronix. Its large (19-inch) screen makes use of "refreshed" as well as storage technology.

There are two basic ways of obtaining CRT graphics. "Refreshed" displays require the electron beam to keep drawing the image while it's being viewed. This gives the advantage of allowing dynamic displays. Storage tubes, by contrast, hold the image after receiving it only once. Far less expensive, this technique also has no flicker or fading, and enables very fine-line graphics.

The 4081 combines both. Its refreshed feature lets the user enlarge, change, delete, rotate, move or otherwise tinker around with a portion of, say, a drawing while the rest of it holds still. Then, when the revised part is just right and in place, the storage screen holds it there.

The 4081, in particular, is keyed to the idea of distributed processing, an important trend in computer usage.

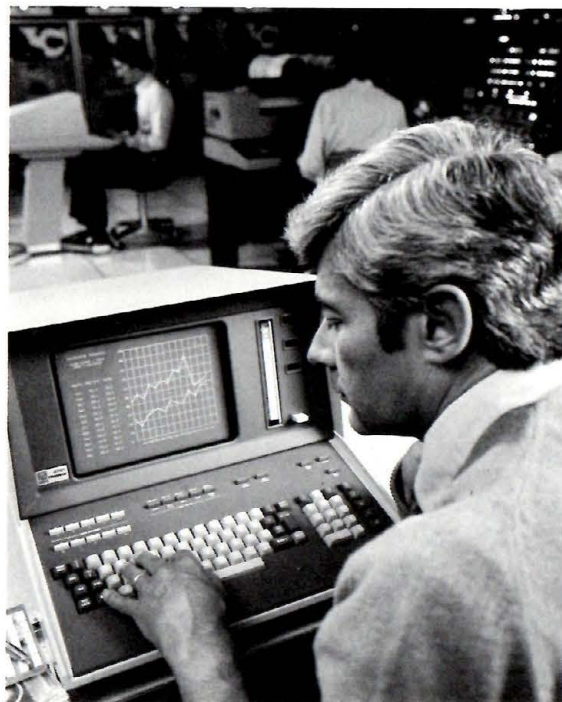
A typical use of computers has been time-sharing, the computing power of large mainframes being used by many terminals at once. As microprocessors and other technology have gotten far less costly, there's a change going on, to the use of "smart" satellite terminals, that can do a great deal of the problem work themselves. This leaves the host computer to its most fitting role, that of high-speed data cruncher with voluminous storage.

Distributed processing with the 4081 not only saves computer and transmission time and cost, but lets the user do a lot of the necessary fiddling and doodling and "thinking out loud" in a friendly sort of interaction with the terminal, getting personal no-wait attention to the problem.

The 4081 is being bought by designers and others whose work is essentially visual. The 4051 is purchased for a wide variety of applications, including by calculator users who find graphics a desirable freebie. (This system is price-competitive with those that do only numbers and letters).

Mixing and Matching with the TM500

There must be a shorter word for "configurability." Maybe not. Anyway, it's emerging as the most



OUR TWO "intelligent" terminals: The 4081 (top) and 4051.

popular characteristic of our TM500 series, which just had a first-rate sales year.

One reason was addition to this line of several high-performance products; another is simply growing customer acquaintance. The TM500 concept—small, modular instrumentation—is no longer new. People have had time to think about it. They like it.

But “configurability” is the (long) key word. And that was what we had in mind from the start.

As you may recall, the TM500s are a series of small plug-in test and measurement instruments which may be combined in six widths of mainframe. Each mainframe contains the power module, a substantial part of any instrument’s cost. Just as with a plug-in oscilloscope, the TM500 mainframe buyer finds that each addition to it costs him less than a self-contained instrument would.

There are now 35 TM500 instruments, including an oscilloscope, and mainframes ranging from one to six holes wide. And are they ever configurable! Not only mechanically (stackable, rackable, one-holer, two-holer, etc.) but also electrically—signals can be sent from one plug-in to another via the mainframe’s “mother board.” On competing products, you have to use wires and plugs, a clutter and a nuisance.

These mainframes can be rack-mounted, stacked, rolled over to the job on Scope-mobile movable test stations or, in the case of the Traveler mainframe, carried about like luggage, which it’s made to resemble.

With 35 instruments, the possible combinations run easily into the hundreds of thousands. There is nothing like that elsewhere on the market.

Among this year’s additions was the world’s state-of-the-art function generator, the FG504, the most flexible, widest-band (40MHz) signal source anywhere.

Sales have been excellent to education; to hospitals, for equipment maintenance; to the military, and, beyond that, to the same traditional wide range of R&D-oriented lab users as Tek oscilloscopes.

Cable Testers Off to a Good Start

An excellent sales response met the 1502 and 1503 cable testers in their first year on the market.

The vast amount of cable stuck under the ground by phone companies and other utilities

has created an instant market for the 1503. Designed for long cable, it can spot a fault to within a yard, from up to three miles away. We expect similar response to the 1502, designed for even more-accurate detection (within fractions of an inch) on shorter cables, but look for a bit slower gestation. Its applications, typically shipboard and aircraft cable, are most identified with military markets, which typically crack more slowly than civilian ones.

Among the more surprising areas of use are the chemical and mining industries. In the latter, broken ground cables on safety gear can cause equipment shutdowns costing \$15,000 an hour. Fast, accurate detection of breaks is critical.

These products use a technique called time-domain reflectometry, in which a pulse sent into an electrical line is reflected back into the instrument. The presence, nature and location of any faults can be deduced from the characteristics of the reflection as it appears on the CRT screen. Like shouting into a cave and studying the echo, sort of.

The 1502 and 1503 are small, lightweight, ruggedized—and obviously on their way to popularity.

A New Tool for the Data Domain

A phone user calls one number, but gets another one. A terminal operator pushes a button, and the computer gives him the razzberry. The problem may be electrical or component failure; faulty programming; errors in timing, or something else entirely.

With the proliferation of computers, computerized devices and computerish built-ins has come a growing need for very rapid signal transmission. “Slow” transmission, such as telephone conversations, can be done serially, with signal following signal in sequence over a single line. But high-speed transfer of information within a computer typically requires parallel transmission over many channels simultaneously.

Designing these systems, or testing or troubleshooting them, demands a way to capture and display the parallel streams of information, coded in on-off binary digits (or “bits”).

In the past, the workhorse oscilloscope has done that job, and well. But, with the increasing abundance of tiny microprocessors promising to multiply the presence of computer power, the

need has become clear for a specialized instrument to analyze these digital patterns.

The Tektronix 7D01 and LA501 are logic analyzers. Both use oscilloscope CRTs for their digital display. The 7D01 is a plug-in for any 7000-series scope mainframe; the LA501 is part of a TM500 modular-instrument package; it can use any oscilloscope for a display.

The scope's limitations in logic analysis were:

It could look only at a small chunk of the data stream at a time. It could trigger on a given fault, but could display only the part of the data stream that followed, not the segment that preceded the fault (where the problem might well lie). It could look at only four channels at once (in some cases eight), whereas data transmission commonly uses 16 channels.

Either of our logic analyzers can observe up to 16 channels at once. Through use of a "word recognizer" (integral with the 7D02, coupled to the LA501), it can trigger on a specific "word," fault or condition; then its extensive semiconductor memory stores the observed stream of signals, and can play back any portion that needs to be studied—including the all-important events that preceded the fault.

Then, having found the fault and its location, it can cause the scope CRT to produce a simultaneous display of the digital signals for closer analysis.

An ideal partner for the oscilloscope, the analyzer presents it with the logical relationships from streams of data racing by. The scope examines the data's electrical characteristics—bit by bit—to see if each is the right size and shape.

The 7D01 has another useful feature. Through use of a cursor, it lets the user not only observe the timing sequence of the data stream but at the same time also read a digital on-screen display of any given "word".

This market is new and fast-growing. These two products are strong ones, price-competitive, with greater memory than competition offers and embodying Tek quality.

The logic analyzer will become increasingly useful for logic-pattern analysis, as a companion to the scope on the logic designer's bench. It is a valuable tool for the software developer as well. Hardware designers will greatly benefit from the combination of logic and waveform displays offered in these significant new products.



THE LA501 logic analyzer, with a Scope-mobile and a 465 scope.



ENGINEERING-related 'bull session' occupies technical employees.

GLITCHES

A waveform displayed on a cathode-ray tube screen is supposed to be clear, sharp and true. When it isn't, it's often due to some unwanted spike, smear or wiggle that shows up on the CRT. Electronic engineers have come to call these undesirable aberrations "glitches."

Companies, too, have *their* operating glitches—things that interfere with, or distract from, the main job.

A glitch list is not upbeat reading, dealing as it does with things that didn't go just right, or were unproductive, or nuisances, or otherwise subtracted from the profitability of the year. But the reader plowing through this report to find out what really happened this year may find, among the glitches, a better understanding of the company.

In the Way of the Tar Brush

Even Rodney Dangerfield got more respect this year than US Business.

Being seen as a Large Corporation didn't get you many points. Surveys showed that only 19 per cent of the public felt "a great deal of confidence" in Business. That's a new low in corporate PR. Fifty-six per cent favored more control over Business by Government (even though only 13 per cent had "a great deal of confidence" in Government).

This kind of attitude can feed two very different kinds of pressures:

- One is a continuing legislative effort to cut multinational corporations down to size by making it harder for them to operate and compete overseas. The belief behind this is that restrictions will bring about higher employment stateside and a net benefit to the US.

The major recent anti-multinational measure was staved off three years ago. Yet pieces of it keep cropping up in one proposed law after another; we must stay on our toes.

- The other is a demand for higher business morality, triggered this year by the news of some corporations' illicit payments and other unethical practices in return for US contracts and foreign business. (Related to this is the tar-brush suggestion that these practices are typical of *all* companies.)

When public outcry has arisen over the well-publicized excesses of some prominent US corporations, we've shared the disappointment expressed.

A business-magazine article cites those companies' "kickbacks, extortion and *other questionable practices*." (Italics ours.)

It's hard to see that there's any question at all involved. The correct word for such behavior is "dishonest."

Tektronix' tradition, as noted earlier, is based on the honor system, a belief in the basic honesty of people. Our corporate atmosphere has tried to foster small as well as large areas of behavior embodying that belief—behavior toward employees, customers, suppliers, government. We seek in our business simply to be "businesslike"—a term founder Jack Murdock saw as incorporating many of the old-time virtues: Honor, mutual concern, truthfulness. . . .

For a while there, corporations' statements of ethics were coming out at such a clip as to almost seem a fad. And you wonder how much good they do. But, for the record, as to bribery, extortion and so on:

Tektronix never has engaged in such practices; (the matter has never even arisen.) We do not engage in them now. We intend never to do so.

It's been said, in defense of the companies involved, that kickbacks and so on are as much a part of the game in some nations as tipping a waiter is in ours.

Well, that may be; perhaps such behavior *is* a part of a given country's culture.

The fact remains: It is not a part of ours.

OUR INTENT is that no manager, no employee, ever engage in *any* activity on Tek's behalf—or in the belief that it is in Tek's interest—that violates his or her own highest ethical standards.

Should any such personal moral conflicts arise, our president has asked to be promptly and personally notified.

A great Tektronix strength has always been that company goals and those of the individual are seen as mutually reinforcing. To allow even the suggestion that one's ethical values should be compromised is intolerable.

Bigger Brother

The government, as everybody knows, is dominated by Big Business (just look at all the subsidies); is hostile to Big Business (hear the threats to bust up the oil companies); favors the wealthy (witness those tax breaks); is robbing the rich to pay the poor (see the huge welfare budget), and, all in all, is taking us to hell in a handbasket. It can't survive; we give it a couple of centuries at most.

In short, the government gets it from all sides. So we don't intend here to contribute to the general griping about Washington, imply that it's populated by incompetents, differ with the intents of most of its programs or even suggest we could run it better.

But the shareholder should be aware that a major influence on Tektronix operation is the growing federal involvement. (Not to mention that of other national governments, or of states and municipalities, increasing at an even faster clip.)



Someone said that the three R's of working with the government are rules, restrictions and reporting. A lot of Tek employees' jobs amount entirely to governmental monitoring and reporting, and those requirements are part of many, many other jobs here, representing payroll costs running into hundreds of thousands of dollars.

These programs typically grow. Who would have dreamed, when Social Security had its modest beginning, that people might someday pay more in SS than they do in federal income tax, as some Tek employees will this year? Unemployment and Workers Compensation costs are on a corresponding rise.

In past reports we've noted the tangled web of federal regulations affecting the conduct of international business. Some programs have been so complex that it took upwards of a year before they were even understood (including by the agencies enforcing them).

This year we faced new regulations and costly reporting requirements in: Product and plant safety; equal-employment opportunity; employee-benefit programs; securities; environmental protection . . .

The ERISA pension-reform measure this year brought about only minimal changes in our pension and retirement programs. But it materially added to their costs.

In our 30 years, we don't know that anyone has seriously harmed himself on a Tek product unless by dropping it on his toes. Yet the pressure increases to meet stricter and stricter safety standards—to be safer than safe; that will cost money, and may even compromise the performance of some products.

THE GOALS the government seeks are, for the most part, ones we endorse also. And, as a result of these programs, the work environment *will* be even less hazardous; our products *will* be super-safe (or even Jumbo-safe); the air and water *will* be cleaner; women and minorities *will* have greater representation in the work force . . . and so on.

But the programs are not free. There are trade-offs:

1. *In inflation.* It will cost more and more money to produce the same products—and thus to buy them.

2. *In lowered productivity.* The US already has the lowest annual increase of any industrialized nation. More time spent on non-productive activities will be a further dilution. This will work against the competitiveness of US products abroad.

3. *In a lowered standard of living,* in terms of material wealth.

ALMOST EVERY governmental regulation comes about to correct or forestall some abuse of some privilege by someone. So "we" bring it on "ourselves." One problem is, the non-offenders become saddled with the same set of restrictions and procedures that the few abusers do.

Second, these programs, designed to enforce consistent behavior, make little allowance for individual company characteristics. They're arbitrary, typically stressing the letter of the law over its spirit.

Third is a subtler thing, but, in a personal company like ours, most important:

Benefit programs and the like have a great deal to do with how a company feels about its people. These programs typically bring about a degree of employee goodwill.

Bvt once the programs become "taken over" by the government, as more and more are, they're seen less as privileges and more as rights; the goodwill vanishes. You get no credit as a company by engaging in a program that's seen as done for (or by) the government.

A Harder Line on EEO

In a federal audit on behalf of US government agencies, Tektronix was found to be in compliance with federal equal-employment-opportunity laws affecting hiring, promotion and pay—as we have been in each of our previous compliance reviews.

These more-or-less annual reviews are required only for companies who contract or sub-contract with the government.

In those earlier audits, our practices were singled out as models for other companies. So, as this year's review began, there was every indication we'd be seen as complying. The law hadn't materially changed, and our programs had been strengthened and broadened.

But things change, including the values of our society—and the standards and techniques used by government agencies. The tone of this year's review was anything but congenial, reflecting a new federal emphasis on EEO.

The law was the same, but the ground rules had changed. From its original concern that employment practices be nondiscriminatory, the government's emphasis has shifted to affirmative-action programs correcting "underutilization" of certain groups of people—particularly women and minorities—in certain job categories.

Before our compliance was demonstrated to the auditors' satisfaction, the lengthy process had cost Tektronix upwards of \$45,000. And that doesn't count the many staff hours, nor show the effect of top-management time being diverted from other corporate concerns.

The audit showed us it's no longer enough just to have fair employment practices. More is needed; the historical data auditors may legally summon is of a variety and detail that few companies can readily retrieve on short notice. With the next compliance review (or some other governmental requirement) likely to call for even more kinds of information, the need is clear for a continuously updated, computerized personnel information system. The design of such a system has begun at Tektronix.

It will be costly; but *not* having one can prove exorbitant.

IN THE COMPETITIVE business world, the company making the best use of its human resources has an edge. We've long realized that equality of



opportunity in employment—assuring that no source of ability is ignored or underused—walks hand in hand with organizational effectiveness.

Thus our affirmative-action program (AAP) embodies attitudes we've always held, and extends employment practices long in existence.

But the program will require skillful managing. Recent court decisions have ruled it's as illegal to discriminate in favor of a member of a "protected" class as against that person. You can get nailed either way. Thus our task is clear: To administer the AAP as an acceleration of existing programs and practices rather than as the force-fit "numbers game" strongly implied in arbitrary federally required numerical EEO targets.

THERE CAN BE no quarrel with the idea that equal opportunity is a part of the American promise. Nor can it be left any longer for each institution to define "equality" for itself, or to decide how fast the inequities can be erased. Some sort of governmental prompting was probably a foregone conclusion. But, since we and the government seek the same goals in employment, the review process would gain if it were cooperative rather than combative.

And if it takes very careful management to meet EEO goals for protected classes without impinging on opportunities for others? Well... that's what managers are for, isn't it?

Today's inequities have long been with US society, including the lesser social and economic roles assigned to (or assumed by) certain groups. And they are not simple; they won't dissolve at the snap of even a governmental finger.

There's no point for us or any company to dwell on the past, or on demonstrated good intentions. Current social values say that what's been done hasn't been enough. Equal employment opportunity is a lofty goal, but it needs to be attained.

It's high time. Let's get on with it.

Tektronix vs US

This is the 16th year of our suit against the US Government in the Court of Claims, for infringement of our patents by their contractors.

Tektronix won the litigation in 1971. Then followed a lengthy deliberation on what that infringement was worth. In September 1975, the trial judge determined that we had \$7,381,174 coming. Luckily, we didn't run out and spend it; for, as

you might guess, there are more legal steps that must ensue.

Our most recent move has been to file our reply brief to the Justice Department's answering brief to our initial brief.

Got that? Okay; that reply brief is the last step before the trial judge's opinion goes to the full court. They may accept, reject or modify it.

We'll keep you posted, from year to year.

A Stronger US Dollar (Chuckle! Sob!)

The skidding value of the British pound sterling (a drop of 24 per cent in the course of the year) got a lot of publicity. Why, the layman may wonder, can't money values just stay put?

What a given currency is worth in other currencies is simply what people are willing to pay for it. The money market is much like the stock market in that respect.

International business people like to have their monetary holdings in stable, safe currencies, and



CAREER AWARENESS Fair acquainted employees with vocational avenues available at Tek, and local career-educational opportunities.

to exchange weaker for stronger ones. As demand for a desirable currency exceeds supply, its price goes up. Since it now costs more rasbuckniks to buy one pazoola, the rasbucknik is said to have weakened, the pazoola strengthened.

This year the US dollar strengthened against all major currencies except the Canadian dollar, reflecting relatively low US inflation rates. That's "relatively" low, which is something like being the world's largest midget; but rates in other countries ranged higher, some very high. (Argentina's is now about 1 per cent per day.)

As a reflection of an improved US economy, we applaud the stronger dollar. But, wait—let's also look at what that means to our business:

Tek (and other US) products become less of a bargain overseas, and those of local competitors more desirable, which is bound to affect sales. Also, when foreign currencies are converted in our consolidated books into dollars at reckoning time, that causes what's called a translation loss; that is, they're not worth as many dollars as they were.

(Given the continuing instability of currencies, these wiggings-about may even out over time. But, on the books, they can raise hob in a given year.)

Add in the almost-indeterminable effects on prices and on changing inventory and backlog values, and you have a complex snarl very few people honestly understand.

Our goal is, as nearly as is reasonable, to offset the fluctuations. We borrow, or sometimes enter into "hedging" contracts—both ways of incurring obligations in a given currency equal to our "exposed" assets in that currency. Sort of like betting equal amounts for and against the same boxer, with different bookies.

Our intention isn't to profit from these financial maneuvers, merely to neutralize the fluctuations, so our profit-and-loss sheet may more truly reflect the effectiveness of our business operations.

The whole thing is a headache.

Bloat

He would up and quit his lousy job, said the circus janitor who cleaned up the elephant cages—but he just couldn't bring himself to leave show biz. Similarly, Tek managers who deal daily with inflation may feel they're sticking with the job only out of devotion. Some days, anyway.

First, some good news:

Our productivity increased, which is the only long-term way to slow the inflationary trend.

The electronics industry is one of very few in which what you get for your dollar has increased over the years. As a comparison, let's look at today's type T921 oscilloscope, and compare its value with that of our type 513, one of the finest scopes available 15 years ago.

The 513 was a single-trace 20-MHz scope, operating at .3 volt per centimeter. Risettime was 20 nanoseconds, and the oscilloscope required a 500-millivolt signal from which to trigger. The 513 weighed 75 pounds, consumed 475 watts and measured 18½ x 12½ x 21½ inches.

The T921 is a single-trace scope also, with roughly the same bandwidth, 15MHz. Its sensitivity is 2 millivolts per centimeter, and it has a directly calibrated display in both time and amplitude. Risettime is 23 nanoseconds, and it needs only a 100-millivolt signal on which to trigger. It weighs just 15 pounds, consumes only 36 watts and measures 10 x 7 x 18½ inches.

The 513 cost \$1600 dollars—and 1951 dollars at that. You can buy the smaller, lighter, faster T921 for just \$695.

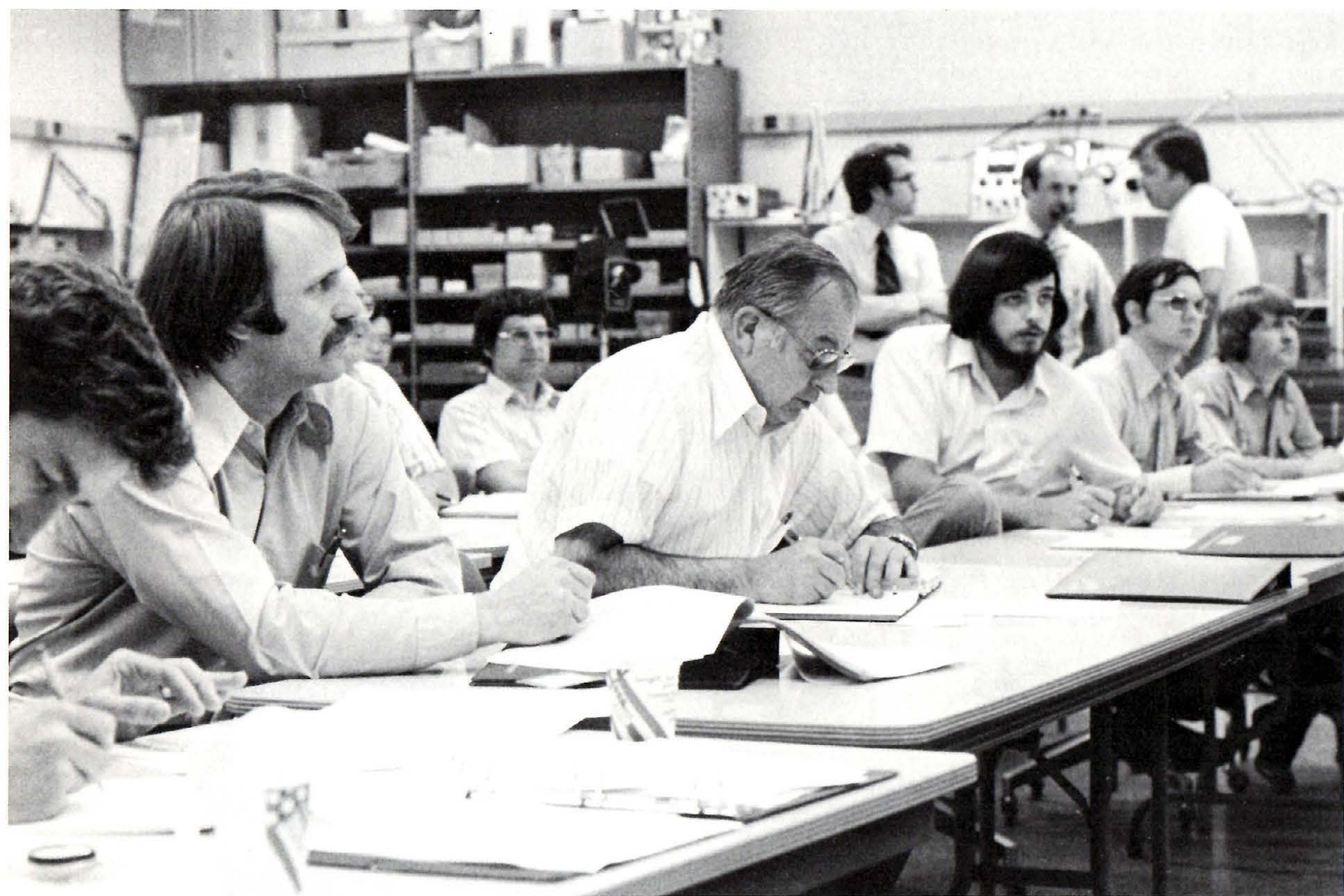
INFLATION, ALTHOUGH ebbing somewhat stateside, was still nothing to brag about. Overseas, it remained a double-digit scourge in most countries, even triple-digit in a few. It is destructive to any sense of financial security; it's a distressingly strong damper on incentive, and it adds confusion to everything from pay to pricing.

It's hard to hold to a merit-pay system when money inflates. This year we found the need to increase US employee pay 5 per cent, over and above merit raises, with no relationship to productivity. Price increases also showed the effects of monetary bloat.

Overseas, Tektronix subsidiaries had it even tougher, with local high inflation in most countries increasing their operating costs far faster than in the US.

The simple answer would seem to be: Just keep raising prices. But in some countries, there are controls on such increases. And in any case there's the predictable "ouch point" of customer resistance to contend with.

So, with an effective damper on prices and none on expenses, our foreign subs have been squished a bit this year.



CLASS TIME on the Tek "campus;" committee meeting on the lawn.

PROSPECT

Things look pretty good.

The coming year should see continued strengthening of Tektronix business. Overseas countries may be nearing the recession's end. The US economy shows renewed vigor. Our product lines are strong, many of them in early stages of their growth curves. Penetration of new markets is encouraging, as is the initial success of our new products. Electronics markets are growing faster than the economy overall.

Technologically, Tektronix is a virtuoso company. Our people are broadly capable and talented, more and more productive.

Our customers are loyal.

Our investment in forward-looking R&D continues to place us among the top US companies in this regard. Our divisional structure has proved itself under fire, allowing sharper focus not only on specific products and markets, but also on effectiveness.

It's generally agreed that economic cycles will continue; we intend to manage our way through them, as we did this year, flattening them by smoothing the peaks and troughs.

It's also agreed that inflation will continue relatively high, come fair or foul economic weather. We clearly need to gear our company to an inflationary environment in the years ahead.

Forecasts are that the annual US per-hour productivity increase will decline over the years to a feeble 1 per cent per year; we hope that's not so. But pressures will continue to work against productivity, here and throughout industry. Governmental involvement in what we do is bound to increase. More and more time and dollars will be spent on desirable but not productive activities: Air and water-pollution prevention; product and plant safety; employee programs . . .

JUDGING BY the accuracy of most forecasts, there's little point in our trying to second-guess what the year ahead might bring. It's probably more valuable to share with you some things that

you can count on in any given year.

The following statements, embodying the elements that form Tektronix' character, are abridged from our Statement of Corporate Intent, provided to all Tektronix managers. Some comments of possible value to shareholders have been added:

To consistently provide unmatched value in product and service.

Some superlatives aren't worth achieving. "The finest in craftsmanship" may matter little to the person who can't afford and doesn't need it. The one superlative we *do* endorse is "unmatched value," for that insures a satisfied customer.

We must be aware of customer needs very early, so our products are available soon enough to keep new technology alive and growing. Tektronix customers expect that.

Every employee should know how his or her job relates to customer satisfaction.

To recognize the one limitless resource: The individual and collective potential of the human being. To provide employees with maximum opportunity to exceed their own expectations.

We have to keep at two seemingly opposed tasks: One, to grow people, helping the individual expand to meet the next day's challenges. The other, to continually increase the challenges themselves, so the jobs we offer will extend or even surpass existing skills. Allowing a person to remain bigger than the job invites boredom; allowing the job to remain bigger than the person invites frustration. Either can result in half-heartedness.

The greatest disservice we can give the employee is under-challenge. The person who faces continuous challenge successfully will, in the long run, develop within himself only the true "job security."

To accept in full the obligations of leadership.

Leadership imposes certain obligations to contribute that followers need not assume. These include the willingness to venture where others fear to tread.

Our products' success must be measured in

terms of innovation as well as profitability—bringing into being something of unique value. A product with low profit at an early stage in its life may still open the doors to whole new worlds of technical potential—for *all* to share.

Leadership also demands corporate integrity—in every aspect of our performance. A leadership position is a magnet that attracts vital, creative new people to join in our efforts.

To consider continued profitability a valid measure of contribution.

Profit is a corporate objective, as well as the result of having carefully chosen and effectively met other objectives. Profit is the measure of what we add to the resources we use. It is likewise the continuing source for growth, product development, community contribution and the ability to offer stimulating personal challenge.

We don't expect the same profits on all products, or from all segments of the company, at all times in a product's life, or in all economic circumstances. For instance, we will not overly restrain investment in the future for short-term gain.

To maintain growth as a means of maintaining and renewing vitality.

Growth has many aspects: Sales, profits, assets, technology, job challenge, employee earnings, new products and services, personal knowledge and confidence. No one of these must be allowed to eclipse the others; a proper balance must always be struck, so that growth becomes a truly permeating force.

To remain static in an expanding field is clearly to fall behind. But bigness for bigness' sake is not a reasonable goal; nor is rapid growth itself a reliable measure of strength. *Orderly* growth is far more indicative—and that will result as we effectively meet our other objectives.

And, beyond any doubt, conservation and the best use possible of the earth's resources must become part of our growth pattern.

To focus our effort in the expanding fields of electronic equipment. To expand that effort only when we lead from strength and expect to make a significant contribution.

From our success with cathode-ray oscilloscopes, and out of our historical emphasis on display and measurement, has come an expanded line—of test and measurement instruments, computer terminals, hard-copy devices and display units.

Each extension to that line will be made as an

outgrowth of strengths developed through engineering, manufacturing and marketing existing products, and into an area where we can foresee a substantial contribution—of something new, unique, significantly more useful.

The electronic-equipment field, broad and dynamic, offers ample opportunity for our contribution toward the solutions to many of the world's problems.

To insure that corporate objectives, wherever possible, enhance the goals of the immediate and larger communities of which we are part.

The world has become too small, and its parts too interrelated, for us to set objectives without being mindful of their effect on others. As a local, a national and a global citizen, we must keep abreast of the social, political and economic strivings of those about us.

Tektronix will continue to vigorously lead the way in corporate citizenship, contributing as broadly as possible to the common welfare; for instance, giving of its resources to help solve social problems; encouraging education, and actively supporting the individual employee's involvement in the community.

To creatively manage change, by organizationally channeling it into the most socially useful and corporately profitable directions.

It's a safe guess that the rate at which things change will not slow down. Our organization must be oriented to put change to the best advantage.

The necessary combination of strength and flexibility will result from clearly stated and accepted objectives; open communications channels, so each employee may receive help and influence others; and just enough structure to support employees' best efforts.

A major goal of management is to foresee the *relevant* changes.

Leadership is not a matter of plunging ahead blindly, but rather of being first to move forward in productive new directions others have not yet perceived.

We must never allow ourselves to become enamored with an approach just because it's working, but rather to live in an atmosphere of constructive criticism, and keep asking the question: Is what we're doing valid *today*? Or, will it be valid *tomorrow*?

We can't afford to be satisfied for long.

Tektronix International Facilities

Tektronix Export Corporation, Beaverton, Oregon—
A Domestic International Sales Corporation

MANUFACTURING SUBSIDIARIES

Tektronix Guernsey Limited; Guernsey;
Tektronix Holland N.V., Heerenveen, The Netherlands;
Tektronix U.K. Ltd., London—Tequipment instruments;
SONY/Tektronix Corporation, Tokyo, Japan—
Serving Japan.

MARKETING SUBSIDIARIES

Australia—Tektronix Australia Pty. Limited, Sydney, Melbourne and Adelaide;
Austria, Rohde & Schwarz—Tektronix GmbH & Co. K.G., Vienna;
Belgium—Tektronix S.A., Brussels;
Canada—Tektronix Canada Ltd., Montreal, Toronto, Ottawa, Calgary, Vancouver, Dartmouth and Edmonton;
Denmark—Tektronix A/S, Copenhagen;
France—Tektronix, Paris, Toulouse, Lyons, Rennes, Nancy and Aix-En-Provence;
Japan—SONY/Tektronix Corporation, Tokyo, Osaka and Nagoya;
Republic of Ireland—Branch of Tektronix U.K. Ltd., Dublin;
Sweden—Tektronix A.B., Stockholm and Gothenburg;
Switzerland—Tektronix International A.G., Zug and Geneva;
The Netherlands—Tektronix Holland N.V., Voorschoten;
United Kingdom—Tektronix U.K. Ltd., Harpenden, Manchester and Scotland.

MARKETING REPRESENTATIVES

Serviced by Tektronix, Inc., Beaverton.

Argentina, Coasin S.A., Buenos Aires, Cordoba, Rosario;
Brazil, Importacao Industria e Comercio Ambriex, S.A., Rio de Janeiro, Sao Paulo, Porto Alegre, Belo Horizonte;
Chile, Equipos Industriales, S.A.C.I., Santiago;
Colombia, HTR Ingenieros, Ltda., Bogota;
Ecuador, Protoco Coasin Cia. Ltda., Quito;
Hong Kong, Gilman & Co., Ltd.;
India, Hinditron Services Private Limited, Bombay, Bangalore;
Indonesia, P.T. United Dico-Citas Co. Ltd., Jakarta;
Korea, M-C International, Seoul;
Malaysia, Mecomb Malaysia Sdn. Bhd., Selangor;
Mexico, Tecnicos Argostal S.A., Mexico D.F., Monterrey, Guadalajara;
New Zealand, W & K McLean, Ltd., Auckland, Wellington, Christchurch;
Pakistan, Pak-Land Corporation, Karachi;
Peru, IRE Ingenieros, Lima;
Philippines, Philippine Electronics Industries, Rizal;
Singapore, Mechanical & Combustion Engineering Co., Ltd., Singapore;
Sri Lanka, Maurice Roche Ltd., Colombo
Taiwan, Heighten Trading Co., Ltd., Taipei;
Thailand, G. Simon Radio Company Ltd., Bangkok;
Uruguay, Coasin Uruguay S.A., Montevideo;
Venezuela, Coasin C.A., Caracas.

MARKETING REPRESENTATIVES

Serviced by Tektronix Limited, Guernsey, Channel Islands, and Tektronix Datatek, Badhoevedorp, The Netherlands.

***Angola, Equipamentos Tecnicos, Lda.,** Luanda;
Federal Republic of Germany, Rohde & Schwarz Vertriebs-GmbH, Cologne, Hamburg, Munich, Karlsruhe;
West Berlin, Rohde & Schwarz Handels-GmbH;
Finland, Into O/Y, Helsinki;
Greece, Marios Dalleggio Representations, Athens;
Iran, Berkeh Co. Ltd., Tehran;
Israel, Eastronics Limited, Tel Aviv;
Italy, Silverstar Ltd., Milan, Rome, Turin;
Jordan, Tareq Scientific Bureau, Amman;
***Kenya, Engineering & Sales Co.,** Nairobi;
Lebanon, Projects S.A.L., Beirut;
Morocco, SCRIM, Casablanca;
***Nigeria, Mofat Engineering Co. Ltd.,** Lagos, Ibadan;
Norway, Morgenstjerne & Company A/S, Oslo;
Portugal, Equipamentos de Laboratorio Lda., Lisbon;
Republic of South Africa, Protea Physical & Nuclear Instrumentation (Pty) Ltd., Bramley, Cape Town, Durban;
Saudi Arabia, Electronic Equipment Marketing Establishment, Riyadh;
Spain, C. R. Mares, S.A., Barcelona, Madrid;
***Tanzania, Engineering & Sales Co., Ltd.,** Nairobi, Kenya;
Turkey, M. Suheyl Erkman, Istanbul;
***Uganda, Engineering & Sales Co., Ltd.,** Nairobi, Kenya;
United Arab Emirates, Tareq Co., Kuwait;
Zambia, Baird & Tatlock (Zambia) Ltd., Ndola, Lusaka.

*Does not include Information Display products.

Tektronix United States Facilities

UNITED STATES

Tektronix, Inc., Beaverton, Oregon—Headquarters and Main Plant

FIELD OFFICES

Albany, N.Y.	*Huntsville, Ala.	Poughkeepsie, N.Y.
*Albuquerque, N.M.	*Indianapolis, Ind.	*Raleigh, N.C.
*Atlanta, Ga.	*Irvine, Calif.	Rochester, N.Y.
Baltimore, Md.	*Kansas City, Kan.	*Rockville, Md.
*Boston, Mass.	*Long Island, N.Y.	*St. Louis, Mo.
*Chicago, Ill.	*Los Angeles, Calif.	*St. Paul, Minn.
*Cleveland, Ohio	Milford, Conn.	*Salt Lake City, Utah
*Concord, Calif.	*New Orleans, La.	San Antonio, Texas
*Dallas, Texas	Oklahoma City, Okla.	*San Diego, Calif.
*Dayton, Ohio	*Orlando, Fla.	*Santa Clara, Calif.
*Denver, Colo.	Pensacola, Fla.	*Seattle, Wash.
*Detroit, Mich.	*Philadelphia, Pa.	*Springfield, N.J.
*Fort Lauderdale, Fla.	*Phoenix, Ariz.	*Syracuse, N.Y.
Hampton, Va.	*Pittsburgh, Pa.	
*Houston, Texas	Portland, Ore.	*Includes Service Center

TEKTRONIX UNITED STATES SUBSIDIARY

The Grass Valley Group, Inc., Grass Valley, California—Headquarters and Main Plant

FIELD OFFICES

Atlanta, Ga.	Dallas, Texas	Los Angeles, Calif.
Chicago, Ill.	Long Island, N.Y.	

**MANAGEMENT'S DISCUSSION AND ANALYSIS OF
STATEMENT OF CONSOLIDATED INCOME**

Increase, As Compared to Prior Fiscal Year (amount in thousands)					Ratio to Net Sales (%)		
1975		1976			1974	1975	1976
Amount	%	Amount	%				
\$65,217	24	\$30,000	9	Net Sales	100.0	100.0	100.0
26,556	20	5,151	3	Manufacturing Cost of Sales	49.0	47.4	44.9
11,854	32	7,504	15	Selling Expense	13.6	14.5	15.3
5,754	25	1,377	5	Engineering Expense	8.3	8.4	8.1
5,101	23	4,698	17	Administrative Expense	8.1	8.0	8.6
3,551	19	4,276	19	Profit Share Expense	6.9	6.6	7.3
3,544	290	(9)	(0)	Interest Expense	0.5	1.4	1.3
525	(40)	(1407)	177	Non-Operating Income (Increase)	(0.5)	(0.2)	(0.6)
8,332	22	8,410	18	Income Before Income Taxes	14.2	13.9	15.1
4,976	23	3,760	14	Earnings	7.9	7.8	8.2

The sales increase for fiscal 1975 reflects primarily increased unit sales attributable to the Company's increased selling efforts, to sales of improved products and to continued demand in the capital goods markets. To a lesser extent, the sales increase for 1975 is attributable to general price increases instituted following expiration of federal price controls. The increase in sales for fiscal 1976 is attributable primarily to price increases for all of the Company's products and to increased unit sales of information display products. Sales for 1976 increased approximately 9 percent over 1975, notwithstanding that the 1976 period was a fifty-two week period as compared to a fifty-three week period in 1975.

The increase in manufacturing cost of sales reflects primarily inflationary pressures on costs and increased sales. In 1975 cost of sales was also affected by the change to the LIFO method of accounting for inventories. The change had the effect of increasing manufacturing cost of sales for 1975 by approximately \$6,580,000. The Company attributes the decline in the ratio of cost of sales to sales in 1975 primarily to improved product design and productivity and to economies of scale as volume increased. The decline in the percentage relationship of cost of sales to sales for 1976 reflects primarily the effect of the price increases mentioned above and improved productivity.

Since 1971, selling expense, including advertising costs, has increased both in amount and as a percentage of sales, reflecting inflationary pres-

ures and management's decision to expand significantly the Company's marketing activities and service support programs. The increase in selling expense for fiscal 1975 and 1976 is also attributable in part to the implementation of a special incentive compensation program for most employees engaged in selling activities.

Administrative expense increases are attributable primarily to increased business activity and expenses incurred in connection with facilities expansion. To a lesser extent, administrative expense increases during 1976 reflect shifts in organizational responsibilities. Engineering expense increases reflect the Company's continuing program for developing new products.

The Company pays cash and retirement profit share based upon income of the participating companies before taxes, profit sharing, executive incentive compensation and charitable contributions. As a result, profit sharing expense increases directly with income before taxes. Effective December 1, 1974, Tektronix, Inc. adopted an Employee Pension Plan to augment the benefits under its Retirement Profit Sharing Plan. Charges to payroll expense for the plan for fiscal 1975 and 1976 were \$2,450,000 and \$4,968,000, respectively.

Borrowings during 1975 increased substantially as the Company invested in inventory and facilities in amounts which exceeded the cash generated from operations. The increased borrowings, together with the high level of interest rates resulted in a substantial increase in interest ex-

pense. In June 1975, the Company sold \$35,000,000 principal amount of 8-7/8% Notes due May 15, 1983. The proceeds from the sale of the Notes were used primarily to repay other indebtedness.

Other non-operating expense (income) items are primarily interest income, charitable contributions, the Company's equity in earnings of Sony/Tektronix and foreign currency translation and exchange gains and losses.

The provision for income taxes, including provision for United States income taxes on undistributed earnings of subsidiaries, is discussed in

Note 7 of Notes to Financial Statements. The effective tax rate for fiscal 1976 was 45.5 percent, as compared to 43.8 percent for fiscal 1975. The increase in the effective tax rate is primarily attributable to a higher percentage of earnings being taxed at rates applicable to United States earnings.

Net earnings increases reflect primarily the increased sales and the decline in manufacturing cost of sales as a percentage of sales mentioned above. The change to the LIFO method of accounting reduced reported earnings for fiscal 1975 by approximately \$2,224,000, and earnings per share by 26¢.

ACCOUNTANTS' OPINION

TEKTRONIX, INC:

We have examined the statement of consolidated financial position of Tektronix, Inc., and subsidiaries as of May 29, 1976, May 31, 1975, and May 25, 1974 and the related statements of consolidated income and reinvested earnings and of consolidated changes in financial position for the years then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying statements present fairly the financial position of the companies as of May 29, 1976, May 31, 1975, and May 25, 1974 and the results of their operations and the changes in their financial position for the years then ended, in conformity with generally accepted accounting principles applied (except for the change in 1975, with which we concur, in method of costing parent company inventories as explained in Note 3 to the financial statements) on a consistent basis.

Portland, Oregon
July 15, 1976

Haskins & Sells

Tektronix Consolidated Income And Reinvested Earnings

(THOUSANDS OF DOLLARS)

The accounting year is the 52 or 53 weeks ending the last Saturday in May.

1972	1973	1974	1975	1976
167,482	202,855	271,428	336,645	366,645
86,552	100,335	133,062	159,618	164,769
80,930	102,520	138,366	177,027	201,876
59,922	72,041	99,869	130,198	146,637
19,241	25,459	36,823	48,677	56,181
17,976	18,208	22,573	28,327	29,704
13,313	15,103	21,867	26,968	31,666
10,462	14,875	18,706	22,257	26,533
697	669	1,222	4,766	4,757
(1,767)	(2,273)	(1,322)	(797)	(2,204)
21,008	30,479	38,497	46,829	55,239
9,244	13,740	17,144	20,500	25,150
11,764	16,739	21,353	26,329	30,089
117,467	129,186	144,140	163,966	188,375
—	(1,785)	(1,781)	(1,734)	(2,107)
(45)	—	254	(186)	(50)
129,186	144,140	163,966	188,375	216,307
8,590	8,632	8,646	8,672	8,774
\$1.37	\$1.94	\$2.47	\$3.04	\$3.43

NET SALES Amounts receivable for products sold or rented. Tektronix sold directly to customers at retail in the U.S., and countries in which it has marketing subsidiaries, and to distributors at a discount, for resale in most of the rest of the world.

MANUFACTURING COST OF SALES The cost of materials used in the products sold. Also, the payroll costs of the employees who fabricated and assembled them, their supervisors, those who assisted them, those who devise improved manufacturing methods and those who design and make tools and equipment. Also, the expense of running the manufacturing operations.

GROSS PROFIT

EXPENSES

SELLING Payroll and commission of sales engineers and employees who assist them, advertising, travel, rent of offices, and other expenses of marketing.

ENGINEERING Payroll of engineers, and those who help them design and develop new products and the components to be assembled into them and to improve existing products, plus the cost of materials, supplies, space and related expense.

ADMINISTRATIVE Payroll of executives and personnel working on accounting, employment, data processing, facilities and communications functions, and the many expenses related to them.

PROFIT SHARING (Note 8).

INTEREST EXPENSE Cost of borrowed money.

OTHER NON-OPERATING EXPENSE (INCOME) Including interest income, earnings of 50% owned companies, currency fluctuation, amortization of intangibles and charitable contributions.

INCOME BEFORE INCOME TAXES

PROVISION FOR INCOME TAXES (Note 7) Estimated income taxes related to the taxable income of Tektronix, Inc., and its consolidated subsidiaries including U.S. income taxes on dividends that may be repatriated from subsidiaries.

EARNINGS A measure of company performance.

REINVESTED EARNINGS AT BEGINNING OF YEAR.

DIVIDENDS PAID 20¢ per share annually 1973-1975, 24¢ in 1976.

OTHER Proceeds from sale of treasury shares at (less than) cost and adjustments related to pooled company.

REINVESTED EARNINGS AT END OF YEAR.

WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING DURING YEAR (Thousands).

EARNINGS PER COMMON SHARE Dilution if all outstanding share options were exercised would not have reduced primary earnings more than two cents.

The accompanying notes are an integral part of these financial statements.

Tektronix Consolidated Financial Position

(THOUSANDS OF DOLLARS)

May 25, 1974	May 31, 1975	May 29, 1976
176,405	217,075	248,347
3,018	5,182	1,273
15,655	31,090	69,178
55,683	61,890	71,093
(453)	(621)	(955)
5,272	8,288	6,572
1,981	2,353	2,041
95,249	108,893	99,145
68,484	63,623	60,540
23,000	12,220	2,517
336	530	538
16,706	13,334	15,870
8,246	12,749	13,565
8,429	12,572	12,895
6,698	5,792	7,756
3,612	4,255	5,493
1,457	2,171	1,906
107,921	153,452	187,807
61,355	82,620	88,563
46,769	59,349	74,429
48,230	60,437	71,091
586	601	685
(49,947)	(57,668)	(66,682)
2,996	5,473	5,916
12,721	14,428	3,124
1,685	983	891
11,616	5,938	7,059
(637)	(29,835)	(38,601)
(6,452)	(10,837)	(13,716)
175,488	202,321	232,003
12,213	14,258	15,707
(691)	(312)	(11)
163,966	188,375	216,307

CURRENT ASSETS Assets likely to be converted to cash or used in the ordinary operation of the business.

CASH (Note 4) Mostly in checking accounts or deposits in transit.

CASH EARNING INTEREST Invested in time deposits, certificates of deposit, U.S. treasury bills, commercial paper, or short-term tax-exempt securities.

ACCOUNTS RECEIVABLE Amounts due from customers for sales on credit.

ALLOWANCE FOR DOUBTFUL ACCOUNTS

PREPAID EXPENSES AND DEPOSITS Amounts paid for things that will not be used and deducted until the following year, and deposits that will be refunded.

SUPPLIES Items that will be consumed in operating offices, maintaining facilities, and running manufacturing plants.

INVENTORIES (Note 3) 1975 and 1976 parent company at last-in, first-out. All other at lower of cost (first-in, first-out) or market. The cost of products finished but not yet sold, purchased materials and parts to be fabricated and assembled into products; and the materials, payroll costs and other costs accumulated in work-in-process.

CURRENT LIABILITIES Obligations due to be paid within one year.

NOTES PAYABLE (Note 4) Amounts borrowed for less than one year.

CURRENT MATURITIES OF LONG-TERM INDEBTEDNESS (Note 6) Installment payments due within one year.

ACCOUNTS PAYABLE Amounts due for materials and services bought on credit.

U.S., STATE AND FOREIGN INCOME TAXES (Note 7) Taxes not yet paid.

EMPLOYEE PENSION AND PROFIT SHARING (Note 8) Due employees and their retirement funds.

PAYROLL AND PAYROLL TAXES Amounts due employees next payday, and taxes due on or withheld from pay.

VACATIONS Amounts earned by employees for their vacations, but not yet used or paid.

INTEREST AND MISCELLANEOUS TAXES

WORKING CAPITAL Current Assets minus Current Liabilities.

FACILITIES AT DEPRECIATED COST The cost of buildings and equipment used in the business, reduced by depreciation.

BUILDINGS AND GROUNDS Cost of buildings, including parking lots and landscaping.

MACHINERY AND FURNITURE Cost of furnishings.

LEASEHOLD IMPROVEMENTS Cost of remodeling rented space.

ACCUMULATED DEPRECIATION Reduction of value for use, wear and age.

LAND Cost of land used in business.

CONSTRUCTION IN PROGRESS Costs accrued on facilities not yet put into operation.

INTANGIBLE ASSETS Amounts not yet deducted (amortized) as a cost of doing business for patents, trademarks, loan costs and the excess paid over the values ascribed to the net tangible assets of the companies acquired. This excess is frequently called goodwill.

INVESTMENTS AND LONG-TERM RECEIVABLES The investment in and advances to 50% owned companies and one half their reinvested earnings. Also included are installments of sale and lease contracts receivable due after one year.

LONG-TERM INDEBTEDNESS LESS CURRENT MATURITIES (Note 6) The unpaid portion minus payments due within one year of amounts borrowed for more than one year.

DEFERRED INCOME TAXES (Note 7) Future taxes on dividends from subsidiaries.

SHAREOWNERS' EQUITY (Notes 5 and 9) The net assets or book value owned by shareowners. This is equal to the assets minus liabilities. Shareowners' equity is made up of:

COMMON SHARES The amount the company received for issuance of common shares.

TREASURY SHARES The cost of Tektronix, Inc. common shares repurchased and held.

REINVESTED EARNINGS The accumulation of earnings reinvested in the business.

The accompanying notes are an integral part of these financial statements.

Tektronix Consolidated Changes In Financial Position

(THOUSANDS OF DOLLARS)

The accounting year is the 52 or 53 weeks ending the last Saturday in May. This statement summarizes the financing and investing activities of the Company.

1972	1973	1974	1975	1976	
19,862	24,416	31,497	39,403	44,209	WORKING CAPITAL PROVIDED FROM OPERATIONS:
11,764	16,739	21,353	26,329	30,089	EARNINGS As shown on INCOME STATEMENT.
6,394	6,834	7,525	9,388	11,635	DEPRECIATION OF FACILITIES The amounts deducted as an expense representing the decrease in value of buildings, machinery and furniture resulting from use, wear and age. Most were computed by accelerated depreciation methods.
(602)	(834)	(1,051)	(1,043)	(966)	EQUITY IN EARNINGS OF 50% OWNED COMPANIES less cash dividends received including equity in net gain or loss on translation of their monetary items. These amounts added to investment.
1,118	1,548	3,086	4,385	2,879	DEFERRED INCOME TAXES Amounts not to be paid currently.
1,188	129	584	344	572	OTHER
1,978	4,459	1,576	43,600	14,266	WORKING CAPITAL PROVIDED FROM:
628	2,945	396	2,418	1,700	COMMON SHARES Net proceeds from sale of Tektronix, Inc. unissued and treasury shares to employee participants of share purchase and option plans.
549	1,295	774	1,053	1,234	RECOVERY OF COST ON SALES OF FACILITIES That part of the proceeds from sales of facilities no longer needed by the company, equivalent to the depreciated cost.
—	—	—	29,910	11,307	LONG-TERM INDEBTEDNESS INCURRED.
205	107	109	9,852	—	REDUCTION OF INVESTMENTS Amounts sold or becoming current assets due within one year.
596	112	297	367	25	OTHER
6,131	13,223	29,541	37,472	24,120	WORKING CAPITAL USED FOR:
4,915	7,075	23,530	31,706	18,812	ADDITIONS TO FACILITIES Cost of land, buildings, machinery and furniture purchased or constructed.
685	160	323	712	2,541	REDUCTION OF LONG-TERM INDEBTEDNESS Amounts becoming current liabilities due within one year, and reduction in estimate of purchase price of business acquired.
244	45	27	9	505	INTANGIBLE ASSETS Amounts paid for patents, trademarks and loan costs and amounts accrued in excess of values ascribed to the net tangible assets of the businesses acquired (goodwill).
44	3,402	3,516	3,131	155	INVESTMENTS Long-term securities, receivables and advances to 50% owned companies.
243	756	364	180	—	PURCHASE OF TREASURY SHARES Cost of Tektronix Inc. common shares acquired by the company.
—	1,785	1,781	1,734	2,107	PAYMENT OF DIVIDENDS
15,709	15,652	3,532	45,531	34,355	RESULTING INCREASE IN WORKING CAPITAL Made up of
18,547	30,494	25,371	40,670	31,273	INCREASE (DECREASE) IN CURRENT ASSETS Minus
19,847	1,640	(11,819)	17,599	34,179	CASH AND CASH EARNING INTEREST
5,720	11,583	10,814	6,039	8,869	ACCOUNTS RECEIVABLE-NET
(7,016)	16,511	23,820	13,644	(9,748)	INVENTORIES
(4)	760	2,556	3,388	(2,027)	SUPPLIES PREPAID EXPENSES AND DEPOSITS
2,838	14,842	21,839	(4,861)	(3,082)	INCREASE (DECREASE) IN CURRENT LIABILITIES
(1,181)	1,972	12,596	(10,586)	(9,694)	NOTES PAYABLE AND CURRENT MATURITIES OF LONG-TERM INDEBTEDNESS
1,016	7,791	8,220	(2,921)	5,473	ACCOUNTS PAYABLE AND OTHER CURRENT LIABILITIES
2,346	1,400	930	4,143	323	EMPLOYEE PENSION AND PROFIT SHARING
657	3,679	93	4,503	816	U.S. STATE AND FOREIGN INCOME TAXES
73,028	88,737	104,389	107,921	153,452	WORKING CAPITAL AT BEGINNING OF PERIOD Plus increase in working capital equals
88,737	104,389	107,921	153,452	187,807	WORKING CAPITAL AT END OF PERIOD As shown on FINANCIAL POSITION STATEMENT.

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements: Tektronix, Inc. and Subsidiaries

1. SIGNIFICANT ACCOUNTING POLICIES:

Principles of Consolidation—The consolidated financial statements include the accounts of Tektronix, Inc. and its subsidiaries (all are wholly-owned) since dates of organization or acquisition, and retroactively to all periods for The Grass Valley Group, Inc. acquired in a pooling of interests on February 21, 1974 (see Note 2). All material intercompany transactions have been eliminated.

Foreign Currency Translation—Facilities and related depreciation, inventories, and other non-monetary assets of foreign subsidiaries are translated into U.S. dollars at historical rates of exchange. Monetary assets and liabilities are translated at year-end rates of exchange. Income and expenses, other than cost of sales and depreciation, are translated at rates prevailing at the end of each four-week accounting period. Translation and exchange gains and losses, including those resulting from foreign currency forward exchange contracts, are in non-operating income (see Note 2). The aforementioned policy is in accordance with Statement of Financial Accounting Standards No. 8.

Inventories—In 1975, the Company adopted the last-in, first-out (LIFO) method of inventory valuation for parent company inventories (see Note 3). Such inventories had previously been stated at the lower of cost, on a first-in, first-out basis (FIFO), or market. Inventories of subsidiaries are stated at FIFO.

Facilities and Depreciation—Facilities are carried at cost. Expenditures for maintenance, repairs, and betterments which do not add to the value of the related assets or materially extend their lives are expensed as incurred. Accelerated methods of depreciation are generally used both for financial accounting and tax purposes based on estimated useful lives of the facilities which vary from 10 to 48 years for buildings and grounds and 3 to 15 years for machinery and furniture. Leasehold improvements are amortized on the straight-line basis over the periods of the leases.

Investments in Joint Venture Companies—Investments in 50%-owned joint venture companies are stated at cost plus the Company's equity in undistributed earnings since dates of organization.

Income Taxes—In addition to provisions for applicable income taxes in each country and state, provisions are made for additional United States income tax on undistributed subsidiary earnings which may not be indefinitely

employed in the subsidiaries' operations and, beginning in 1974, for income taxes allowed to be deferred by the Company's Domestic International Sales Corporations (see Note 6).

Investment tax credits are accounted for on the "flow-through" method, which recognizes the reduction in tax in the year the related assets are placed in service.

Engineering and Development—Expenditures for plant start-up, engineering, and research and development are expensed as they are incurred.

2. SUBSIDIARIES AND 50% OWNED COMPANIES:

On February 21, 1974, the Company issued 465,637 of its previously unissued common shares in exchange for all the outstanding common stock of The Grass Valley Group, Inc. The transaction was treated for accounting purposes as a pooling of interests and, accordingly, the accompanying consolidated financial statements are presented as though the companies had been combined throughout each period. Sales and earnings of Grass Valley included in the consolidated financial statements as previously restated for 1974 and prior years were:

May 27, 1972	May 26, 1973	May 25, 1974	
\$3,214,907	\$4,657,960	\$6,088,174	Sales
546,627	1,065,727	1,470,212	Earnings

Assets and liabilities of foreign subsidiaries in the following amounts are included in the consolidated financial statements:

May 25, 1974	May 31, 1975	May 29, 1976	
\$58,817,780	\$76,374,909	\$75,517,482	Current assets
8,870,345	10,093,513	12,682,665	Facilities—net
966,797	823,249	584,277	Other assets
11,128,112	19,107,933	15,275,072	Current liabilities
200,400	4,671,690	3,666,112	Long-term debt

Earnings of foreign subsidiaries included in the consolidated financial statements were \$5,589,782 in 1972, \$5,471,825 in 1973, \$8,994,473 in 1974, \$13,371,253 in 1975 and \$7,945,738 in 1976.

Translation and exchange gains (losses) included in other non-operating income were as follows: 1972, \$1,151,315; 1973, \$606,008; 1974, \$(1,016,161); 1975, \$(369,096); and 1976, \$(859,227).

The Company's share of the earnings of 50%-owned companies was \$602,351 in 1972, \$834,182 in 1973, \$1,087,294 in 1974, \$1,076,470 in 1975 and \$998,102 in 1976.

3. INVENTORIES AND ACCOUNTING CHANGE:

In 1975, the method of valuing parent company inventories was changed from the first-in, first-out (FIFO) method to the last-in, first-out (LIFO) method because management believes LIFO constitutes a preferable method inasmuch as it more clearly reflects income by matching current costs against current revenues, and thereby minimizes the effects of inventory profits during periods of rising prices. The effect of the change for 1975 was to reduce inventories \$6,579,572, earnings \$2,224,000, and earnings per share 26¢.

It was not practicable to value the inventory at the end of the prior years on the LIFO method and therefore it is not possible to determine the pro-forma results of applying the new valuation method to the prior years and the effect on reinvested earnings at the beginning of the 1975 fiscal year.

Inventories consisted of the following:

May 25, 1974	May 31, 1975	May 29, 1976	
\$21,146,875	\$33,904,696	\$35,534,485	Finished goods
43,657,506	52,473,441	52,043,550	Work-in-process
30,444,758	29,095,066	21,977,342	Purchased materials
	(6,579,572)	(10,409,549)	LIFO reserve
<u>\$95,249,139</u>	<u>\$108,893,631</u>	<u>\$99,145,828</u>	Total

4. SHORT-TERM NOTES PAYABLE:

The Company has short-term borrowing arrangements with domestic and foreign banks which aggregated \$30,097,000 at May 29, 1976. Average compensating bank balances of 10% are informally required on \$10,000,000 of such arrangements.

The May 29, 1976 balance of notes payable bears interest at an average rate of 10.4%. Average borrowings during the year, based on period-end balances were \$7,586,000 at an approximate weighted average interest rate of 10.3%. Maximum period-end aggregate short-term borrowings during the year were \$14,535,000. During the years ended May 25, 1974 and May 31, 1975, average borrowings were \$11,843,000 and \$28,935,000 respectively, at average interest rates of 9.5% and 12.7%.

5. SHAREOWNERS' EQUITY:

Authorized capital consists of 20,000,000 common shares without par value. Issued and outstanding shares are as follows:

May 25, 1974	May 31, 1975	May 29, 1976	
8,670,507	8,737,493	8,792,721	Issued
19,463	8,992	311	Held in Treasury
<u>8,651,044</u>	<u>8,728,501</u>	<u>8,792,410</u>	Outstanding

6. LONG-TERM INDEBTEDNESS:

May 25, 1974	May 31, 1975	May 29, 1976	
		\$35,000,000	(A) 8 7/8% Notes due 5-15-83
		(214,385)	Unamortized discount on (A)
	\$3,502,500	1,764,000	(B) Revolving credit note
	1,244,000	2,203,760	(C) Term note
\$236,737	365,272	322,122	(D) Mortgage notes
708,628	230,000	42,527	(E) Contract payable
27,763	23,153	21,024	Other
	25,000,000		(F) Revolving credit note
<u>973,128</u>	<u>30,364,925</u>	<u>39,139,048</u>	Total
<u>336,337</u>	<u>530,082</u>	<u>537,964</u>	Less current maturities
<u>\$636,791</u>	<u>\$29,834,843</u>	<u>\$38,601,084</u>	Long-term indebtedness-net

(A) On June 3, 1975, the Company sold \$35,000,000 of 8 7/8% Notes due May 15, 1983. The outstanding balance on the revolving credit note (F) was repaid from the proceeds. The 8 7/8% Notes may be redeemed at any time on or after November 15, 1981, at the option of the Company, at the principal amount together with accrued interest. The Indenture relating to the Notes contains certain limitations on the amount of additional indebtedness which the Company may incur.

(B) The revolving credit note repayable in Pounds Sterling is due June 1, 1978. Interest varies with the London Interbank Offering rate and was 12.7% at May 29, 1976.

(C) The installment note repayable in French Francs is due \$449,000 in 1977 and \$523,000 annually thereafter.

(D) The mortgage notes payable are due in annual installments of \$46,200, plus interest at rates ranging from 4 1/2% to 7 1/2%. Facilities with an original cost of \$1,500,000 are pledged as collateral. One note is repayable in Dutch Guilders.

(E) The contract payable represents the discounted estimated contingent portion of the purchase price of the assets of an electronic calculator business acquired in May, 1971. Contingent payments were based on sales of calculator products to May, 1976. The Company has amortized the contingent portion of the purchase price as the payments accrued.

(F) This revolving credit note was due under a \$25,000,000 commitment with Morgan Guaranty Trust Company. Interest varied with the bank's minimum commercial lending rate and was 8.25% at May 31, 1975. In May 1976, the Company terminated the commitment and replaced it with a \$5,000,000 short-term open line of credit.

7. INCOME TAXES:

The provisions for income taxes for the five years ended May 29, 1976 consist of the following: (in thousands)

Years Ended					
May 27, 1972	May 26, 1973	May 25, 1974	May 31, 1975	May 29, 1976	
\$6,419	\$9,845	\$11,600	\$12,400	\$17,894	United States
700	990	1,400	1,625	2,095	State
2,125	2,905	4,144	6,475	5,161	Foreign
<u>\$9,244</u>	<u>\$13,740</u>	<u>\$17,144</u>	<u>\$20,500</u>	<u>\$25,150</u>	Provision for income taxes

The above provisions were less than the amounts which would result by applying the United States statutory rate of 48% to income before income taxes. A reconciliation of the differences is as follows: (in thousands)

1972	1973	1974	1975	1976	
\$10,084	\$14,630	\$18,478	\$22,478	\$26,515	Computed income taxes based on 48% rate
(1,153)	(1,288)	(2,257)	(3,269)	(706)	Effect of certain foreign subsidiary earnings taxed below 48%
1,118	1,548	(1,717)	1,225		Provisions for (reversal of) deferred income taxes on undistributed earnings of foreign subsidiaries
(350)	(1,300)				Reduction of income taxes resulting from DISC operations
		2,814			Provision for deferred income taxes of DISCs relating to years prior to 1974
364	575	721	845	1,090	State income taxes, net of Federal income tax benefit
(254)	(265)	(564)	(1,099)	(957)	Investment tax credit
(565)	(160)	(331)	320	(792)	Other-net
<u>\$9,244</u>	<u>\$13,740</u>	<u>\$17,144</u>	<u>\$20,500</u>	<u>\$25,150</u>	Provision for income taxes

In the year ended May 25, 1974, the Company restored to income \$1,717,064 of prior provisions for United States deferred income taxes on undistributed earnings of foreign subsidiaries, due primarily to the removal of dividend repatriation requirements which existed under previous regulations of the Office of Foreign Direct Investments. Also in 1974, the Company made provision for \$4,802,902 of deferred income taxes (which included \$2,814,000 relating to years prior to 1974) due to future uncertainty allowing indefinite deferral of taxation of the undistributed earnings of its Domestic International Sales Corporations (DISCs). The provision represented the tax effect of the accumulated undistributed earnings of the DISCs, including transfers to one DISC from the Company's Export Trade Corporation subsidiary.

Undistributed reinvested earnings of foreign subsidiaries and DISCs amounted to approximately \$87,000,000 at May 29, 1976. Except for accumulated deferred income tax provisions of \$14,144,206 relating to approximately \$34,000,000 of such reinvested earnings, no provision has been made for additional United States income taxes which could result from the transfer of such reinvested earnings to Tektronix, Inc. because it is anticipated that they will continue to be employed indefinitely in the subsidiaries' operations. If such reinvested earnings were to be transferred to Tektronix, Inc. foreign tax credits would be available to partially offset the amount of United States income taxes otherwise payable.

Deferred income taxes included in the provisions for United States income taxes are as follows: (in thousands)

1972	1973	1974	1975	1976	
\$1,118	\$1,548	\$(1,717)	\$1,225		On undistributed earnings of foreign subsidiaries
		4,803	3,160	\$3,202	On undistributed earnings of DISCs
				(428)	Other-net
<u>\$1,118</u>	<u>\$1,548</u>	<u>\$3,086</u>	<u>\$4,385</u>	<u>\$2,774</u>	Total deferred income taxes

8. PROFIT SHARING, PENSION, AND INCENTIVE PLANS:

Most permanent employees receive cash profit share amounting to 27½% of income of participating companies before income taxes, profit-sharing, charitable contributions, and executive incentive compensation. Additional profit share of 7½% of its allocation of such income is contributed to a retirement trust for parent company employees. In lieu of retirement profit-sharing, most foreign subsidiary companies have various governmental and privately insured pension plans.

In November 1974, the Company adopted an Earnings Per Share Growth Plan to provide incentive compensation for selected executives. The plan provides for compensation based on the improvement in earnings per share over a three year period. Charges to profit share expense amounted to \$100,000 for 1975 and \$450,000 for 1976.

Effective December 1, 1974 the parent company adopted a pension plan for its employees to augment the benefits of its retirement profit-sharing plan. The Company's policy is to fund pension costs as accrued, plus amortization of past service costs over a period of 20 years. Charges to payroll expense for the period from plan adoption to May 31, 1975 were \$2,450,000 and for the year ended May 29, 1976 were \$4,968,000. The unfunded past service liability at May 29, 1976 was approximately \$26,000,000 and vested benefits exceeded fund assets by approximately \$4,300,000.

9. EMPLOYEE STOCK OPTION AND SHARE PURCHASE PLANS:

Under qualified stock option plans for employees, 214,615 common shares of the Company were reserved at May 29, 1976. Shares available for options not yet granted were 4,247 at May 29, 1976 (47,097 shares at May 31, 1975). The plans provide that the option price shall not be less than 100% of the fair market value of the shares on the date of grant and that the options are exercisable in four cumulative annual installments beginning one year after the date of grant.

At May 29, 1976, options to purchase 210,368 shares were outstanding for which the option price, ranging from \$19.64 to \$60.10 per share, amounted to \$7,946,450 and options to purchase 46,116 shares were exercisable, for which the option price amounted to \$2,331,190. During the year then ended, options became exercisable for 34,905 shares at option prices per share ranging from \$19.64 to \$60.10 with market prices per share at date exercisable ranging from \$34.65 to \$62.50. Options were exercised for 59,320 shares at option prices per share ranging from \$19.64 to \$50.50 and market prices per share at date of exercise ranging from \$34.75 to \$62.75.

Option and market prices for options which became exercisable and for options which were exercised in the five years ended May 29, 1976 were:

Year	Options Which Became Exercisable		Options Exercised	
	Option Price	Market Price	Option Price	Market Price
1976	\$1,364,135	\$1,386,807	\$1,519,564	\$2,532,983
1975	3,872,652	4,544,819	2,200,123	2,626,826
1974	3,028,478	2,984,354	231,072	342,324
1973	1,674,898	1,853,539	2,695,908	3,402,591
1972	2,388,433	2,025,083	465,520	577,024

Under a non-qualified stock option plan for employees, 99,000 common shares of the Company were reserved at May 29, 1976. Shares available for options not yet granted amounted to 62,500 at May 29, 1976 (65,500 shares at May 31, 1975). The plan provides that the option price must be at least 85% of the fair market value of the shares on the date of grant and that the options are exercisable in four cumulative annual installments beginning one year after the date of grant and expire ten years after the date of grant. Through May 29, 1976, all options granted under the plan have been equal to 100% of the fair market value of the shares at dates of grant.

At May 29, 1976, options to purchase 36,500 shares were outstanding under the non-qualified plan for which the option price amounted to \$927,950. During the year then ended, 9,375 shares became exercisable (at option prices totaling \$228,500 and market value at date exercisable totaling \$325,313) and options for 1,000 shares were exercised (at option prices totaling \$24,375 and market value at date exercised totaling \$41,975). No options became exercisable or were exercised prior to the year ended May 29, 1976.

Under an "Employee Share Purchase Plan" 152,103 common shares of the Company were reserved at May 29, 1976 (155,692 shares at May 31, 1975). The share purchase discount provided in the plan (which may not exceed 15% of market value on the date of purchase), has been charged to income as follows: \$9,219 in 1972, \$3,431 in 1973, \$7,244 in 1974, \$12,057 in 1975 and \$6,080 in 1976.

10. COMMITMENTS:

The companies are committed under long-term building and equipment leases in the aggregate amount of \$14,238,000 payable, \$3,107,000 in 1977, \$2,631,000 in 1978, \$2,114,000 in 1979, \$1,612,000 in 1980 and \$4,774,000 thereafter.

Rental expense charged to income, including short-term leases, was \$1,399,000 in 1972, \$1,705,000 in 1973, \$2,719,000 in 1974, \$4,678,000 in 1975, and \$4,976,000 in 1976. Capitalization of financing leases would not have a material effect on earnings.

Tektronix Consolidated Financial Statistics

(DOLLARS, SHARES AND SQUARE FEET IN THOUSANDS)

1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	Fiscal year or year end
129,961	135,021	151,011	168,939	149,442	167,482	202,855	271,428	336,645	366,645	NET SALES
94,878	91,521	100,302	107,007	86,816	101,310	122,137	155,764	196,323	217,931	United States
35,083	43,500	50,709	61,932	62,626	66,172	80,718	115,664	140,322	148,714	International
13,620	13,810	14,572	15,005	9,904	11,764	16,739	21,353	26,329	30,089	EARNINGS
\$1.64	\$1.64	\$1.72	\$1.75	\$1.16	\$1.37	\$1.94	\$2.47	\$3.04	\$3.43	Per Share
10.5%	10.2%	9.7%	8.9%	6.6%	7.0%	8.3%	7.9%	7.8%	8.2%	% of Sales
20.1%	16.5%	14.5%	13.0%	7.8%	8.5%	10.8%	12.2%	13.0%	13.0%	% of Equity
25,611	25,825	26,379	26,398	16,806	21,008	30,479	38,497	46,829	55,239	INCOME BEFORE TAXES
19.7%	19.1%	17.5%	15.6%	11.2%	12.5%	15.0%	14.2%	13.9%	15.1%	% of Sales
46.6%	46.0%	44.6%	43.2%	41.1%	44.0%	45.1%	44.5%	43.8%	45.5%	Effective Income Tax Rate
130,000	137,000	157,000	169,000	145,000	174,000	232,000	297,000	329,000	376,000	Orders Received
12,000	13,000	19,000	19,000	15,000	21,000	53,000	74,000	61,000	70,000	Unfilled Customer Orders
7,302	7,892	8,813	9,957	9,091	8,334	10,580	12,693	12,664	12,970	Number of Employees
17.8	17.1	17.1	17.0	16.4	20.1	19.2	21.4	26.6	28.3	Sales per Employee
38,413	41,625	49,214	60,281	56,338	58,609	70,949	94,258	116,511	121,404	PAYROLL BEFORE PROFIT SHARE
13,744	13,542	13,360	13,144	8,275	10,462	14,875	18,706	22,257	26,533	PROFIT SHARE
1,596	1,711	1,813	2,111	2,329	2,429	2,612	2,940	3,420	3,705	Facilities in Use (Sq. Ft.)
81.4	78.9	83.3	80.0	64.2	69.0	77.7	92.3	98.4	99.0	Sales per 1000 Square Feet
41,447	47,638	59,256	76,146	81,381	84,947	89,681	111,302	140,288	155,245	COST OF FACILITIES
5,889	6,644	12,269	17,289	6,047	4,915	7,075	23,530	31,706	18,812	INVESTED IN FACILITIES
3,008	3,470	3,870	4,904	5,898	6,394	6,834	7,525	9,388	11,635	DEPRECIATION
15,929	18,955	22,348	26,789	32,140	37,726	43,514	49,947	57,668	66,682	ACCUMULATED DEPRECIATION
93,348	107,552	127,813	155,619	157,808	173,743	206,599	251,061	306,616	344,860	TOTAL ASSETS
21,675	22,873	27,428	29,165	27,113	32,833	44,417	55,230	61,269	70,138	ACCOUNTS RECEIVABLE
34,305	35,289	41,599	59,252	63,085	56,066	72,904	97,230	111,246	101,186	INVENTORY AND SUPPLIES
63,375	74,840	86,728	101,506	101,991	120,539	151,033	176,405	217,075	248,347	CURRENT ASSETS
23,480	22,183	27,042	38,674	28,963	31,802	46,644	68,484	63,623	60,540	CURRENT LIABILITIES
39,895	52,657	54,686	62,832	73,028	88,737	104,389	107,921	153,452	187,807	WORKING CAPITAL
2,134	988	501	429	1,930	1,288	1,100	973	30,365	39,139	LONG-TERM DEBT
8,323	8,456	8,555	8,572	8,588	8,602	8,651	8,651	8,729	8,792	Year-end Shares Outstanding
67,897	83,824	100,297	115,841	126,338	138,488	155,630	175,488	202,321	232,003	SHAREOWNERS' EQUITY
6,009	7,507	7,774	8,325	8,889	9,357	12,158	12,213	14,258	15,707	COMMON-SHARE CAPITAL
64,511	78,320	92,546	107,532	117,467	129,186	144,140	163,966	188,375	216,307	REINVESTED EARNINGS

BOARD OF DIRECTORS

HOWARD VOLLUM, *Chairman*
PAUL L. BOLEY, *Partner, Davies, Biggs, Strayer, Stoel and Boley*
JAMES B. CASTLES, *Secretary and General Counsel*
JOHN D. GRAY, *Chairman, Omark Industries*
LOUIS B. PERRY, *President, Standard Insurance Company*
EARL WANTLAND, *President*
FRANK M. WARREN, *President, Portland General Electric Co.*

OFFICERS

HOWARD VOLLUM, *Chairman of the Board*
EARL WANTLAND, *President and Chief Executive Officer*
LESLIE F. STEVENS, *Group Vice President—Finance*
DONALD ALVEY, *Group Vice President*
LAWRENCE L. MAYHEW, *Group Vice President*
WILLIAM J. POLITZ, *Group Vice President*
WILLIAM D. WALKER, *Group Vice President*
FRANCIS DOYLE, *Vice President*
LEWIS C. KASCH, *Vice President*
WILLEM B. VELSINK, *Vice President*
WILLIAM B. WEBBER, *Vice President*
JAMES B. CASTLES, *Secretary and General Counsel*
DON A. ELLIS, *Treasurer*
ELWELL E. SWANSON, *Controller and Assistant Secretary*
F. H. NEISSER, *Assistant Secretary*
ERIC JORGENSEN, *Assistant Secretary*
KENNETH H. KNOX, *Assistant Treasurer*

SHAREOWNERS' MEETING

The annual meeting of shareowners of Tektronix, Inc., will be held on Saturday, September 18, 1976, at 9 a.m. Pacific Daylight Time, in the Assembly Cafeteria Building, S.W. Karl Braun Drive, Tektronix Industrial Park, near Beaverton, Oregon.

Transfer Agents
United States National Bank
of Oregon, Portland, Oregon

Morgan Guaranty Trust
Company
New York, New York

Registrars
First National Bank
of Oregon,
Portland, Oregon

Citibank
New York, New York

Mailing Address:

TEKTRONIX, INC., Beaverton, Oregon 97077
Telephone (503) 644-0161

QUARTERLY INCOME STATEMENT

(Thousands of Dollars)

12 Weeks Ended Aug. 23 1975	12 Weeks Ended Nov. 15 1975	16 Weeks Ended March 6 1976	12 Weeks Ended May 29 1976	52 Weeks Ended May 29 1976	
74,858	82,210	113,846	95,731	366,645	Net Sales
35,296	38,851	52,175	38,447	164,769	Cost of Sales
11,013	12,209	17,421	15,538	56,181	Selling
6,066	6,471	8,945	8,222	29,704	Engineering
5,903	6,994	9,637	9,132	31,666	Administration
5,055	5,615	8,337	7,526	26,533	Employee Profit Share
1,212	1,147	1,334	1,064	4,757	Interest Expense
(547)	(700)	(971)	14	(2,204)	Other Non-Operating (Income) Expense
10,860	11,623	16,968	15,788	55,239	Income Before Income Taxes
5,100	5,463	7,466	7,121	25,150	Provision for Income Taxes
5,760	6,160	9,502	8,667	30,089	Earnings
66¢	70¢	\$1.08	99¢	\$3.43	Earnings per Share

