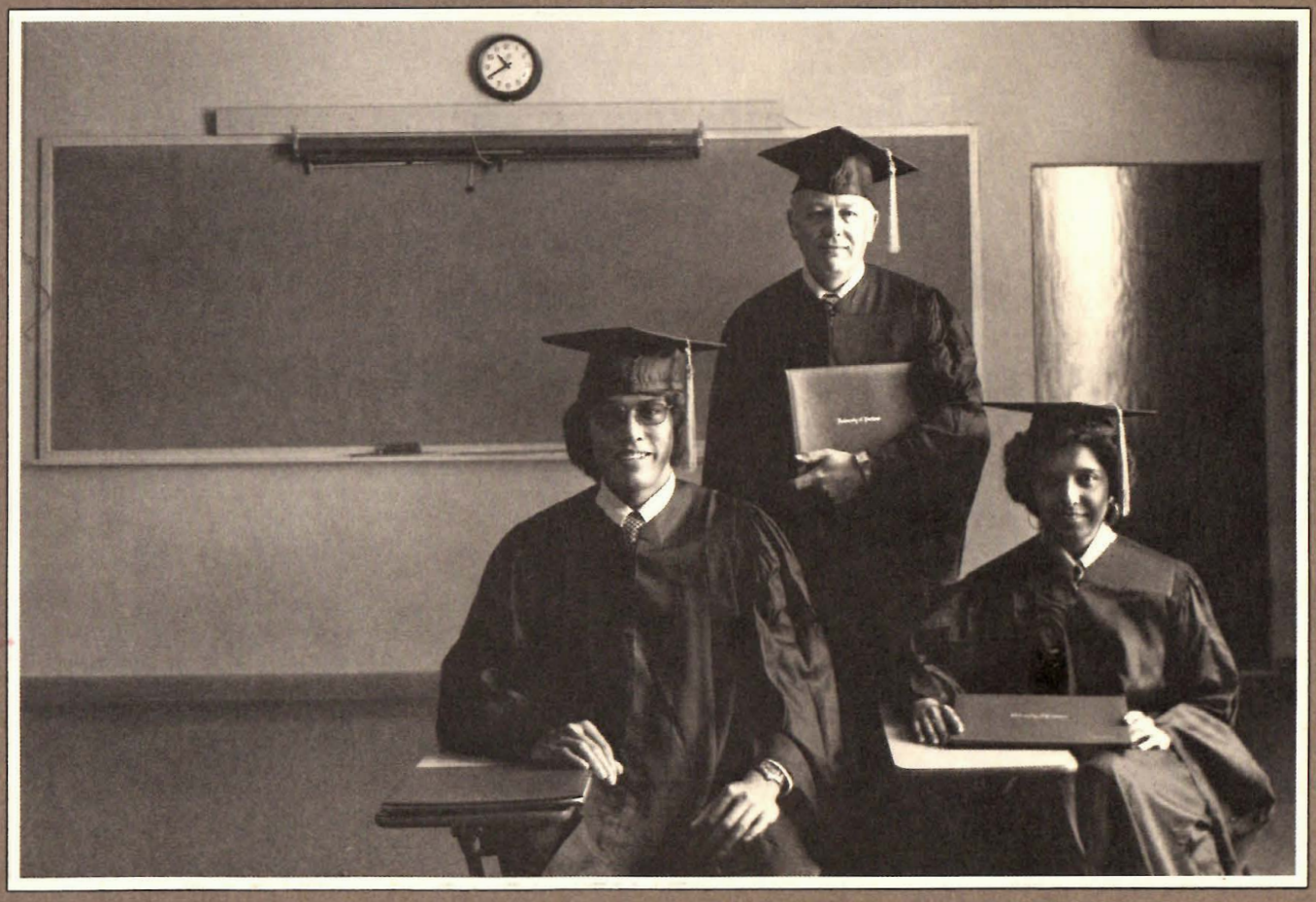
Tektronix, Inc. Annual Report · 31st Year · May 28, 1977

# Committed to Excellence



*COVER — Employees may obtain master's and bachelor's degrees in various fields of study, in courses taught entirely on Tektronix premises and paid for by the company. Other facets of the Tektronix environment are shown photographically throughout the pages of this report.*

# The Habit of Success

All that's wrong with calling this an exceptional year is that it wasn't. It *was* the best year in recent memory; sales, orders and productivity went up again (and earnings most of all), reaching new highs. But that's become the rule around here, rather than an exception to it.

What it is, one Tektronix executive observed, is just that we've gotten into the habit of success.

His one-liner (not to be confused with Management's Discussion and Analysis, which takes place further back in this report) is a pretty apt summary of what's been going on at Tek for not one but several years. The individual factors—high morale, improved productivity, insightful product design, a hustling marketing effort—*do* tend to become habits.

For 22 straight quarters now (including during the US recession), our earnings have increased over those of the same quarter the year before. That's a record few companies can match. Paced by a 55 per cent increase in sales of information-display products, our business this year grew by a substantial 24 per cent.

Figures, percentages, breakdowns and remarks of one sort or another start on page 2.

Self-renewal, as we like to call it, also has been a way of life here since Day One. Our current employee-development activity is extensive and full of innovation. But its goal is simple: *To increase the competitiveness of every single Tek employee.*

For some, that means training; for others, help in career planning; for still others, jobs that better match their potential. But for some employees it means erasing assumed barriers to job mobility, in the form of long-held "traditional" beliefs that certain kinds of jobs are off limits to them.

As those job stereotypes have begun to melt away, Tek women (in particular) have shown they're ready and able to tackle non-traditional work. Our women managers are doing a splendid job. (If that comes as a surprise, it shouldn't.) Upward and lateral mobility are discussed beginning on page 23.

Fitting into our general program is a specific one: The federally mandated Affirmative Action Plan, which sets specific employment goals for minorities and women. Our efforts this year are paying off; in many instances, we've gone well beyond our federal commitment. Our scorecard is on page 29.

The whole subject of EEO (Equal Employment Opportunity) is often misunderstood. You'll find some straight talk about that complex issue on page 24.

In our redesigned logotype, the wording has been both shortened and broadened. With the third word ("technical") removed, our new statement reads simply: "Committed to Excellence."

That broader affirmation is long overdue. It's been a long while since Tektronix' concern was solely with technical superiority. Human excellence, excellent service, excellence in citizenship have always been among the expectations we've placed on ourselves.

This report shares with you fiscal year 1977. It was a year of excellence.

# Tektronix 1977 Financial Highlights

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

| 1976 | | 1977 | | Increase | | |
|---|---|---|---|---|---|---|
| **$366,645,000** | **100%** | **$454,958,000** | **100%** | **$88,313,000** | **24%** | **RECEIVED BY THE COMPANY**<br>For sale or rent of products |
| 303,021,000 | 83% | 356,289,000 | 78% | 53,268,000 | 18% | TEST AND MEASUREMENT |
| 63,624,000 | 17% | 98,669,000 | 22% | 35,045,000 | 55% | INFORMATION DISPLAY |
| **336,556,000** | **92%** | **410,987,000** | **90%** | **74,431,000** | **22%** | **RELATED COSTS AND EXPENSES** |
| 126,051,000 | 35% | 143,191,000 | 31% | 17,140,000 | 14% | TO OUTSIDE SOURCES<br>To pay for raw materials, purchased parts, rent, utilities, insurance, advertising, interest and other business expenses. |
| 169,449,000 | 46% | 218,564,000 | 48% | 49,115,000 | 29% | FOR EMPLOYEES<br>To pay the men and women who design, make, sell, and service our products—including profit share, commissions, employee benefits and payroll taxes. |
| 11,635,000 | 3% | 12,781,000 | 3% | 1,146,000 | 10% | FOR USE OF FACILITIES OWNED<br>To provide for depreciation in value of buildings, machinery and furniture resulting from use, wear and age, mostly computed by accelerated depreciation. |
| 29,421,000 | 8% | 36,451,000 | 8% | 7,030,000 | 24% | FOR TAXES<br>To pay U.S., foreign, state and local taxes. |
| **30,089,000** | **8%** | **43,971,000** | **10%** | **13,882,000** | **46%** | **RESULTING IN EARNINGS**<br>Reinvested in expansion of our business after payment of dividends. |
| **$1.71** | | **$2.49** | | **78¢** | **46%** | ***EARNINGS PER COMMON SHARE**<br>Dilution if all outstanding share options had been exercised would not have reduced primary earnings more than 3¢. |
| **12¢** | | **22½¢** | | **10½¢** | **88%** | ***DIVIDENDS PAID PER SHARE** |
| **376,000,000** | | **513,000,000** | | **137,000,000** | **36%** | **ORDERS RECEIVED** |

*Adjusted for 2-for-1 share split effective May 9, 1977.

| 1976 | 1977 | Increase (Decrease) | |
|---|---|---|---|
| **$248,347,000** | **$310,245,000** | **$61,898,000** | **Current Assets** |
| **60,540,000** | **84,277,000** | **23,737,000** | **Current Liabilities** |
| **187,807,000** | **225,968,000** | **38,161,000** | **Working Capital** |
| **88,563,000** | **95,375,000** | **6,812,000** | **Facilities—Net** |
| **39,139,000** | **40,456,000** | **1,317,000** | **Long-Term Indebtedness** |
| **232,003,000** | **274,122,000** | **42,119,000** | **Shareowners' Equity** |
| **70,000,000** | **128,000,000** | **58,000,000** | **Unfilled Customers' Orders** |
| **12,970** | **14,637** | **1,667** | **Number of Employees at Year End** |
| **17,585,000** | **17,675,000** | **90,000** | ***Year-end Shares Outstanding** |

# Momentum

The accepted range of Corporate Cliches for describing a really good year is somewhat limited ("superior," "excellent," "rewarding"), and the actual comments of Tek management ("damn good," "a whale of a performance," "super") lack the decorum required of annual reports. The temptation is to just forget superlatives, smile modest-like and simply point to the year's operating results. They were very good.

The sales, orders and earnings figures reflect strong performance and speak for themselves.

But, if we've said it once we've said it probably 13 times (in 13 shareholder reports): No one-year segment gives a meaningful picture; a company can be really understood only as a continuum.

A more informative time span over which to look at Tek would be the past five years. There you can see *continued* strength and stability, and gathering momentum.

Not to take anything away from the past year. Sales were up 24 per cent, earnings a husky 46 per cent; it was in many ways our best year ever. We're enormously proud of the women and men whose insights and efforts made it all happen.

But five years gives a clearer perspective, and is an appropriate span to use. In that time Tektronix has changed both its management structure and product orientation, the two major contributors to the increasing upward momentum.

In that half decade, our sales have grown at a compound rate of 22 per cent, and earnings 30 per cent. Sales went from $167.5 million to $455 million; earnings from $11.8 million to $44 million.

We're in the instrumentation business—one of the world's two top test-instrument makers. Because our early and continuing success was with oscilloscopes, the image of being "a scope company" clung with us long after we began our gradual broadening into other fields. Now, one of them—information display products—alone has contributed 22 per cent of our sales.

Our acknowledged leadership position in oscilloscopes provides a solid, reliable base for product diversification. We continue to lead the world in scopes; the same is true now of graphic computer terminals, a smaller but faster-growing product area; television test and control instrumentation, and a number of more specialized products.

In 1971 our organization was re-formed into major operating areas, each under a group vice-president. By 1973 we had divided into product groups and divisions. Each passing year has shown the increased effectiveness of this structure. It's goal-directed. It's profit-oriented. And it works.

Underlying all else is broad and deep technological competence, that earned and has maintained our company reputation—an irreplaceable asset as we venture into new, less "traditional" fields.

Virtually all our top management (even in Marketing) are technically trained people also. Moreover, they've all come up through the ranks at Tektronix—a home-grown leadership team of demonstrated excellence. They know the company's history, operations, jobs and people; they're thus able to serve as role models for others here. That's an important factor in maintaining our heritage of corporate values in the face of increased company size.

Now, about last year:

One significant influence on it was something that *didn't* happen the year before: The recession didn't cause us to break our stride, as it did so many US companies. Having managed our way through that recession with continued growth in sales and earnings has enabled a great deal of operating efficiency this year. It's always far less effort to maintain momentum than to brake and then accelerate.

Sales, orders and earnings curves all steepened this year. It was our sixth growth year in a row. What's more, "down" years are rare for us, and have almost never been severe, typically just flatter spots in an upward growth curve. The new figures were highs for Tektronix:

*Sales* were up 24 per cent from those of a year earlier, moving to $455 million from $367 million. The *international portion* increased by 15 per cent, to $170 million from $149 million; the *US segment*, by 31 per cent, to $285 million from $218 million.

*Information Display sales* increased 55 per cent, moving to $99 million from $64 million. They accounted for 22 per cent of our total sales—compared with 17 per cent in 1976, 14 per cent in 1975 and 8 per cent in 1974.

Sales of *test and measurement products*, responsible for the remainder of our business, increased 18 per cent, to $356 million from $303 million.

*Earnings* were up 46 per cent, reaching $44 million compared to $30 million the year before. *Earnings per share* were $2.49, up from $1.71 (based on the 2:1 share split this year).

You should be aware that the 46 per cent earnings increase reflects some things for which we can't take any credit. They include changes in the effective corporate tax rate, caused by a variety of factors, which, taken together, worked in our favor. (Some years they do just the opposite.)

For this reason, we suggest our *pre-tax* earnings as a more accurate reflection of performance. It's still, of course, a very handsome increase: 37 per cent.

*Incoming orders* totaled $513 million compared with $376 million the year before, an increase of 36 per cent. *Unfilled orders* increased to $128 million from $70 million, attributable to high order volume and customer requests for spread deliveries.

*Employees* at year's end increased in number to 14,637 from 12,970 last year. That increase was 13 per cent.

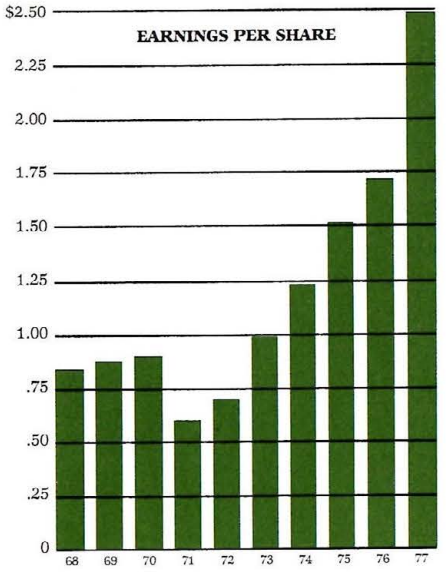
Theme of the year's planning cycle was "Productivity." The resulting focus on productive improvements, along with the economies allowed by volume production, increased our efficiency. Ratio of cost of sales to sales dropped to 43 per cent, from 46 per cent the preceding year—continuing a downward trend.

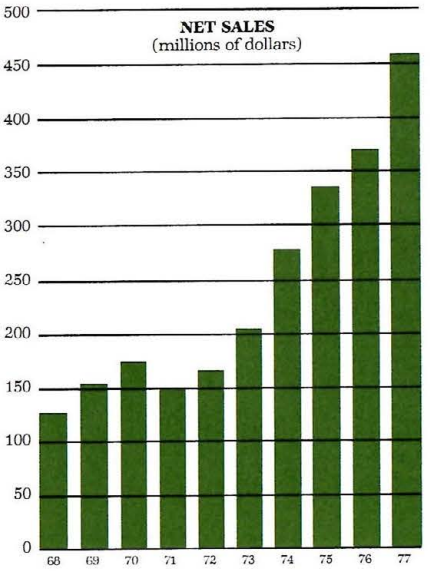
Looking ahead: The US economic recovery seems to be orderly rather than overheated. That's all to the good. It should reduce the severity of another recession if one should occur. Overseas economies, all in all, look stronger.

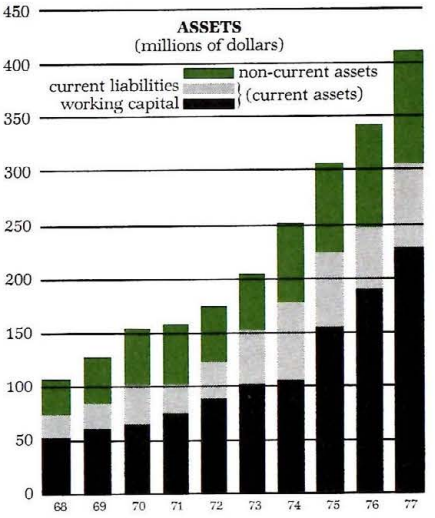
The year ahead doesn't look half bad.

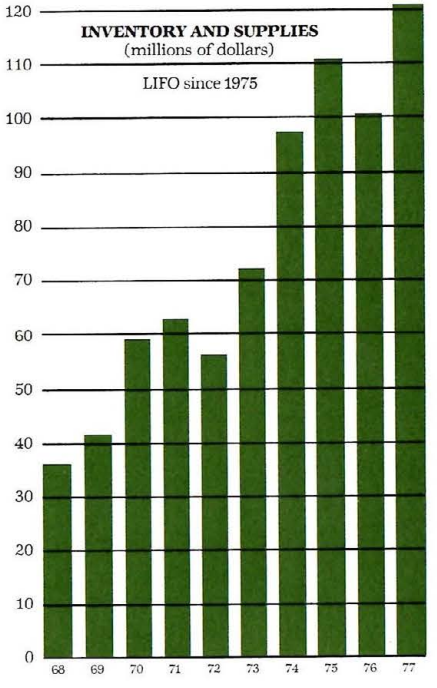
A postscript—and a needed perspective:

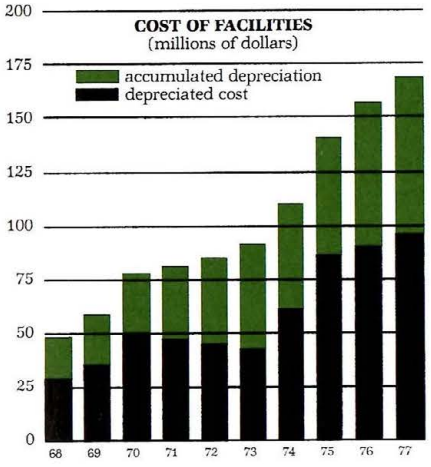
In the welter of annual-report percentages, one vital piece of economic information can easily get lost—and often does, judging from periodic surveys of what the public thinks about business and "profits."

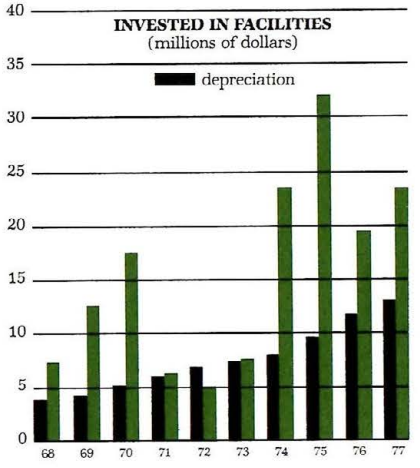

EARNINGS PER SHARE
$2.50
2.25
2.00
1.75
1.50
1.25
1.00
.75
.50
.25
0
68 69 70 71 72 73 74 75 76 77

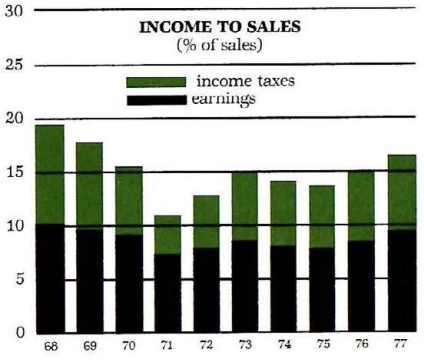

NET SALES
(millions of dollars)
500
450
400
350
300
250
200
150
100
50
0
68 69 70 71 72 73 74 75 76 77

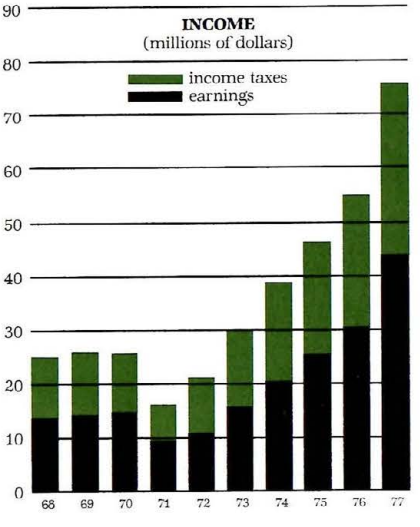

ASSETS
(millions of dollars)
non-current assets
current liabilities
working capital
(current assets)
450
400
350
300
250
200
150
100
50
0
68 69 70 71 72 73 74 75 76 77


INVENTORY AND SUPPLIES
(millions of dollars)
LIFO since 1975
120
110
100
90
80
70
60
50
40
30
20
10
0
68 69 70 71 72 73 74 75 76 77


COST OF FACILITIES
(millions of dollars)
accumulated depreciation
depreciated cost
200
175
150
125
100
75
50
25
0
68 69 70 71 72 73 74 75 76 77


INVESTED IN FACILITIES
(millions of dollars)
depreciation
40
35
30
25
20
15
10
5
0
68 69 70 71 72 73 74 75 76 77


INCOME TO SALES
(% of sales)
income taxes
earnings
30
25
20
15
10
5
0
68 69 70 71 72 73 74 75 76 77


INCOME
(millions of dollars)
income taxes
earnings
90
80
70
60
50
40
30
20
10
0
68 69 70 71 72 73 74 75 76 77

Our 46 per cent increase in earnings sounds impressive. But let's look at it another way: In this year, a year of smashing performance, "only" 90.3 per cent of our revenues went for materials, services, facilities, payroll and taxes.

The remaining 9.7 per cent were earnings (or "profits").

## EVENTS:

● Five changes in or additions to Tektronix officers were made.

The board of directors July 7, 1977 appointed Lew Kasch group vice-president. Lew has accepted the responsibility for US Sales and International Operations. He replaces Don Alvey, who resigned earlier in the year to manage a personal business venture in Hamburg, Germany.

Since his first position with Tektronix, as a field engineer in 1961, Lew has held a wide variety of responsibilities in marketing, sales and international operations. He's been vice-president, US Sales, since 1973.

At the same meeting the board named a new treasurer, Ken Knox, and created two new vice-presidents, Don Ellis and Eb von Clemm.

Eb has been with Tek since 1955. From his first job, as production engineer, he moved on to various positions in the field sales organization, including district manager of our Washington, D.C. office. He held that job until 1963, when he was named general manager of Tektronix Canada Ltd., Montreal. Eb has been International Marketing manager since 1972.

Don has served as Tektronix treasurer since 1958, having joined Tek in 1951.

His successor, Ken, has been assistant treasurer since 1971. His responsibilities before that were General Credit manager, Marketing Financial Services manager and International Finance coordinator.

In October, the board appointed Larry Choruby vice-president. His position is Director of Management Information. This new assignment includes information services, US and international accounting and profit planning. Larry has been with Tek since 1960. His most recent positions were Budget director and Operations Planning director.

● With technology and society changing faster all the time, it's a comfort to have a few constants you can count on from year to year. Which brings us to our lawsuit against the US government.

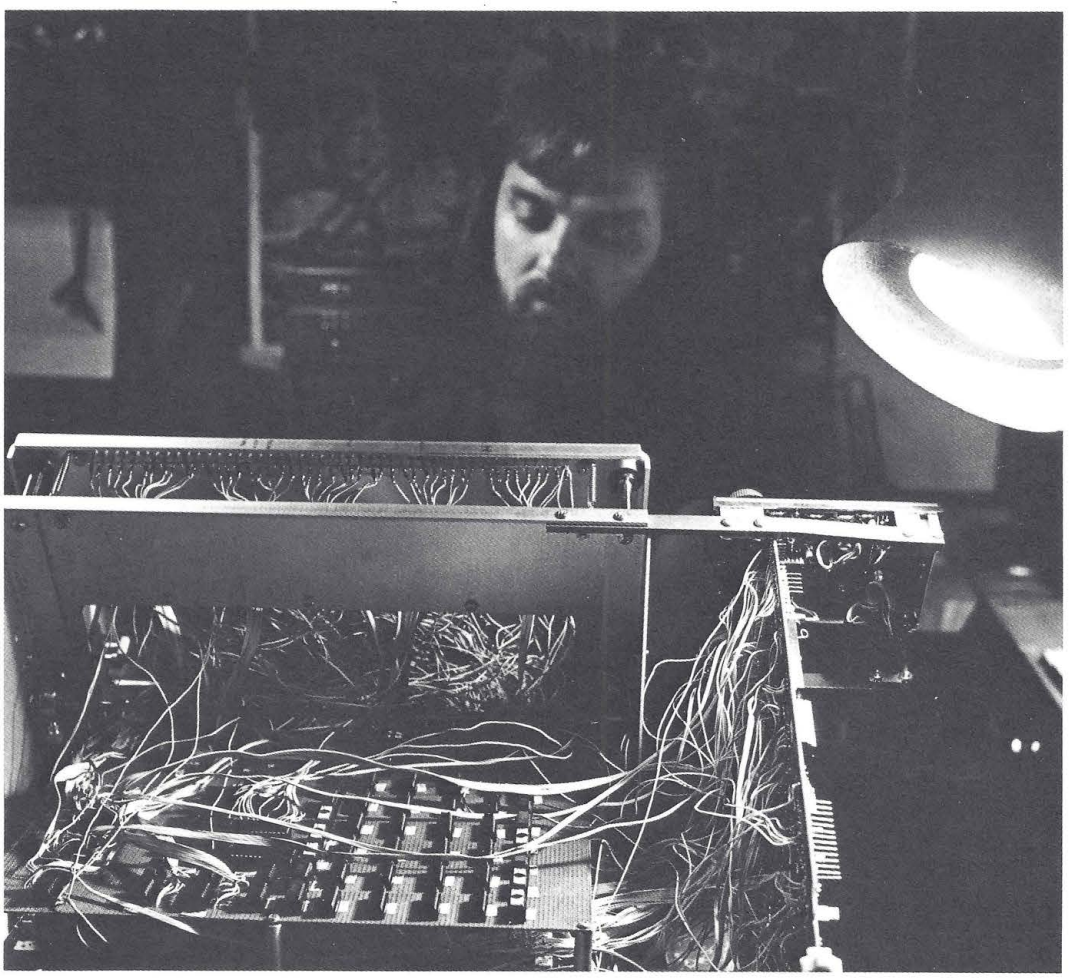
That suit has been around longer than most of our employees. We filed it in 1961, and then won it in 1971, when the Court of Claims agreed that government contractors had infringed valid Tektronix patents. Since then the accounting phase has been going on, to determine damages.

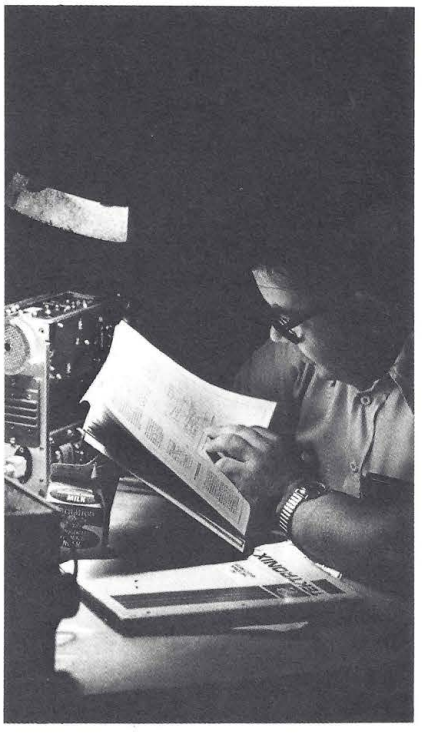
This year's progress, as you might call it, amounted to the Court in March concluding that Tektronix is entitled to a royalty of 10 per cent on the infringing procurement, plus delay damages or interest from the time of infringement.

The award was less than what the trial judge had recommended in 1975, the Court disagreeing with the royalty rate he used in his reckoning.

The matter has been referred to the trial judge to compute the precise amount. Again we expect the figure to be somewhere over $4 million.

We've been at this too long to forecast any great strides (or "strides" at all.) But the matter *is* moving along in an orderly sort of way, bringing nearer the day when we'll add whatever damages are finally awarded to the moral satisfaction of having our position borne out.





# IDG: The Coming of Age

There *was* no "computer graphics market" before 1970, at least not hardly. Tektronix, armed with proprietary storage CRT technology and the hunch that graphics would someday become an affordable problem-solving tool, set out to create customers. That fledgling market we nursed along has now grown to be substantial, and rewarded us this past year with a 55 per cent increase in sales of information-display products.

With its sales accounting for 22 per cent of our business (or about the same dollar amount as *total* Tektronix sales only 11 years ago), the Information Display Group has clearly come of age.

Tek began with an early edge: We had the storage tube, and nobody else did. It provided flicker-free, high-resolution display of numbers, words and pictorial matter, at increasingly low cost. It brought Tek "world leadership," albeit in a pretty piddly market.

The product drew enthusiastic response from experts in computer graphics. But there weren't many of them around; it was a new and untried tool.

By working closely with this innovator segment, however, we began to get a feel for the needs of graphics users, and understand their problems. This let us tailor products and software to meet those needs. Slowly, customers became aware that here was a new, very useful kind of problem-solving tool.

So today we address not just people who have graphics knowhow but also just people who have *problems* suited to graphic solutions.

The IDG organization is segmented so as to focus on specific customer needs: One division markets products largely to innovators and sophisticated users; another develops applications software-supported systems to help less-expert customers solve particular problems; the third bears down on the needs of the OEM (original equipment manufacturer) market.

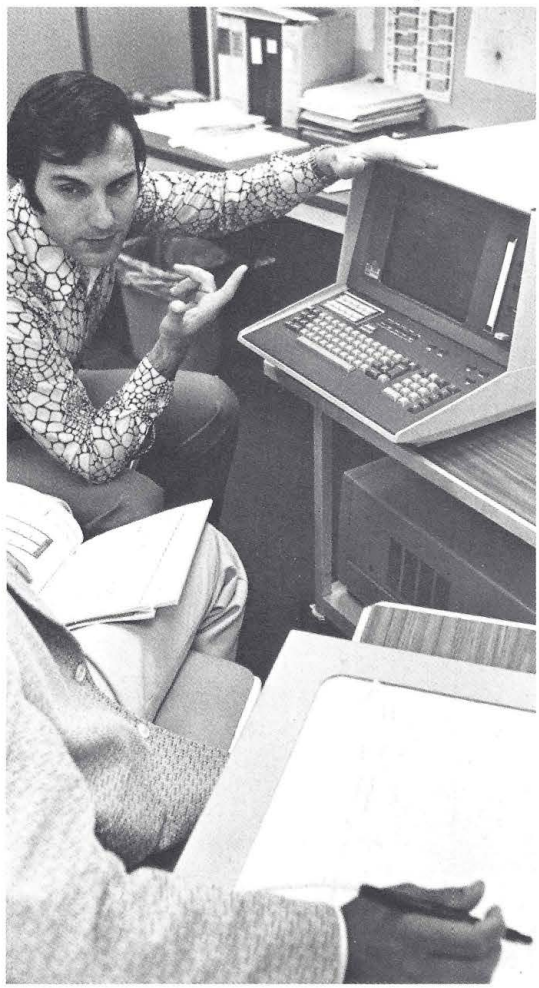
Our OEM sales made a very substantial increase this year. (An OEM product is bought by a manufacturer to build into his own system, which is marketed under his company's name, not ours.)

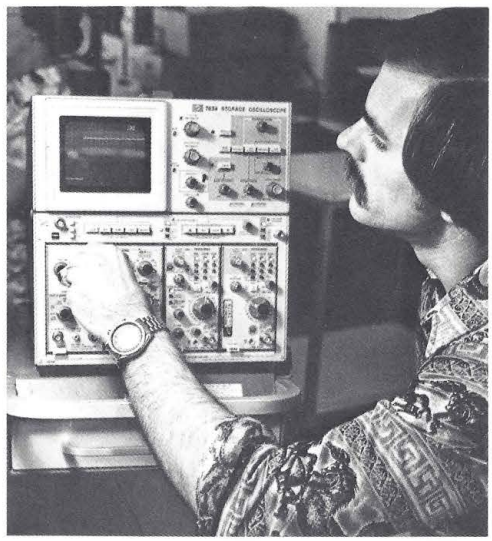
Often what OEM customers have wanted is the storage feature. Often what they've been buying is a Tek catalog product. Often what they've been doing is stripping it down. They've tossed away the keyboard and other unwanted paraphernalia and kept just the elements they needed.

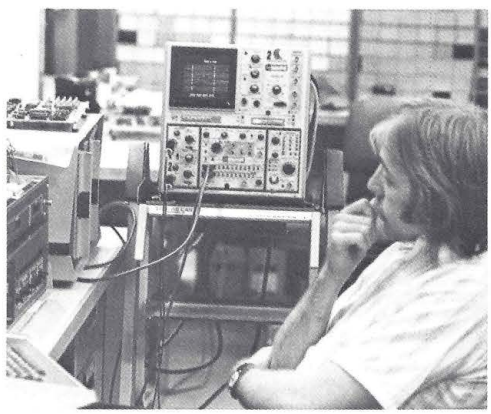
This year we've made it easier on everybody, by providing a bare-bones, lower-cost version of our 19-inch storage CRT—essentially just the tube and its drive circuitry. We also now make custom OEM versions of our hard-copy units. And the old Tek 31 calculator, itself considered a matured product, has become a very successful OEM component for a variety of systems.

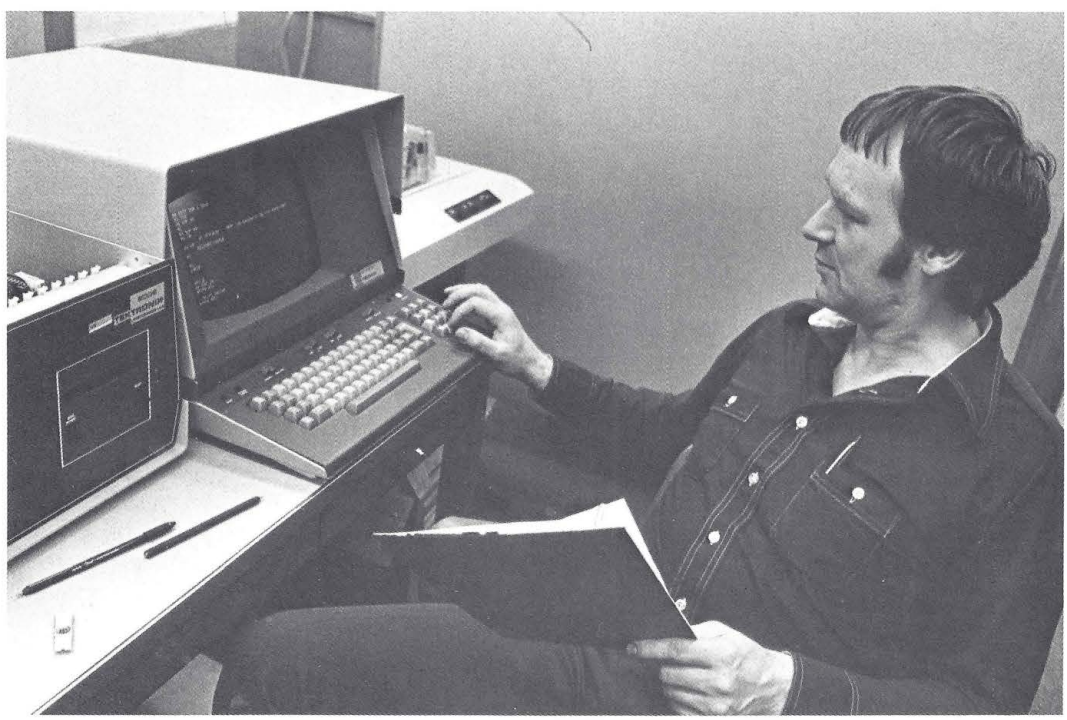
This year our 4051 graphic computing system (top left photo, opposite page) has had excellent response. A microprocessor-based product containing keyboard and graphic CRT, it can be used alone as a personal desktop computer; employed as an off-line terminal to a larger host computer, or used as a controller of other instruments in a system.

A large initial user has been education, in math problem solving and chem and physics labs. But it's also finding a very wide range of industrial and governmental uses, which are expected to be its major market.









From the start, the storage CRT gave us advantages over competitive terminals, which were either mechanical and slow, or used "refreshed" displays. Refreshed CRTs usually must keep transmitting the image all the time it's being viewed, like TV does; that's costly. Our storage tube receives the transmitted image once, then holds it for viewing.

The tube's competitive longevity continues to gratify us. After nearly 10 years now, despite other hotshot technologies rearing their heads, the storage CRT retains all its original advantages—and has gained brightness and tube life.

Eventually, the lowering cost of semiconductor memory may provide refreshed tubes with storage at competitive costs. But not right away, or for all applications. And, when it comes to high resolution and a sharp, non-fading, non-flickering display, our CRT has no equal.

Despite the tube's extended run, IDG's bright future doesn't depend entirely on that technology. We have other strong assets, including:

1. Reputation as the world's leader—in what's now a significant market.
2. Overall CRT expertise such as you'll find perhaps nowhere else.
3. Intimate knowledge of the graphics market, gained from having stayed with it from the start; nothing beats knowing what you're doing.

In the Test and Measurement area:

Sales were strong pretty much throughout the product line, notably of spectrum analyzers and both laboratory and portable oscilloscopes. This growth reflected wider electronics markets; strong product reputation, and increased capital buying with the US economy on the mend.

## A PACE-SETTING STORAGE SCOPE

In a nutshell: The new Tektronix 7834 is a four-holer 400MHz storage oscilloscope. (Top right photo, page 9.)

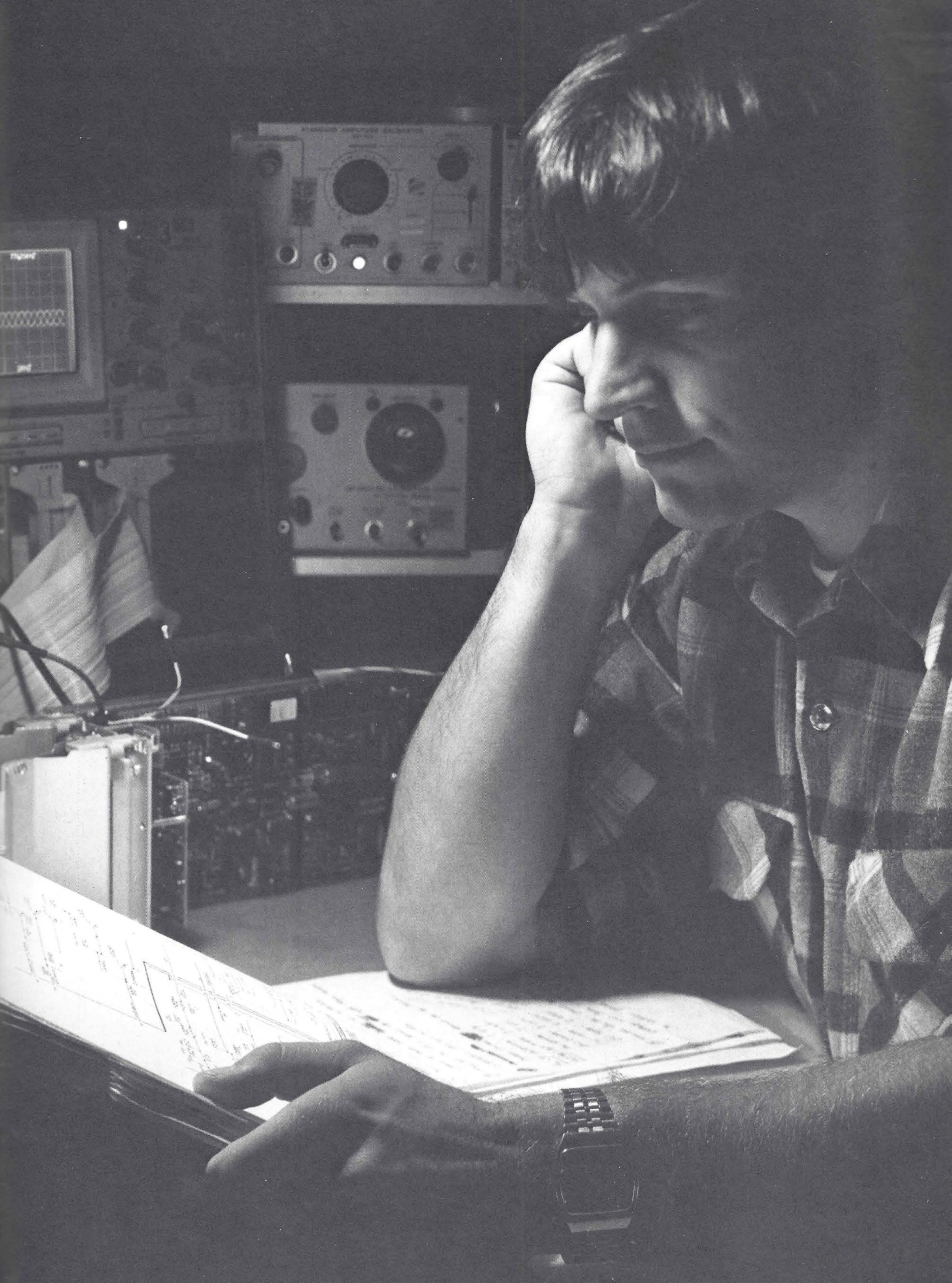
People in the industry will recognize that statement as a succinct definition of a true state-of-the-art instrument. The 7834 offers a unique combination of very useful features. One is direct-view storage, the ability of the CRT to retain the display of an electrical event after that event has ceased. The second is wide bandwidth, enabling study of a broad variety of waveforms, including high-frequency ones. The third is versatility of use.

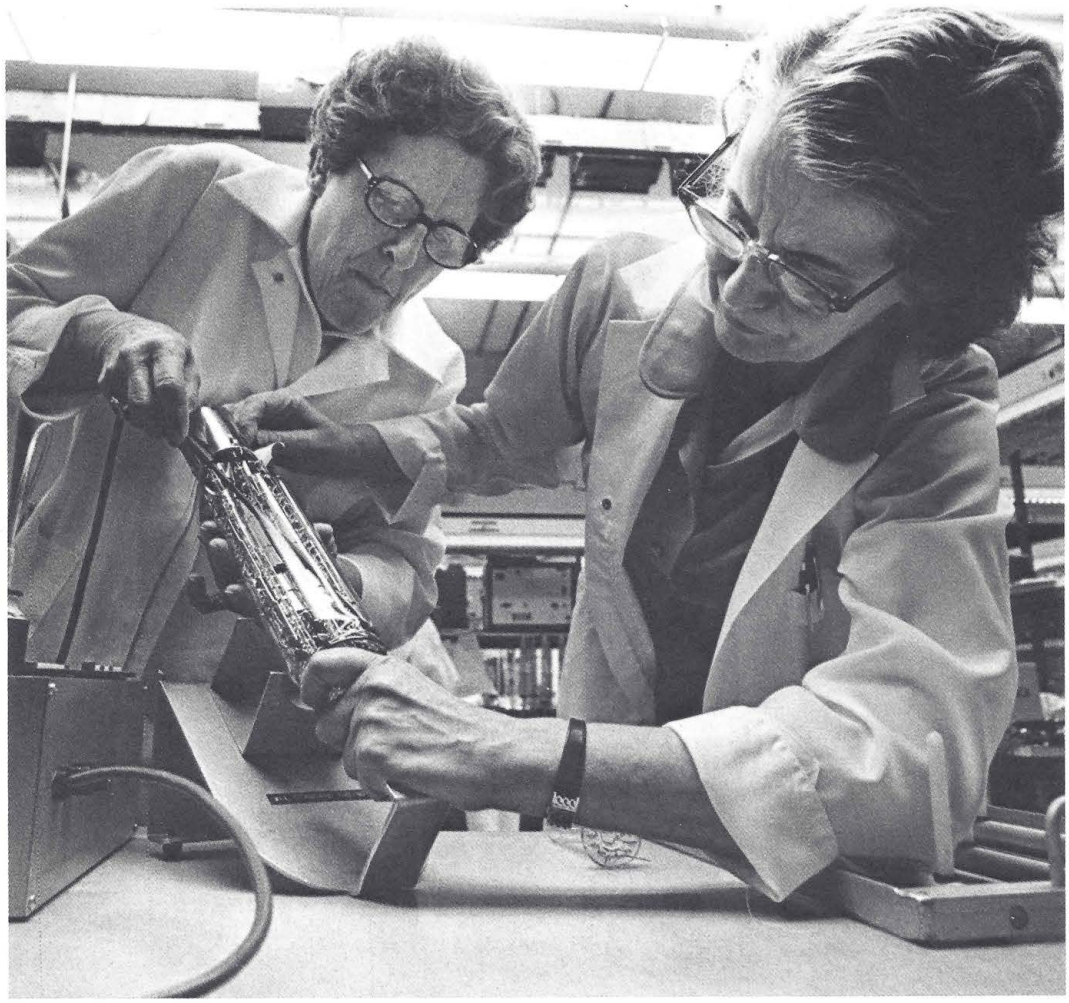
It's the world's fastest storage oscilloscope, with four times the bandwidth (400MHz) and 2½ times the stored writing rate (2500cm/msec) of the previous record-holder, Tek's 7633. It's the only scope that can retain waveforms of very fast single-shot events (up to 1.4 nsec risetime) typical of nuclear research, laser fusion or glitches in digital logic circuitry. Direct-view storage isn't the only way to capture these things, but it's the least costly and the most convenient.

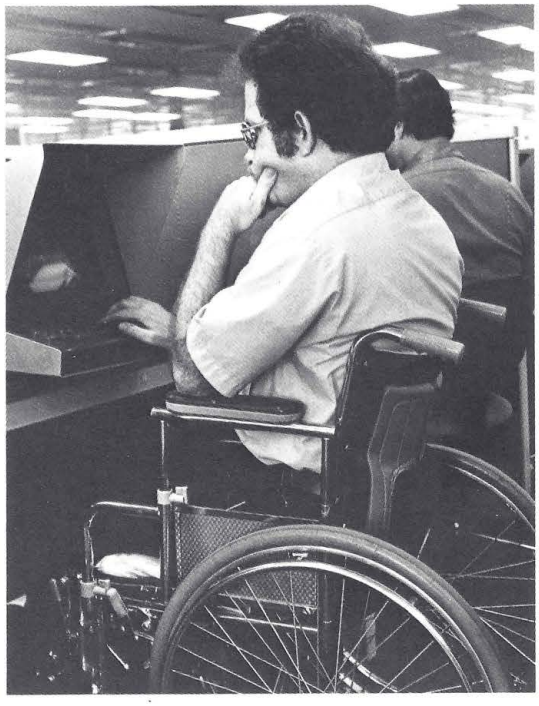
Its 400MHz bandwidth is more than any competitor offers in any kind of scope. And its four-hole capability lets it accept up to that number of Tek plug-in units at one time, adding storage to the full range of plug-in amplifiers, counters, multimeters, logic analyzers and spectrum analyzers.

For additional versatility, it offers four kinds of storage: Bistable (which is either bright or dark); variable persistence, which slowly fades, and high-speed versions of each.

Each has its own uses. Bistable displays are particularly valuable for long-term viewing of a waveform, for instance. Variable persistence offers high-contrast displays; provides, in its fast mode, the maximum 7834 stored writing







rate, and is useful for the study of slowly repeating, slowly changing waveforms.

The scope's biggest users are nuclear-energy researchers, both governmental and private; and computer people. The 7834 often is used in a "baby-sitting" mode, set to trigger on and trap bothersome random hiccups in a computer circuit, by displaying them on the CRT. Something like a trip-wire camera in this respect.

A maturing product line, our 7000-series oscilloscopes, surprised us a bit with very substantial growth. One factor was the splendid maiden-year success of the first Tek logic analyzers; our growing line of spectrum analyzers also did very well. One LA model and our newer spectrum analyzers are designed as plug-in units for 7000-series mainframes. When an analyzer plug-in sold, it often was accompanied by a mainframe sale. (Now the mainframe owners, in turn, can economically convert their scope into *many* instruments simply by adding one or more of over 30 Tektronix plug-ins.)

## THE MILLIMETER SPECTRUM ANALYZER

Our new 7L18 is a microwave spectrum analyzer. But this designation is almost misleading, since the product enables frequency analysis well into the millimeter range. Far out on the fringes of electronic technology, such high-frequency measurements are required by people engaged in advanced communications research, for example.

Clearly representing the state of the art in spectrum analysis, the 7L18 has an operating range greater than that of any other analyzer, from 1.5 to 60GHz. By developing our own waveguide mixers, we've managed to extend the industry's assumed 40GHz limit.

The 7L18 offers about three times the resolution formerly achieveable in a microwave analyzer—30Hz, at frequencies up to 12GHz.

This product should find a ready market in telephone company long-haul transmission, both terrestrial and satellite, as well as that of military and private communications systems; in marine and weather radar, and in avionics.

Normally high-frequency analyzers are complex to operate. But by using a microprocessor plus a Tek-built set of digital processor chips, we've made the 7L18 as easy to use as a lower-frequency analyzer. Most of the complex calculations are done by the instrument, not the user.

The 7L18 should further strengthen our position in this important and growing market.

Our logic analyzers have proved to be excellent companion tools for Tek oscilloscopes in logic hardware design and testing, and trouble-shooting computer circuitry and similar digital devices and systems. Together the LA and scope offer a potent one-two diagnostic combination of logic and waveform displays.

With our logic analyzers—and with our Microprocessor Development Lab, just now on the market—we're drawing a bead on a very fast-growing market segment, that of digital electronics in the so-called "data domain."

Not that this is a new market to us; it isn't. But what's causing all the stir now is the rapid growth rate of the "digital revolution."

Because of the long-term opportunities (and risks) it offers us, some paragraphs are in order as to how this "revolution" has come about.

## μP, μP—AND AWAA-AY!

For those of us to whom "chips" still suggests poker or potato, "program" is what you sit through at PTA and "intelligence" something we wish Johnny had more of, it will be hard at first to grasp the language of microprocessors—let alone the impact they'll have on our lives.

The microprocessor (μP to folks who speak Electronics) is a "chip" of silicon, roughly the size of an oat flake, whose miniature circuitry contains about as much artificial "intelligence" as a room-sized computer did only a few years back. And it costs a tiny fraction as much.

Even though it was the agreed-on "next step" in miniaturized digital circuitry, the μP arrived like a thunderbolt. It offers the promise of injecting computer power into almost everything imaginable, from ovens to cars to watches to games to oscilloscopes to—who knows what? Scientifically speaking, we ain't seen nothin' yet.

What might you do, as a designer, if you had a general-purpose computer as a component, one small enough to build into any product or process, and not increase its cost more than a few dollars—or maybe even *de*crease it?

"Look at it this way," says Tek Vice-President Bill Walker. "It's easier to list the places μPs *won't* be used than the places they will."

On the desk here is an old photo showing the ENIAC, the first electronic digital computer, built in 1946. Crammed chockablock with vacuum tubes and wire, it fills a room that looks to be the size of a dance hall. In mid-photo, acting as monitor, is a vintage-model Tektronix oscilloscope.

That's a reminder that we've been in the digital market since before there really *was* one. As that market has grown, so have our sales into it.

Laboratory oscilloscopes are essentials in designing computer mainframes and peripherals; portable scopes equally useful in servicing them. The computer industry has been a solid customer. Computer-mated scope systems and waveform digitizers are among our most advanced products. Our automated test systems (opposite photo) are widely used for testing digital integrated circuits, including μPs.

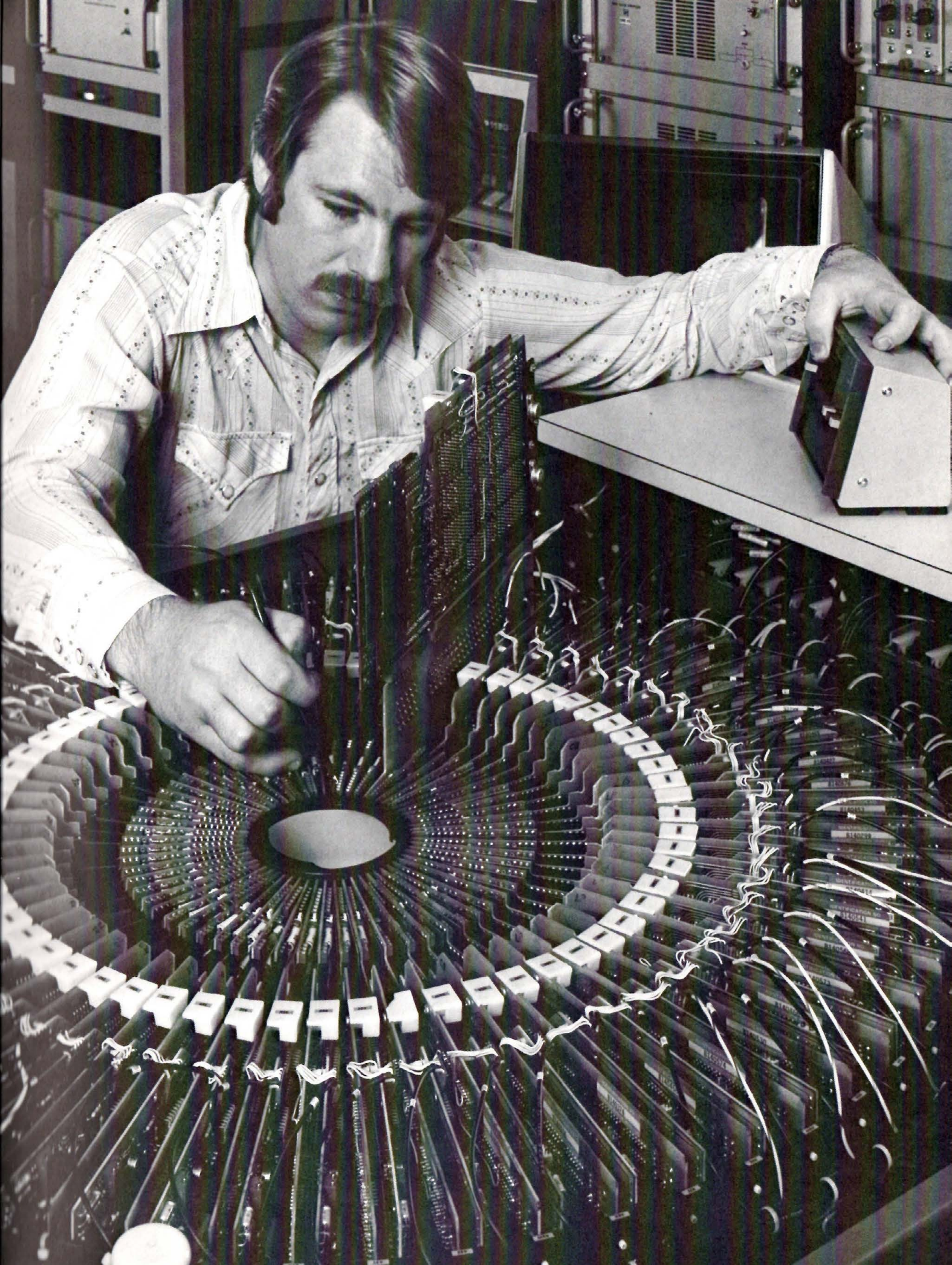
So, the most obvious opportunity afforded by the increasing digital market is simply expanded sales of our traditional product line.

The μP-driven "digital revolution" will benefit us in other ways also. We can now supplement our time-domain and frequency-domain instruments with new kinds of products in what's called the digital (or logic) domain. There the concern is with multi-channel relationships, presence or absence of signals and so on; and the emphasis as much on the "software" instruction program as on the electronic hardware itself.

Tek's first logic-analyzer models, introduced this year, are proving especially popular with digital hardware designers. Our new Microprocessor Development Lab zeroes in on μP applications (software) engineers. And we're expanding our software expertise gained through years of designing graphic terminals.

The third opportunity is to incorporate μPs into our own instruments. A quarter of our products introduced last year had one.

Increased sales of time-related measurement products; the chance to contribute significantly in the data domain, and benefiting our customers by increasing product performance and value . . . These add up to a triple-barreled opportunity. We intend to make the most of it.



The vacuum tube, workhorse component of early-day electronics, became a dinosaur about 17 years ago when the smaller, cheaper, more reliable solid-state transistor was invented. Further shrinking of components allowed placing hundreds of transistors onto single silicon chips—integrated circuits (ICs). Then came even larger-scale integration (LSI) of thousands of components per chip. And then, in a bold move in 1971, one company managed to put the entire circuitry of a general-purpose digital computer onto one LSI chip—the first microcomputer.

Now, the basic computer components—processing chips, and memory chips capable of storing "programs" of instructions—are items made by a growing number of semiconductor companies in a hotly competitive market.

"Memory is free; processing is free," is being chanted by some electronics engineers—who know that it's not really true. Not quite. Still, the day when you can buy a computer for less than a hamburger is not an impossibility.

If the microprocessor is new stuff to electronics engineers, it may cause total bogglement in other designers whose background is not in electronics or computer programming. They won't be able to just up and plunk a $\mu$P into whatever it is they're building. They'll need help, including tools.

One such tool is the 8002 Microprocessor Development Lab, new this year from Tektronix. By assisting the designer with software writing and debugging and the integration of software and $\mu$P hardware, it reduces what might have been weeks of tedious work to a matter of days.

# Hitting the Ground Running

A coast-to-coast bicyclist passed through our town the other day. He was blind.

The Governor of Washington spoke recently. She was applauded.

The phone company's directory-assistance voice comes over the receiver. It is bass/baritone.

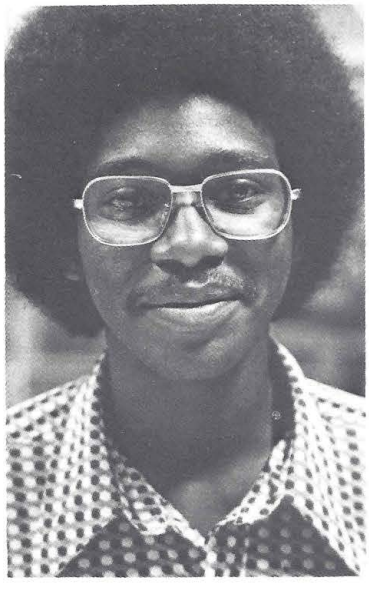
Slowly, bit by bit, "traditional" ideas of just who can do what are dissolving, a dissolution that will have a more and more positive impact on our work force.

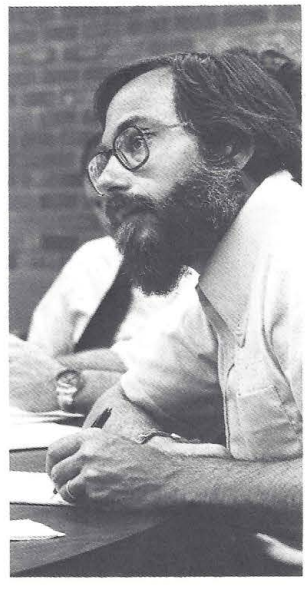
In the Book of Dismal Statistics, you read that people are believed to use only about 8 per cent of their potential. Even Einstein estimated he used only 25 per cent of his, and he should know.

From that we might conclude that Tektronix, being a collection of people, may be using only 8 per cent of *its* potential. That would be woefully inefficient. Because we must do a great deal better than that, we've tried to set up an atmosphere in which people receive maximum opportunity to excel.

It occurs to most corporations to proclaim somewhere that "the company is people," making that overworked phrase the most threadbare one of the year (and hardly news anyway, other than to those few readers who might have assumed a company to be made up of robots or trolls).

A company is, for sure, a complex, interrelated *human* endeavor. And if its overall excellence can exceed the sum of its parts (which we believe), it's still true that individual excellence is the base on which it must build.





People *want* to do a good job, to realize as much of their potential as possible. To the extent that a company enables and encourages personal excellence, it strengthens the bond with its employees. We've often stated, and repeat once again, that the basic goals of the individual and those of the company are the same. Tektronix has thrived as that belief has proved itself time and again.

Often the only difference between a craftsperson and a hack is pride. And it can't be synthesized; you know when it's there. Tektronix has been blessed over the years with a very large number of proud people.

It seems from here that pride is enhanced when an employee knows:

1. That the goal is a worthy goal.
2. That the organization is successfully achieving that goal.
3. That the job is worth doing.
4. That the job is being done well.
5. That this excellence is being rewarded accordingly.
6. And, increasingly, that opportunity exists for personal growth, to realize more of one's human potential.

From the very start, Tek has stressed the continuing need for individual and corporate self-renewal. At its best, this has created a hothouse for personal growth, almost forcing individuals to exceed their own expectations. We emphasize not only job training, but also broad personal development; we seek to fill most job openings from our own ranks; we try to keep the organizational structure unobtrusive so the employee doesn't bump and bang into it; and there's great leeway here for people to build their own jobs.

But more is needed. It's no longer enough to provide avenues for growth. What's necessary today is to give the old corporate nudge, encouraging people to *take* that next step toward excellence.

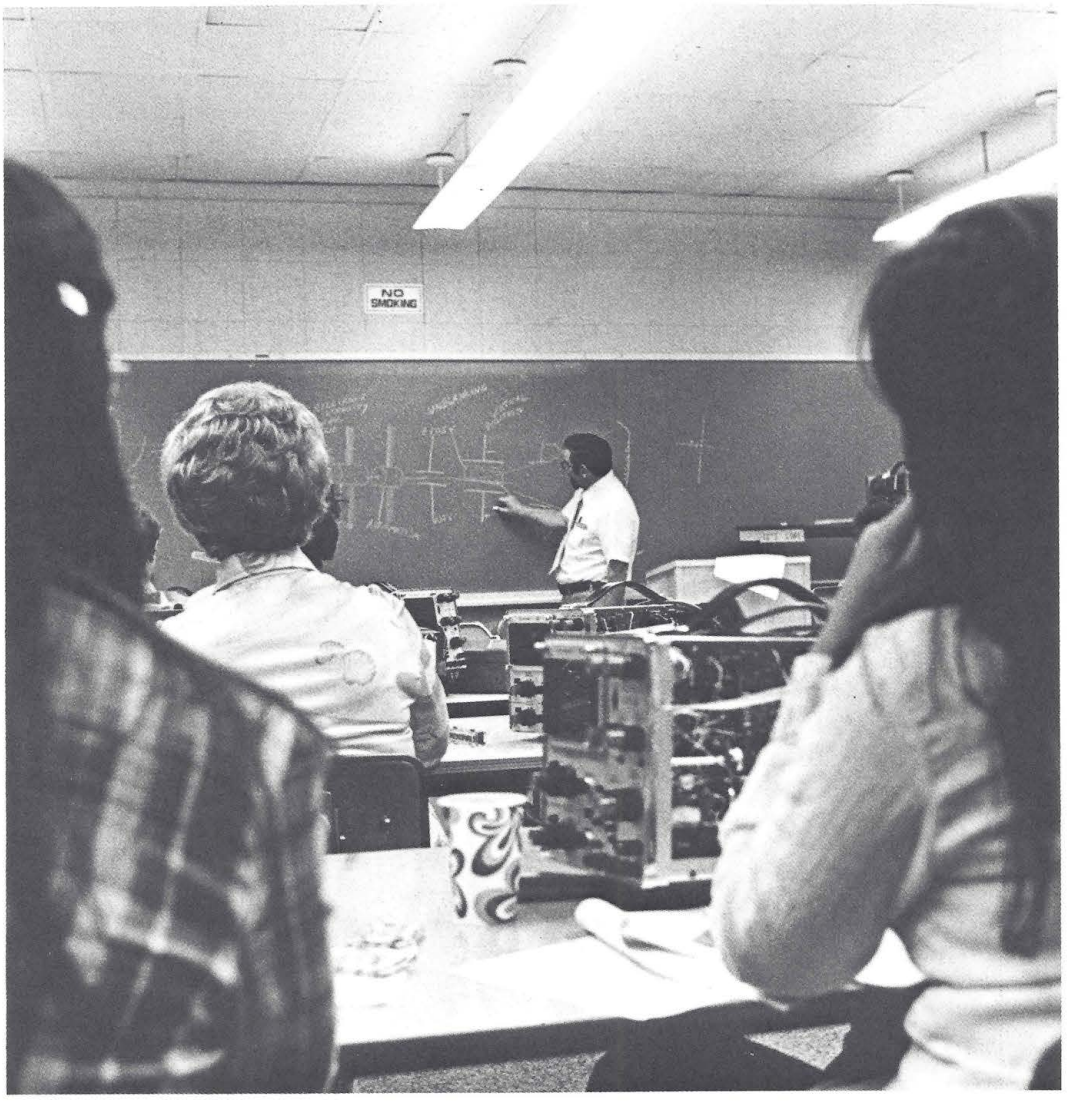
For one thing, the world of work changes as fast as technology changes. And that's fast. When the change comes, the employee is either ready to hit the ground running, or else.

For another thing, social attitudes are changing, and "traditional" ideas of who can hold what jobs are dissolving. That's all to the good.

Third, since any job is obsolescent, an employee's concern increasingly is with a job *sequence*, or vocational path. The growing emphasis must be on careers.

So our employee development this year has exceeded even that of past years. Because this kind of effort has always been so much a part of our corporate life, however, a number of organizational features have long been in place that contribute to maximum personal development:

1. One of the most extensive employee-education programs in industry.
2. Heavy emphasis on and excellent facilities for job-related training.
3. Open communications, both in-line and across the organization, unimpeded by artificial status barriers.
4. Non-unionized employees, and thus a flexible organization in which there is excellent opportunity to mix and match people and jobs, to find the "right" fit.
5. Great freedom of lateral movement throughout the company, from job to job. The sense of "up" and "down" so typical of some companies is a minor factor here, allowing each career option to be seen in terms of opportunity rather than whether it's "up" or "down" on an organizational chart. Many's the person here (including some top executives) whose career path has turned "east", "west" or even "south" on the way "north".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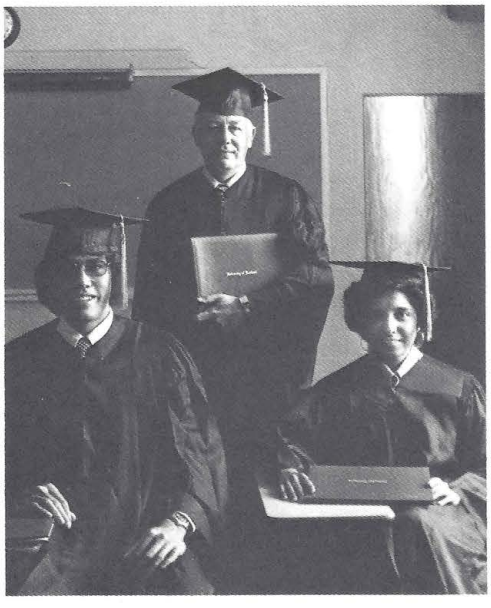


## GET READY, GET SET. . .

The handwriting used to be on the wall; nowadays, the alphanumerics are on the CRT; but the message is the same: *Times change; there is no alternative to self-renewal.*

That Tek people see continued personal growth as a "must" and not an option is seen in their response to our educational program.

They've always been great ones for self-development anyhow; but this year, participation in our educational offerings jumped 50 per cent—the largest increase in the long, successful history of the program.

Taking all its aspects together, these men and women marked down over 9000 successful course completions during the school year.

"Tek Tech" (as it's not called) held 406 employee-education courses on our own premises, mostly in our 33,500-square-foot Education & Training center. Subjects range from personal growth to technical knowhow providing or increasing job skills. This in-house program had 4686 student completions. (These courses typically cost the employee or family member $10 plus any books.) In addition, tuition refunds were given for 1692 completions of college or community-college classes.

Our program is broad, growing and innovative, in many ways without a peer.

For example: An employee with high-school education (or equivalent) who's interested in electronics might earn a bachelor's degree in electrical engineering, then continue to graduate school and receive an MS in that subject. This might be done, moreover, without having to leave the Tek "campus." And the company might have paid for the entire education.

This hasn't happened—yet. But the pieces of this academic journey are all in place. If the student's job is a technical one, the classes job-related and each one satisfactorily completed, our 100 per cent tuition refund would cover the whole program.

Through arrangement with Oregon State University and the University of Portland, and taught mostly by their instructors (and some qualified Tek people), courses leading to the BSEE from University of Portland and MSEE from Oregon State are held in Tek classrooms during non-work hours. The student then graduates with his or her class at the respective university.

A similar arrangement allows attaining a bachelor's degree, then a master's (both from U of P) in Business Administration, also on Tek premises. Another such program provides an MS in Computer Sciences through Oregon State; another, an MS in Electrical Science from Oregon Graduate Center.

On-premises degree programs this year counted 11 Tek graduates: Nine with a master's in business administration, two with a bachelor's in electrical engineering. Participants totaled 634, plus 86 auditing.

Of the 1692 tuition refunds earned (by 1024 employees throughout the US), 1142 were 100 per cent; those were for job-related courses. Another 550 received 50 per cent reimbursement; that refund applies to darn near anything other than crafts and gym.

Our off-hours education program is democratic; anyone in any job can take any class. This isn't typical in industry. Here you don't have to be a supervisor to take a supervisory course, a technical person to take a technical course. As you can see, that's a real boost to upward mobility, breaking the you-can't-get-the-job-without-training/you-can't-get-training-without-the-right-job cycle so frustrating to those whose sights are upward.

A major and dramatic influence on electronics today is the microprocessor ($\mu$P), the computer-on-a-chip discussed elsewhere in this report. To classes on that subject, taught on our campus by Tek instructors, we invited members of Portland State University's technical faculty. With the resulting knowledge (enriched by their own skills and study), they're teaching microprocessors both at PSU and at Tektronix. (We also supply the lab hardware.)

A metal-machine operators training program has just begun. This eight-week, eight-hour-a-day course, employing a fulltime instructor and using full-time shop facilities, is designed to enable women and minorities in particular to qualify for this "non-traditional" job skill. Of the first participants, 60 per cent are women, 10 per cent from minority groups.

The program will be ongoing. Our intent is to place those graduates who qualify into some part of our extensive metal-working operations.

Within our operating areas also, training is hitting hard at job stereotypes. As one result, we've found Tektronix women employees, in particular, increasingly eager to tackle alternate, technical and non-traditional work and to show what they can do. What they can do, for instance, is manage well; Tek's management team is increasingly co-ed. And 60 per cent of the promotions into technician jobs this year were earned by women.

Our management trainee program encourages participation by minority group members and women. The program's year of training supplements coursework by letting the trainees experience a variety of Tek jobs. Half the trainees—and *over* half those who've obtained management jobs—are women.

Supplemental job training in production and technician areas is open to minorities and women, qualifying them for more-highly-paid positions.

Our Test and Measurement division provides 600 hours of classroom instruction and lab work leading to qualification as an electronics technician. This course is held every work day, three hours a day, half on company time and half on the employee's time. Seventy per cent of the participants are women.

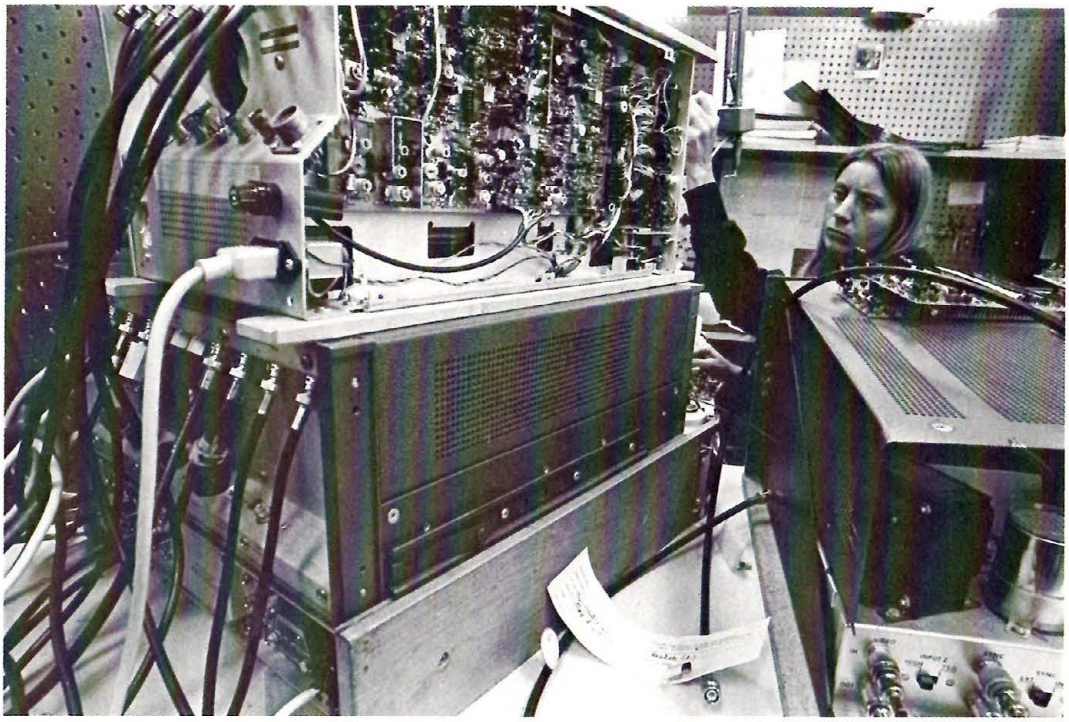
A four-year training program in air conditioning qualifies the graduates for positions as senior maintenance persons. Half the class are women.

A major technical training effort in Manufacturing runs from basic electronics through circuit analysis of the specific instruments on which the employees work. Those completing the course will qualify as calibrators or electronics technicians. Seventy-four per cent of the trainees are women.

By being the world's best widget peeler, you may be taking a step forward on a career path. Or you may not; what could happen is that your proficiency causes you to be stereotyped as a widget peeler (or, just as damaging, you may come to see *yourself* as only a widget peeler), and your potential for other kinds of jobs may never be uncovered.

Surely—but slowly—a concern with jobs is giving way to a concern with careers. It really has to. For one thing, jobs change fast (and can even disappear). Also, a job has a pay limit—and sometimes a satisfaction limit, too. Satisfaction with any job, however well it's performed, may still curdle if that job is seen as the end of the vocational line.

Our Human Resources representatives, staff ombudspeople, do a lot of listening to employee concerns. They've come to learn that one factor in most job dissatisfactions is inadequate career counseling.




PAYROLL DEP

We intend to remedy that. A Career Advisory committee is working to bring together our existing activities in this area. Some counseling is done by the employee's manager—more and more, we're requiring it. Beyond that, Tek has two fulltime career counselors, with access to outside specialist help.

But the most useful "career counseling" may be that which results from Tek's open, informal organization. To learn about the requirements of a job, easiest thing is to wander over to the manager of that area; buy him or her a cup of coffee, and ask.

To make more visible the wide range of vocational choices within Tektronix, our job-posting program (which seeks to have 90 per cent of openings for other than entry jobs filled by Tek candidates) was expanded to a weekly eight-page job-opportunity newspaper. Immediately, the number of in-house job applicants doubled; and it's stayed at this higher level.

## . . . GO!

When a person hasn't achieved this or that, most often it's because he has tried and failed. True or False?

That's an interesting question. It can be argued that the main reason any of us hasn't done *any* given thing is simply that, for whatever reasons, we just haven't made the try.

As far as job advancement goes, two kinds of obstacles can get in the way: Those outside the person and those inside.

For our part, we seek to avoid placing arbitrary organizational barriers in the way of advancement. Tougher problems to get at are barriers *within* the person (partly because they may seem to be none of our business).

If you skated as a kid, you may recall watching someone remove the "Danger—Thin Ice" sign from the frozen pond. It would be great to be first on the ice. And yet . . .

Such must be the feelings of a job candidate trying for a position that used to seem off limits but is now termed okay. Family pressures, social attitudes, even one's own emotional needs, may prevent stepping onto untried vocational "ice."

Traditions are wonderful, for the most part. Much of the corporate adhesive that binds us is the amalgam of traditional Tek values—informality, absence of artificial status, basic honesty . . . But once traditions come to mean hidebound ways of doing or thinking, then they must be given the heave-ho.

Part of our task is to wipe out even the subtlest organizational hint that a given job is off limits to anyone; the second part is to provide a support structure for people understandably leery of venturing into non-traditional jobs.

A great deal of effort has gone on this year to expunge outdated job images and to carry to *all* employees a basic message: *Your career horizon is far, far broader than you may have imagined.*

Upward (and lateral) mobility was the theme of two day-long off-campus "Focus on Choices" seminars paid for by Tek during work hours. Women, minorities and handicapped people from our production and service areas were particularly encouraged to attend. About 500 employees did. Similar programs for other job categories are scheduled.

Another four seminars, each attended by 100 to 200 employees, also dealt with upward mobility and career growth. Our education program has incorporated a class on job-seeking, and one on non-traditional jobs for women.

New-employee orientation now includes information on promotional opportunities for women and minorities. Our Human Resources reps maintain current lists of promotable people in these categories. Two career-awareness fairs were held, at Beaverton and at Wilsonville, stressing job options within and outside Tektronix.

To make it easier to obtain schooling, Tek allows flexible work hours for employees who wish to take advantage of education available only during the workday. Also, child-care expenses incurred while attending any class at Tektronix are reimbursed by the company.

People whose life situation (student, housewife with schoolkids, elderly person) precludes full-time or regular work hours have often been unemployable. For several years, our "farm-in" operations have offered short shifts and irregular hours that accommodate such needs.

We're now studying the possibility of certain jobs being shared by two people, neither of whom can or wishes to work full days. Such an arrangement would be useful to persons nearing retirement, providing a decompression period to prevent the "bends" sometimes caused by a too-sudden move from the world of work to the world of leisure.

Health problems and physical afflictions also may block the career path.

Our employee handbook is put onto an audio tape for those unable to see; so is our weekly employee newspaper. Tek people trained in sign language are paid to assist the hearing-impaired in employee meetings. An intensive drug and alcohol referral program deals in a supportive rather than retributive way with what is an increasing problem in many industries.

This probably should be emphasized:

The strongest Tektronix tradition of all has been respect for the individual. In none of the above activities do we seek to violate anyone's personal desires in the area of work, to force-fit square pegs into round holes.

We *do* intend, however, to make it clear to all that the opportunities abound and are attainable. Our message is simply that the pegs are nowhere near as square, nor the holes as round, as "tradition" has perhaps led folks to believe.

## OUR ANSWER IS AFFIRMATIVE

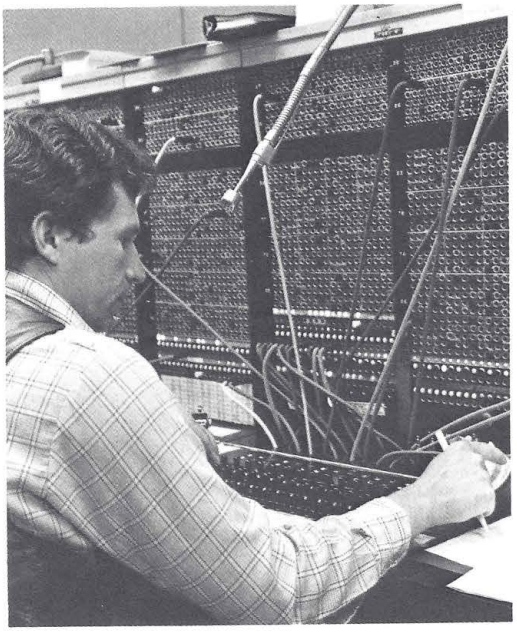
Which brings us to EEO. What those initials stand for is Equal Employment Opportunity. And what *that* means gets redefined each year. This year it has meant strong emphasis on our Affirmative Action Plan, a formalized plan required by the US government of its contractors and subcontractors, to meet federal goals in the area of fair employment.

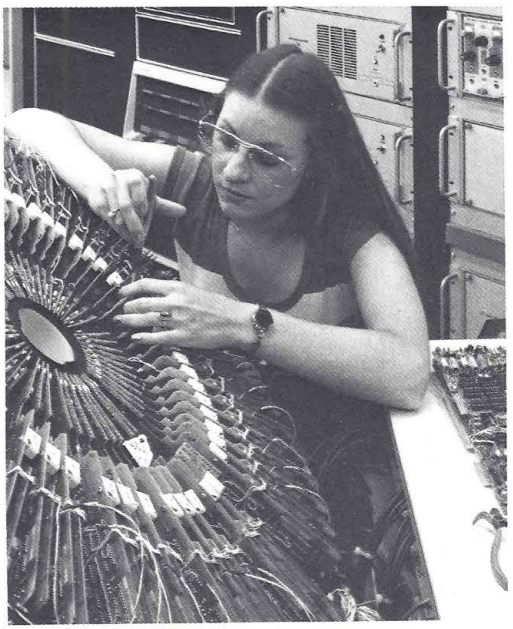
Shareholders deserve straight talk about EEO; so do employees; so does everyone, because it's a commonly misunderstood subject. However, EEO things are easier done than said.

Part of the problem, to be candid about it, is the adversary atmosphere that tends to surround EEO matters. What ideally should be a cooperative government-business approach to the problem of equal opportunity (since we share the same goals) has too often turned into attack-and-defend. Companies get jumpy, particularly about what they say publicly. With litigation lurking around the verbal corner, it seems safer to talk in generalities.

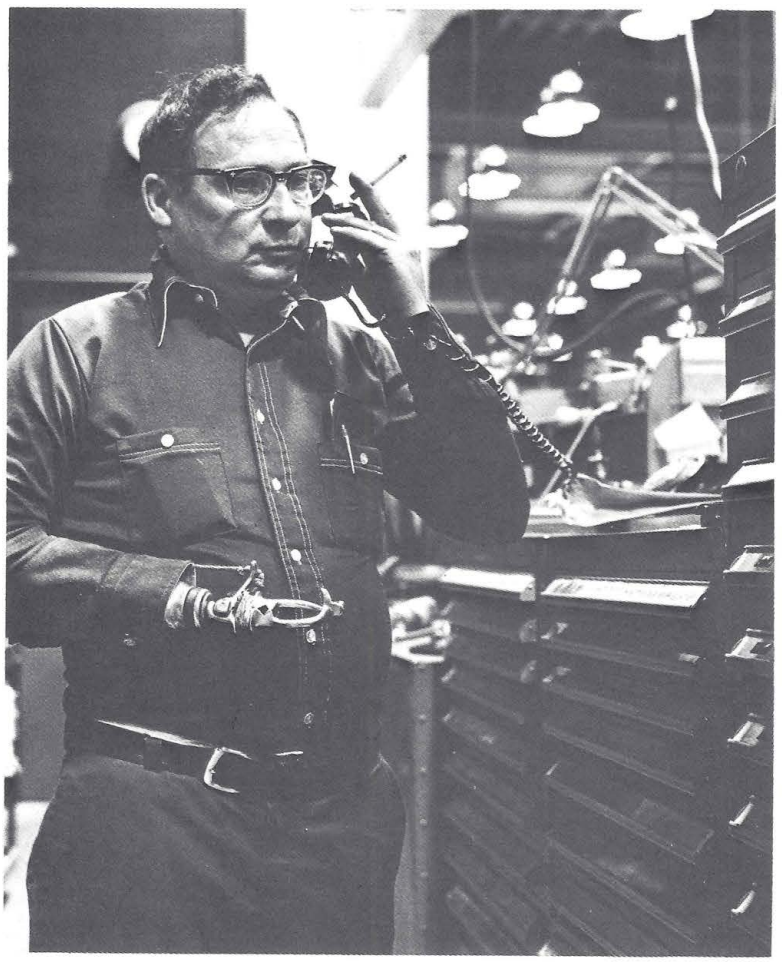
But those generalities often disguise what is really a complex problem.

Today, as you scan the recent crop of annual reports, you'll read, probably,






TEKTRONIX
Electronic Instrumentation



that Whatever Company has "always practiced" equal opportunity; then, later, that in the past year Whatever Company has made "great strides" in providing opportunity for women and minorities.

There's at least a hint of contradiction there. If a company has always practiced equal opportunity, the reader may ask, why is there any *need* for "great strides" to catch up?

Further, if all companies *had* always hired and promoted without discrimination, our society as a result would have flowed over with equal opportunity. But it didn't; some classes of people undoubtedly were more equal than others.

Part of the answer to this apparent discrepancy, or course, is that values change. Our society today is a great deal more aware than it used to be.

Annual reports, which have to be written while the year is still hot and smoking, resemble those "instant analyses" by TV commentators, who, only minutes after the President gives a speech, feel obligated to interpret it.

To get a real perspective on a given year, it should be viewed from a standpoint 10 years, say, in the future. Then trends would show up, or wouldn't, and the significance of events could be more clearly seen.

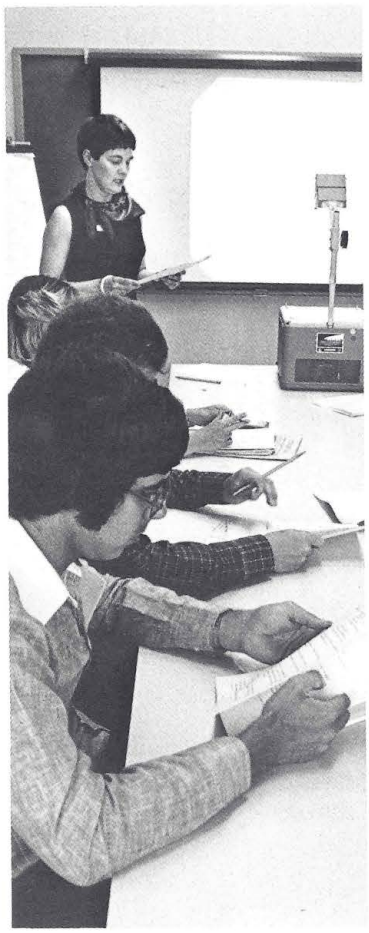
Who knows? Ten years from now, what we see at Tek today as a benign industrial democracy may be viewed as intolerable. Having to work eight hours a day; having to be at work by a certain time; being bossed around rather than choosing one's own work; working in noisy rather than soundproofed rooms; standing rather than seated, all may be seen as unreasonable conditions in the enlightenment of 1987. Or not. The point is, who can say?

Hindsight, of course, is nifty. Knowing what we know today and given today's set of social values, we look back on US society a decade or so ago and see it as more flawed than it seemed at that time. Certain groups or classes bucked a considerable social and economic headwind. It helped a lot to be white, neither old nor handicapped. And male.

Many of what we now see as possible discriminatory patterns in America 10 years back resulted from attitudes and cultural pressures over a century old. Some groups were being served or limiting *themselves* to smaller slices of the American pie. Nor was this necessarily the result of malice or intent by anyone. It was just The Way Things Were. And every institution, to some extent, reflected as well as contributed to the value system: Business, education, the family—and, we hasten to add, government itself, whose own official awareness of some of these inequities dates back only to 1964, when the Civil Rights Act was passed.

The earliest federal efforts, to wipe out obvious discriminatory practices by companies, were largely successful. Now that that's been done, the government has taken a new tack: To seek out and correct what they term "present effects of past discrimination"—classes of people now economically less advanced because of job or career opportunities denied them in the past. Companies' Affirmative Action Plans contain specific numerical targets, by job category, to remedy "underutilization," particularly of women and minorities.

A lot hinges on what's "fair" and "equal." Who's to decide that? Well, most often it's the government. And they, of course, have a lot of clout: They can require payments to make up for past discrimination; withdraw often-substantial direct and indirect government business; take companies to court . . .




Coca-Cola

This year it seems to us our progress toward AAP targets was very good by any standards, and supplemented by innovative programs, above and beyond what the government requires, to counter underutilization.

More broadly, we believe Tek's long reputation as a good employer would not exist if our practices had *not* been fair and nondiscriminatory.

That having been said, it's nevertheless true that Tek has been part of society. And society's values (it now appears) included a number of stereotyped ideas. For example, Man the Hunter/Woman the Childbearer, as a concept, has been reflected in schools and the family, in literature, music and toys for generations, and is bound to have affected people's ideas as to who could, or should, hold what kinds of jobs.

Our corporate policy on employment has always been beyond question. To make sure it's absolutely understood and followed, all Tektronix managers this year have received thorough training in EEO matters. What we're working hardest to eliminate now is any current reflection of outdated social attitudes, particularly residual employment patterns that are not intentionally discriminatory but might have that *effect*. (For instance, state laws setting weight limits on lifting tended to favor men, penalize women.) To the end that any such patterns be identified and eliminated, we've retained objective outside help, to turn our employment statistics every which way in search of the least trace of remotely questionable practices.

The government, to put it simply, is concerned with *results*. They look at the percentages of women, minorities and so on — in technical jobs, in management positions, in individual pay ranges, etc. Then they compare those percentages to what might exist if society had been different and no employment barriers had ever existed.

Of course, there's bound to be disparity. That these imbalances be removed — in education, in employment, wherever — is the government's concern..Ours, too.

This year we think we made a good showing:

For every three woman managers at Tektronix at the start of the year, we had five when it ended.

Some of that was due to the increase in total number of managers (those in any supervisory position). A more relevant figure is this: Female representation among Tek managers increased during the year by 44 per cent.

The ranks of professional, technical, service and crafts people also saw more and more successful women applicants.

Two job categories predominantly manned by women (so to speak) saw female representation either hold steady or decline. That's desirable. Those two areas were office/clerical and production.

The "sales" category gives us the most trouble. Tektronix salespeople are engineers or the equivalents, requiring thorough technical backgrounds as well as marketing skills and willingness to travel. The world at the moment is not full of women with those combined qualifications. (Our year's increase, 200 per cent, is deceptive, in that we went from one saleswoman to three.)

These were the increases in women as a percentage of each job category:

Managers, up 44 per cent. Professional (typically requiring four-year college backgrounds, such as electrical engineers, accountants, chemists, computer programmers and so on), up 42.4 per cent. Technical (electronics technicians,

process operators, software designers and the like), up 4.3 per cent. Office/clerical, essentially no change. Craftspeople (electricians, lead operators, computer operators and such), up 11 per cent. Production, down 4 per cent. Sales, up 200 per cent (see disclaimer above). Service, up 15.9 per cent.

We believe these figures give an honest capsule picture of upward trends; still, they need to be qualified and requalified. For instance, a small increase may mean we haven't done well—or it may mean we were doing pretty well in the first place. (As an example, nearly a quarter of our technical employees a year ago were women.) And a very large increase may mean the base we started with was very small.

Minority-group members increased as a percentage of our total work force, by 27.9 per cent. In all job categories except one, their representation went up. That category was service occupations, down 17.7 per cent, which suggests some upward movement of minority members from this classification.

These were the increases in minorities as a percentage of job category:

Managers, up 24.2 per cent, professional, up 12.2 per cent. Office/clerical, up 36 per cent. Craftspeople, up 53.8 per cent. Production, up 33.7 per cent. Sales, up 48 per cent.

Government EEO pressures may imply that the answer is to play the numbers game—simply hire and promote protected-class members until some quota is reached. That's totally unacceptable to us; our intent is that no instances of it occur.

First off, it's illegal to discriminate. For. Against. Any direction. Secondly, it's very, very poor business.

A basic Tek policy is to hire based on qualifications and to reward based on performance. To violate that keystone policy by selecting the less-competent individual over the more-competent would be a breach of faith with our employees.

It's very important to remember this:

*We will not compromise our merit system.* Hiring, promotion and pay here will continue to reflect individual performance.

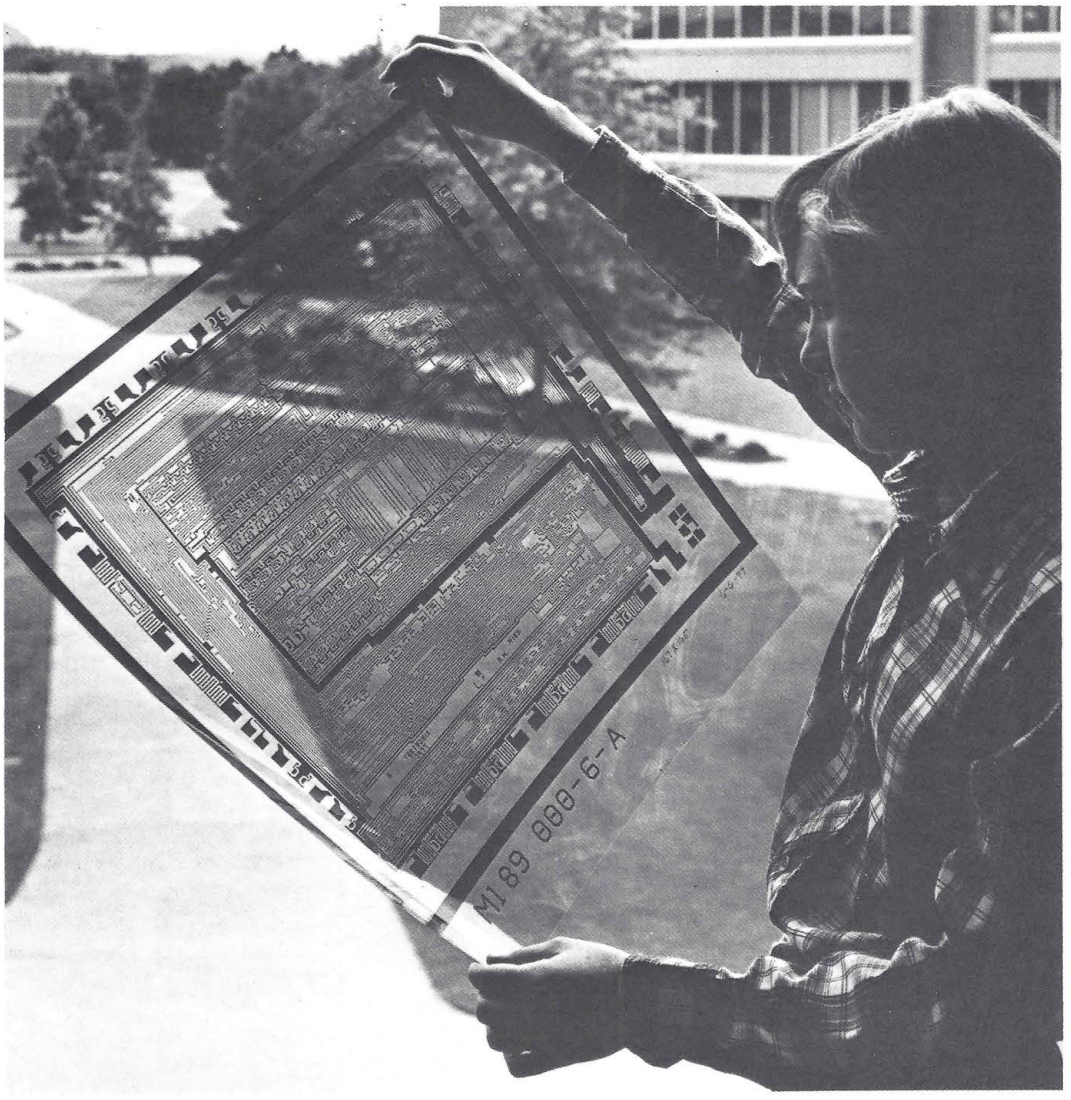
In hustling about to improve the competitiveness of *all* employees, it's true we've chosen to provide more-equal footing for some people who might otherwise have competed at a disadvantage. For this reason we've encouraged women, minorities and those with handicaps to take part in many of our training activities.

But, once those programs conclude, each individual is on his or her own, competing on the basis of ability to perform a given job. Over the long haul, that's the only approach that makes sense.

A related point:

Sometimes, as companies compete hotly for persons with critical job skills, they bid up their offering prices, often away out of reason. A lot of that is going on now, as companies under EEO pressure simply opt to "buy" the necessary people to meet quotas in hard-to-fill job classifications.

Our president, believing such a practice to be short-sighted, a violation of Tektronix standards and personally offensive, has prohibited it. We will offer competitive pay and benefits, but not go beyond that and engage in "meat bidding." (Our stance has had some effect on others in our industry also.)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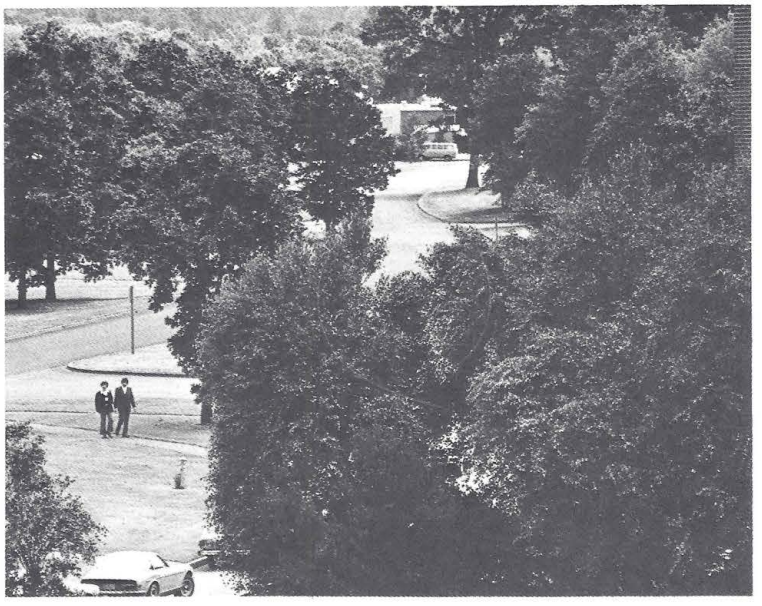


# Snapshot

Tek never stands still long enough for a portrait.

In these yearly reports to you, sharing what's relevant at the time, the resulting picture of Tektronix becomes kaleidoscope rather than portraiture.

But a snapshot may provide useful reference material. Here, in brief, is how your company looked as the fiscal year ended:

## Products

Our catalog lists over 700 products, including the various models of each. Our products typically rank first or second in their respective markets. Tektronix became known for its oscilloscopes, and the scope remains our primary product. The most common electronic instrument, it enables study of electrical events or a wide variety of phenomena convertible into voltage (heat, sound, pressure, strain, velocity, nuclear events and biochemical changes), by displaying their waveforms for study and analysis. The waveform is a graph written by a focused electron beam on the sensitive phosphor screen of the scope's cathode-ray tube (CRT).

Scopes range from "mini" or handheld to benchtop size. Some are monolithic; that is, self-contained; others vary their performance characteristics by accepting a number of Tek-made plug-in units, including multimeters and counters. Some are coupled to computers for additional analysis of waveform information. These models are said to have "intelligence." Some scopes have storage CRTs, that can retain the graphed waveform after the event it depicts has ceased.

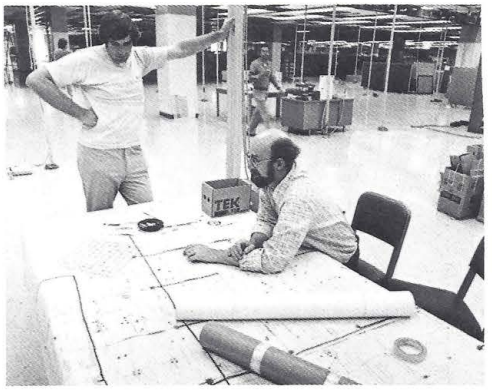
Scopes vary also in bandwidth, sensitivity, price and other features.

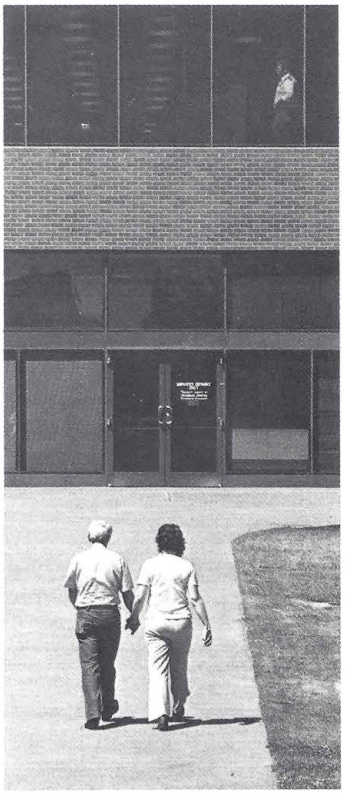
Test and measurement products also include modular plug-in instrument systems; spectrum analyzers, which are frequency-based (rather than time-based like scopes), allowing analysis of complex signals by separating them into their component frequencies; pulse generators, amplifiers, logic analyzers, microprocessor development aids, cable testers, power supplies and physiological monitors. Tek also produces a variety of accessories including probes, attenuators and waveform cameras.

Specialized products for use in the television industry are waveform and picture monitors, signal generators and vectorscopes, all of which test and display the quality of video transmission; and the products of The Grass Valley Group, Inc., our California subsidiary, which manufactures production and routing switchers and special-effects systems. Both Tektronix and Grass Valley television products are the ranking ones in this market.

Information-display products include graphic computer terminals, that provide a CRT display of not only words and numbers but also maps, charts, diagrams and a variety of other pictorial content; graphic computing systems, which can function as stand-alone personal desktop computers or interact with a host computer; hard-copy units, which make permanent paper copies of the CRT screen contents; and display monitors, which receive and picture computer output in a variety of ways.

Most of these terminals, monitors and computing systems use storage CRTs like those in a scope, enabling retention of the images after they've been written only one time. Our storage tube remains a unique competitive feature.


TEK



## Markets

Tektronix markets cover the range of human endeavors, in science, industry and education. The major ones, in order of contribution to our total sales, are:

Electronic and electrical equipment (electric motors, industrial controls, radio and television sets, telephone equipment, radar systems...), close to a quarter of our business;

The computer industry, also representing about a quarter of our sales;

Government (US, state and local—not foreign), just under 10 per cent of Tek business. We sell here standard commercial products, and accept neither R&D nor production contracts for non-catalog items;

Education, also representing about 10 per cent (but broadly influential on *future* buying habits of students), in medical schools, vocational and technical institutions, graduate investigative labs and classroom use associated with the burgeoning number of computers in schools;

The instrumentation industry (companies like ourselves, but not counting us), over 6 per cent of our business;

Broadcast television and other TV, under 5 per cent.

The rest of Tektronix sales are widely spread among such industries as petroleum, chemicals, transportation, printing and publishing, and medicine.

Tektronix products are sold in most countries. Primary foreign markets are Germany, France, the United Kingdom and Japan, followed by Canada, Australia, Switzerland, The Netherlands and Sweden.

## Facilities

People passing a Tek industrial park will notice it's a park before they're aware it's industrial. Natural beauty, retained and enhanced, bespeaks our respect for the environment. The buildings merge into forest, shrubbery and lawn.

Deer push their noses against the windows at Wilsonville; a weasel reportedly lives under our main Tek roadway at Beaverton. We put a "duck crossing" on one road until the ducks quit using it.

The 300-acre industrial park at Beaverton contains 25 buildings comprising 2,242,000 square feet in a sylvan campus. A 38-acre tract along Walker Road three miles to the west, with its 113,000-square-foot building, was obtained this year by trading our Sunset plant.

Approval has been given for a 103,000-square-foot addition to our 255,000-square-foot building on the 250-acre Wilsonville industrial park, headquarters of the fast-growing Information Display Group. Also approved are a 200,000-square-foot building on our Walker Road site, plus a 65,000-square-foot addition to the existing structure there; a 28,000-square-foot chemical storage structure on the Beaverton park, and a 38,000-square-foot expansion of our maintenance building there.

Outside Oregon, Tek owns six field offices or service centers comprising 160,000 square feet, and leases another 183,000 square feet, a total of 343,000 square feet. Our Grass Valley, Cal. subsidiary has 60,000 square feet of buildings.

In 10 foreign countries, Tek and subsidiaries own 396,000 square feet and lease another 176,000 square feet. Worldwide, the manufacturing, engineering, warehousing and related space we own totals about 3,259,000 square feet.

Overseas manufacturing plants are situated in two locations near London; on the Channel Isle of Guernsey; at Heerenveen, The Netherlands, and in Tokyo and Gotemba, occupied by SONY/Tektronix, our equally owned Japanese subsidiary.

## Technical Emphasis

Technology spins and wheels faster and faster. A company, to keep ahead, must have solid technical grounding. We do that; about 8.5 per cent of our revenues go into engineering, research and developmental activities; around 10 per cent of our employees are in those fields, and about one-third of them have engineering or science degrees.

Technological spurts also sometimes catch component-makers short, unable to supply the items a customer needs in adequate quantity, or on time, or at all. Component suppliers also sometimes can't provide the specialized characteristics a user must have. Sometimes, too, it's just not economical to accept a lot of "onesy-twosy" short-run or custom orders.

So, over the years, Tek has become a highly vertically integrated company, producing many of its own components, letting us tailor both instrument and components for optimum performance. We produce our own CRTs, some semiconductors, integrated circuits, transformers, chassis and cabinets, ceramic hybrid circuits, ceramic CRT envelopes, etched circuitry, potentiometers, switches, precision capacitors and resistors, inductors, relays and oscillators, coaxial cables and plastic parts in wide number. Many of these Tek-made parts are supplied to our overseas manufacturing plants also.

Our corporate objectives state that we intend to concentrate on the expanding fields of electronic equipment. We'll broaden that effort, they go on, only when we lead from strength and expect to make a significant contribution.

The opportunities to contribute significantly are certainly here: Not only in our traditional field of test and measurement, and the newer one of information display, but also in the growing market for logic-domain products to serve the fast-changing digital electronics field.

Our strengths also abound: Momentum; a leadership position; a good name; faithful customers; proud employees, with talent to burn; financial strength to support foreseeable expansion; a profit-directed organization; and a wide range of popular, broadly useful products.

And one more: Our board chairman once called attention to the "pioneering spirit" of Tektronix men and women, an attitude in keeping with the traditions of our Oregon country—and one very much in evidence at Tek today.

The pioneering spirit was an historically effective blend, roughly equal parts husbandry and adventure. In today's increasingly challenging field of electronics, that seems to be just about the right mix.

**COMMON SHARES — DESCRIPTION:**

The authorized capital of Tektronix consists of 20,000,000 Common Shares, without par value, all of one class. The board of directors of the Company has adopted a proposed amendment to the Restated Articles of Incorporation of the Company which would increase the number of authorized Common Shares from 20,000,000 to 40,000,000 shares, to be submitted to a vote of shareholders at the annual meeting of shareholders to be held on September 24, 1977.

**SHARE SPLIT:**

Effective May 9, 1977, Tektronix Common Shares were split 2-for-1 by means of a 100% share dividend payable on that date to shareholders of record on April 15, 1977. All references to numbers of shares, share prices, dividends and earnings per share have been adjusted to reflect the split.

**PRICE RANGE OF COMMON SHARES:**

The table below shows the range of sale prices of the Common Shares for the periods indicated. Prices through January 23, 1976 are for transactions on the New York Stock Exchange. Prices after that date reflect composite prices reported by the Wall Street Journal for transactions on all exchanges where the Common Shares are traded and for reported transactions not on an exchange.

| High | Low | 1975 | High | Low | 1976 |
|---|---|---|---|---|---|
| 16-1/2 | 9-1/16 | First quarter | 30-1/4 | 22-1/8 | First quarter |
| 19-3/4 | 14-3/8 | Second quarter | 32-1/8 | 28 | Second quarter |
| 20-5/8 | 15-7/8 | Third quarter | 34-1/4 | 29 | Third quarter |
| 22-3/4 | 18-13/16 | Fourth quarter | 34-7/16 | 28-7/8 | Fourth quarter |

| High | Low | 1977 |
|---|---|---|
| 34-1/4 | 28-1/4 | First quarter |
| 36-3/8 | 28-1/4 | Second quarter |
| 37-1/2 | 33-7/8 | Third quarter through August 4, 1977 |

**DIVIDENDS:**

Tektronix currently pays dividends on a semi-annual basis. The table below shows the dividends paid on each Common Share on the date shown.

| Amount | Date | Amount | Date |
|---|---|---|---|
| 5¢ | October 28, 1974 | 6¢ | April 27, 1976 |
| 5¢ | April 28, 1975 | 7-1/2¢ | November 1, 1976 |
| 6¢ | October 27, 1975 | 15¢ | May 9, 1977 |

Payment of future dividends by Tektronix is within the discretion of the board of directors. Whether future dividends are paid will depend, among other things, on Tektronix' earnings, capital requirements and financial condition.

**PRINCIPAL SHAREHOLDERS:**

Only Howard Vollum, Chairman of the Board of Directors, holds more than 10% of the outstanding shares. On June 30, 1977 he held 3,717,680 shares of record, or 21.0% of the 17,704,503 shares outstanding. Members of his family held an additional 114,204 shares on that date, for which Mr. Vollum disclaims beneficial ownership.

# 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**—Telequipment 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;
**Brazil**—Tektronix Industria e Comerico Ltda., Sao Paulo;
**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., Badhoevedorp;
**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,** Proteco 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;
**Panama,** Executive Marketing Corp., Panama;
**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 Uruguaya S.A., Montevideo;
**Venezuela,** Coasin C.A., Caracas.

**MARKETING REPRESENTATIVES**

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

***Egypt,** Giza Systems Engineering Co., Cairo;
**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,** SCRM, Casablanca;
***Nigeria,** Mofat Engineering Co. Ltd., Lagos, Ibadan;
**Norway,** Morgenstierne & 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;
***Sudan,** Cine & Photo Supply Co., Khartoum;
***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;
***West Africa,** Sitel, Ivory Coast;
**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.
*Albuquerque, N.M.
*Atlanta, Ga.
*Baltimore, Md.
*Boston, Mass.
*Chicago, Ill.
*Cleveland, Ohio
*Concord, Calif.
*Dallas, Texas
*Dayton, Ohio
*Denver, Colo.
*Detroit, Mich.
*Fort Lauderdale, Fla.
Hampton, Va.
*Honolulu, Hawaii
*Houston, Texas
*Huntsville, Ala.
*Indianapolis, Ind.
*Irvine, Calif.
*Kansas City, Kan.
*Long Island, N.Y.
*Los Angeles, Calif.
Milford, Conn.
*New Orleans, La.
*Oklahoma City, Okla.
*Orlando, Fla.
Pensacola, Fla.
*Philadelphia, Pa.
*Phoenix, Ariz.
*Pittsburgh, Pa.
Portland, Ore.
Poughkeepsie, N.Y.
*Raleigh, N.C.
Rochester, N.Y.
*Rockville, Md.
*St. Louis, Mo.
*St. Paul, Minn.
*Salt Lake City, Utah
San Antonio, Texas
*San Diego, Calif.
*Santa Clara, Calif.
*Seattle, Wash.
*Springfield, N.J.
*Syracuse, N.Y.

*Includes Service Center

**TEKTRONIX UNITED STATES SUBSIDIARY**

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

**FIELD OFFICES**

Atlanta, Ga.
Elkhart, Ind.
Long Island, N.Y.
Mabank, Texas
Sherman Oaks, Calif.

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

The tables below set forth the increase in certain items of the Company's Statement of Consolidated Income for the periods indicated and the ratios of those items to net sales. The following discussion should be read in connection with the information in the tables and the Company's Statement of Consolidated Income and notes to financial statements.

| Increase, As Compared to Prior Fiscal Year (amount in thousands) | | | | | Ratio to Net Sales (%) | | |
|---|---|---|---|---|---|---|---|
| 1976 | | 1977 | | | 1975 | 1976 | 1977 |
| Amount | % | Amount | % | | | | |
| $30,000 | 9 | $88,313 | 24 | Net Sales | 100.0 | 100.0 | 100.0 |
| 13,646 | 5 | 53,268 | 18 | Test and Measurement Sales | 86.0 | 82.6 | 78.3 |
| 16,354 | 35 | 35,045 | 55 | Information Display Sales | 14.0 | 17.4 | 21.7 |
| 5,637 | 3 | 26,780 | 16 | Manufacturing Cost of Sales | 48.7 | 46.2 | 43.1 |
| 7,018 | 16 | 12,370 | 24 | Selling Expense | 13.3 | 14.1 | 14.1 |
| 1,377 | 5 | 8,953 | 30 | Engineering Expense | 8.4 | 8.1 | 8.5 |
| 4,698 | 17 | 8,624 | 27 | Administrative Expense | 8.0 | 8.6 | 8.9 |
| 4,276 | 19 | 12,806 | 48 | Profit Share Expense | 6.6 | 7.3 | 8.6 |
| (9) | (0) | (628) | (13) | Interest Expense | 1.4 | 1.3 | 0.9 |
| 1,407 | 177 | 1,099 | 50 | Other Non-Operating Expense (Income) | (0.2) | (0.6) | (0.7) |
| 8,410 | 18 | 20,507 | 37 | Income Before Income Taxes | 13.9 | 15.1 | 16.6 |
| 3,760 | 14 | 13,882 | 46 | Earnings | 7.8 | 8.2 | 9.7 |

Test and measurement sales were $289,375,000, $303,021,000, and $356,289,000, respectively, for the 1975, 1976 and 1977 fiscal years. Information display product sales for the same periods were $47,270,000, $63,624,000 and $98,669,000.

The increase in sales for fiscal 1977 reflects primarily increased unit sales of both test and measurement and information display products. The Company believes that the increased unit sales were the result of a strong market for electronic equipment during the last year, and, in the case of information display products, to the increased market acceptance for graphic computer terminals. The sales increase 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.

Cost of sales decreases as a percentage of sales for both 1976 and 1977 reflect a gradual shift in product sales to products with a lower ratio of cost of sales to sales. The Company also attributes the decline in 1977 to economies of scale as volume increased, to improved productivity and to improved product design. The decline for 1976 also reflects the effect of the price increases mentioned above and improved productivity. The dollar increases in manufacturing cost of sales in 1976 and 1977 reflect primarily increased sales and inflationary pressures on costs.

The increases in selling expense for 1976 and 1977 reflect primarily the increase in business activity for those years. The increase in selling expense for 1976 is also attributable in part to management's decision to expand significantly the Company's marketing activities and service support programs and to the implementation of an incentive compensation program for most employees engaged in selling activities.

Administrative expense increases during 1976 and 1977 are attributable primarily to increased business activity. To a lesser extent, administrative expense increases for 1976 also reflect expenses incurred in connection with facilities expansion and 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 income taxes, profit sharing, executive incentive compensation and charitable contributions. Profit sharing expense also includes executive incentive compensation. 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, 1976 and 1977 were $2,450,000, $4,968,000 and $5,569,000, respectively.

Items included in determining other expense (income) are primarily interest income, charitable contributions, the Company's equity in earnings of Sony/Tektronix and foreign currency gains and losses. Interest expense decreases reflect primarily decreases in overseas borrowings and somewhat lower interest rates.

Effective tax rates for 1977, 1976 and 1975 were 41.9%, 45.5% and 43.8%, respectively. The changes in tax rate are primarily attributable to fluctuations in

the percentage of earnings taxed at rates applicable to United States earnings.

Expenses for maintenance and repairs and advertising have increased generally with the increases in the level of the Company's business activity. Increases in payroll tax expense reflect higher payroll tax rates and wage levels, increases in the Company's work force and taxes paid on increases in profit share.

Earnings increases reflect primarily the increased sales and the decline in manufacturing cost of sales as a percentage of sales mentioned above. The increase in earnings for 1977 is also attributable to the decrease in effective tax rate discussed above.

## EXPLANATION OF FINANCIAL STATEMENTS

Corporate performance and strength are usually measured by financial figures, although they only tell part of the story. It is hoped the explanation included as part of the financial statements will assist shareowners unfamiliar with financial analyses to a better understanding of Tektronix.

*Performance* is usually presented on the income statement, which shows how much of the revenue, mostly from sales, can be kept by the company after paying the costs of goods sold and the expenses of running the business.

*Strength* is pictured by the financial position statement, which shows the cost of the assets or resources used in the business and tells what part of them is owned by the shareowners and what part owed to creditors.

Another statement, Changes in Financial Position, shows the connection between the other two statements. Note that the first item on this statement is the earnings shown on the income statement. The last item is the working capital shown on the financial position statement.

To best adapt to conditions outside the United States, Tektronix operates in Japan and Austria through non-consolidated 50% owned companies, and elsewhere through wholly-owned subsidiary corporations. However, a meaningful financial picture of Tektronix is gained only by consolidated figures.

The figures on the financial statements are rounded to the nearest thousand dollars.

We hope these explanations will contribute to better understanding, and lead to further clarification.

## AUDITORS' OPINION

To the Shareowners of Tektronix, Inc.:

We have examined the statement of consolidated financial position of Tektronix, Inc. and subsidiaries as of May 28, 1977, May 29, 1976, and May 31, 1975 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 28, 1977, May 29, 1976, and May 31, 1975 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 21, 1977

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.

| 1973 | 1974 | 1975 | 1976 | 1977 | |
|---|---|---|---|---|---|
| **202,855** | **271,428** | **336,645** | **366,645** | **454,958** | **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. |
| **102,560** | **136,074** | **163,638** | **169,275** | **196,055** | **MANUFACTURING COST OF SALES** (Note 7) 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. |
| **100,295** | **135,354** | **173,007** | **197,370** | **258,903** | **GROSS PROFIT** |
| **69,816** | **96,857** | **126,178** | **142,131** | **183,157** | **EXPENSES** |
| 23,234 | 33,811 | 44,657 | 51,675 | 64,045 | SELLING (Note 7) Payroll and commission of sales engineers and employees who assist them, advertising, travel, rent of offices, and other expenses of marketing. |
| 18,208 | 22,573 | 28,327 | 29,704 | 38,657 | 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. |
| 15,103 | 21,867 | 26,968 | 31,666 | 40,290 | ADMINISTRATIVE Payroll of executives and personnel working on accounting, employment, data processing, facilities and communications functions, and the many expenses related to them. |
| 14,875 | 18,706 | 22,257 | 26,533 | 39,339 | PROFIT SHARING (Note 8). |
| 669 | 1,222 | 4,766 | 4,757 | 4,129 | INTEREST EXPENSE Cost of borrowed money. |
| (2,273) | (1,322) | (797) | (2,204) | (3,303) | OTHER NON-OPERATING EXPENSE (INCOME) Including interest income, earnings of 50% owned companies, currency fluctuation, amortization of intangibles and charitable contributions. |
| **30,479** | **38,497** | **46,829** | **55,239** | **75,746** | **INCOME BEFORE INCOME TAXES** |
| **13,740** | **17,144** | **20,500** | **25,150** | **31,775** | **PROVISION FOR INCOME TAXES** (Note 11) Estimated income taxes related to the income of Tektronix, Inc., and its consolidated subsidiaries including U.S. income taxes on dividends that may be repatriated from subsidiaries. |
| **16,739** | **21,353** | **26,329** | **30,089** | **43,971** | **EARNINGS** A measure of company performance. |
| 129,186 | 144,140 | 163,966 | 188,375 | 216,307 | REINVESTED EARNINGS AT BEGINNING OF YEAR. |
| (1,785) | (1,781) | (1,734) | (2,107) | (3,971) | DIVIDENDS PAID *10¢ per share annually 1973-1975, *12¢ in 1976, *22½¢ in 1977. |
| — | 254 | (186) | (50) | (88) | OTHER |
| 144,140 | 163,966 | 188,375 | 216,307 | 256,219 | REINVESTED EARNINGS AT END OF YEAR. |
| **17,263** | **17,291** | **17,344** | **17,547** | **17,628** | ***WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING DURING YEAR** (Thousands). |
| **$.97** | **$1.23** | **$1.52** | **$1.71** | **$2.49** | ***EARNINGS PER COMMON SHARE** Dilution if all outstanding share options were exercised would not have reduced primary earnings more than three cents. |

*Adjusted for 2-for-1 share split effective May 9, 1977.

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

# Tektronix Consolidated Financial Position

(THOUSANDS OF DOLLARS)

| May 31, 1975 | May 29, 1976 | May 28, 1977 | |
|---|---|---|---|
| **217,075** | **248,347** | **310,245** | **CURRENT ASSETS** Assets likely to be converted to cash or used in the ordinary operation of the business. |
| 5,182 | 1,273 | 3,477 | CASH (Note 4) Mostly in checking accounts or deposits in transit. |
| 31,090 | 69,178 | 91,477 | CASH EARNING INTEREST Invested in time deposits, certificates of deposit, U.S. treasury bills, commercial paper, or short-term tax-exempt securities. |
| 61,890 | 71,093 | 88,285 | ACCOUNTS RECEIVABLE Amounts due from customers for sales on credit. |
| (621) | (955) | (993) | ALLOWANCE FOR DOUBTFUL ACCOUNTS |
| 8,288 | 6,572 | 7,074 | 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. |
| 2,353 | 2,041 | 2,502 | SUPPLIES Items that will be consumed in operating offices, maintaining facilities, and running manufacturing plants. |
| 108,893 | 99,145 | 118,423 | INVENTORIES (Note 3) 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. |
| **63,623** | **60,540** | **84,277** | **CURRENT LIABILITIES** Obligations due to be paid within one year. |
| 12,220 | 2,517 | 4,708 | NOTES PAYABLE (Note 4) Amounts borrowed for less than one year. |
| 530 | 538 | 674 | CURRENT MATURITIES OF LONG-TERM INDEBTEDNESS (Note 6) Installment payments due within one year. |
| 13,334 | 15,870 | 22,049 | ACCOUNTS PAYABLE Amounts due for materials and services bought on credit. |
| 12,749 | 13,565 | 19,645 | U.S., STATE AND FOREIGN INCOME TAXES Taxes not yet paid. |
| 12,572 | 12,895 | 18,551 | EMPLOYEE PENSION AND PROFIT SHARING (Note 8) Due employees and their retirement funds. |
| 5,792 | 7,756 | 10,201 | PAYROLL AND PAYROLL TAXES Amounts due employees next payday, and taxes due on or withheld from pay. |
| 4,255 | 5,493 | 6,411 | VACATIONS Amounts earned by employees for their vacations, but not yet used or paid. |
| 2,171 | 1,906 | 2,038 | INTEREST AND MISCELLANEOUS TAXES |
| **153,452** | **187,807** | **225,968** | **WORKING CAPITAL** Current Assets minus Current Liabilities. |
| **82,620** | **88,563** | **95,375** | **FACILITIES AT DEPRECIATED COST** The cost of buildings and equipment used in the business, reduced by depreciation. |
| 59,349 | 74,429 | 73,935 | BUILDINGS AND GROUNDS Cost of buildings, including parking lots and landscaping. |
| 60,437 | 71,091 | 83,461 | MACHINERY AND FURNITURE Cost of furnishings. |
| 601 | 685 | 639 | LEASEHOLD IMPROVEMENTS Cost of remodeling rented space. |
| (57,668) | (66,682) | (73,852) | ACCUMULATED DEPRECIATION Reduction of value for use, wear and age. |
| 5,473 | 5,916 | 6,495 | LAND Cost of land used in business. |
| 14,428 | 3,124 | 4,697 | CONSTRUCTION IN PROGRESS Costs accrued on facilities not yet put into operation. |
| **6,921** | **7,950** | **9,708** | **INVESTMENTS AND OTHER LONG-TERM ASSETS** The investment in and advances to 50% owned companies and one half their reinvested earnings. Also included are intangible assets and installments of sale and lease contracts receivable due after one year. |
| **(29,835)** | **(38,601)** | **(39,783)** | **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. |
| **—** | **—** | **(3,043)** | **OTHER LONG-TERM LIABILITIES** |
| **(10,837)** | **(13,716)** | **(14,103)** | **DEFERRED INCOME TAXES** (Note 11) Future taxes on dividends from subsidiaries. |
| **202,321** | **232,003** | **274,122** | **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: |
| 14,258 | 15,707 | 17,914 | COMMON SHARES The amount the Company received for issuance of common shares. |
| (312) | (11) | (11) | TREASURY SHARES The cost of Tektronix, Inc. common shares repurchased and held. |
| 188,375 | 216,307 | 256,219 | 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

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.

| (THOUSANDS OF DOLLARS) | | | | | |
|---|---|---|---|---|---|
| 1973 | 1974 | 1975 | 1976 | 1977 | |
| **24,416** | **31,497** | **39,403** | **44,209** | **58,338** | **WORKING CAPITAL PROVIDED FROM OPERATIONS:** |
| 16,739 | 21,353 | 26,329 | 30,089 | 43,971 | EARNINGS As shown on INCOME STATEMENT. |
| 6,834 | 7,525 | 9,388 | 11,635 | 12,781 | 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. Mostly computed by accelerated depreciation methods. |
| (834) | (1,051) | (1,043) | (966) | (1,738) | EQUITY IN EARNINGS OF 50% OWNED COMPANIES less cash dividends received. These amounts added to investment. |
| 1,548 | 3,086 | 4,385 | 2,879 | 388 | DEFERRED INCOME TAXES Amounts not to be paid currently. |
| 129 | 584 | 344 | 572 | 2,936 | OTHER |
| **4,459** | **1,576** | **43,600** | **14,266** | **7,008** | **WORKING CAPITAL PROVIDED FROM:** |
| 2,945 | 396 | 2,418 | 1,700 | 2,118 | COMMON SHARES Net proceeds from sale of Tektronix, Inc. unissued and treasury shares to employee participants of share purchase and option plans. |
| 1,295 | 774 | 1,053 | 1,234 | 2,581 | 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 | 1,759 | LONG-TERM INDEBTEDNESS INCURRED. |
| 107 | 109 | 9,852 | — | — | REDUCTION OF INVESTMENTS Amounts sold or becoming current assets due within one year. |
| | | | | | OTHER |
| **13,223** | **29,541** | **37,472** | **24,120** | **27,185** | **WORKING CAPITAL USED FOR:** |
| 7,075 | 23,530 | 31,706 | 18,812 | 22,174 | ADDITIONS TO FACILITIES Cost of land, buildings, machinery and furniture purchased or constructed. |
| 160 | 323 | 712 | 2,541 | 577 | REDUCTION OF LONG-TERM INDEBTEDNESS Amounts becoming current liabilities due within one year. |
| 45 | 27 | 9 | 505 | 305 | INTANGIBLE ASSETS Amounts paid for patents, trademarks and loan costs. |
| 3,402 | 3,516 | 3,131 | 155 | 158 | INVESTMENTS Long-term securities, receivables and advances to 50% owned companies. |
| 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 | 3,971 | PAYMENT OF DIVIDENDS |
| **15,652** | **3,532** | **45,531** | **34,355** | **38,161** | **RESULTING INCREASE IN WORKING CAPITAL** Made up of |
| **30,494** | **25,371** | **40,670** | **31,273** | **61,897** | **INCREASE (DECREASE) IN CURRENT ASSETS** Minus |
| 1,640 | (11,819) | 17,599 | 34,179 | 24,502 | CASH AND CASH EARNING INTEREST |
| 11,583 | 10,814 | 6,039 | 8,869 | 17,154 | ACCOUNTS RECEIVABLE—NET |
| 16,511 | 23,820 | 13,644 | (9,748) | 19,277 | INVENTORIES |
| 760 | 2,556 | 3,388 | (2,027) | 964 | SUPPLIES PREPAID EXPENSES AND DEPOSITS |
| **14,842** | **21,839** | **(4,861)** | **(3,082)** | **23,736** | **INCREASE (DECREASE) IN CURRENT LIABILITIES** |
| 1,972 | 12,596 | (10,586) | (9,694) | 2,327 | NOTES PAYABLE AND CURRENT MATURITIES OF LONG-TERM INDEBTEDNESS |
| 7,791 | 8,220 | (2,921) | 5,473 | 9,674 | ACCOUNTS PAYABLE AND OTHER CURRENT LIABILITIES |
| 1,400 | 930 | 4,143 | 323 | 5,656 | EMPLOYEE PENSION AND PROFIT SHARING |
| 3,679 | 93 | 4,503 | 816 | 6,079 | U.S. STATE AND FOREIGN INCOME TAXES |
| **88,737** | **104,389** | **107,921** | **153,452** | **187,807** | **WORKING CAPITAL AT BEGINNING OF PERIOD** Plus increase in working capital equals |
| **104,389** | **107,921** | **153,452** | **187,807** | **225,968** | **WORKING CAPITAL AT END OF PERIOD** As shown on FINANCIAL POSITION STATEMENT. |

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

# Tektronix, Inc. and Subsidiaries
# Notes to Financial Statements

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 and balances 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).

**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 the lower of cost, on a first-in, first-out basis, or market.

**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.

**Income Taxes**—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.

**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. All material intercompany profits have been eliminated.

**Common Share Data**—On March 31, 1977, the Board of Directors declared a two-for-one share split effected in the form of a 100% stock dividend, on the Company's outstanding common shares, effective May 9, 1977. All references to the number of shares and per share amounts in the accompanying financial statements and notes to the financial statements have been adjusted to reflect the share split.

2. SUBSIDIARIES AND 50% OWNED COMPANIES:

In February, 1974, the Company acquired The Grass Valley Group, Inc. in a transaction accounted for 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 1973 and 1974 were:

| May 26, 1973 | May 25, 1974 | |
|---|---|---|
| $4,657,960 | $6,088,174 | Sales |
| 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 31, 1975 | May 29, 1976 | May 28, 1977 | |
|---|---|---|---|
| $76,374,909 | $75,517,482 | $88,255,532 | Current assets |
| 10,093,513 | 12,682,665 | 13,273,409 | Facilities—net |
| 823,249 | 584,277 | 502,515 | Other assets |
| 19,107,933 | 15,275,072 | 21,685,256 | Current liabilities |
| 4,671,690 | 3,666,112 | 4,831,846 | Long-term debt |

Earnings of foreign subsidiaries included in the consolidated financial statements were $5,471,825 in 1973, $8,994,473 in 1974, $13,371,253 in 1975, $7,945,738 in 1976 and $13,407,540 in 1977.

Translation and exchange gains (losses) included in other non-operating income were as follows: 1973, $606,008; 1974, $(1,016,161); 1975, $(369,096); 1976, $(859,227); and 1977, $(543,644).

The Company's share of the earnings of 50%-owned companies was $834,182 in 1973, $1,087,294 in 1974, $1,076,470 in 1975, $998,102 in 1976, and $1,772,663 in 1977.

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 13¢.

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 31, 1975 | May 29, 1976 | May 28, 1977 | |
|---|---|---|---|
| $ 33,904,696 | $ 35,534,485 | $36,117,259 | Finished goods |
| 52,473,441 | 52,043,550 | 66,011,363 | Work-in-process |
| 29,095,066 | 21,977,342 | 27,078,407 | Purchased materials |
| (6,579,572) | (10,409,549) | (10,783,935) | LIFO reserve |
| $108,893,631 | $ 99,145,828 | $118,423,094 | Total |

4. SHORT-TERM NOTES PAYABLE:

The Company has short-term borrowing arrangements with domestic and foreign banks which aggregated $30,305,000 at May 28, 1977. Average compensating bank balances of 10% are informally required on $10,000,000 of such arrangements.

The May 28, 1977 balance of notes payable bears interest at an average rate of 11.0%. Average borrowings during the year, based on period-end balances, were $4,269,000 at an approximate weighted average interest rate of 9.9%. Maximum period-end aggregate short-term borrowings during the year were $5,400,000. During the years ended May 31, 1975 and May 29, 1976, average borrowings were $28,935,000 and $7,586,000 respectively, at average interest rates of 12.7% and 10.3%.

5. SHAREOWNERS' EQUITY:

Authorized capital at May 28, 1977 consists of 20,000,000 common shares without par value. Issued and outstanding shares are as follows:

| May 31, 1975 | May 29, 1976 | May 28, 1977 | |
|---|---|---|---|
| 17,465,994 | 17,585,131 | 17,675,607 | Issued |
| 8,992 | 311 | 311 | Held in Treasury |
| 17,457,002 | 17,584,820 | 17,675,296 | Outstanding |

On July 21, 1977, the Company's Board of Directors approved an increase in authorized capital to 40,000,000 common shares without par value. The increase is subject to shareowner approval.

In connection with the two-for-one share split declared on March 31, 1977, $88,299 was transferred to the common share account from reinvested earnings.

6. LONG-TERM INDEBTEDNESS:

| May 31, 1975 | May 29, 1976 | May 28, 1977 | |
|---|---|---|---|
| | $35,000,000 | $35,000,000 | (A) 8⅞% Notes due 5-15-83 |
| | (214,385) | (183,770) | Unamortized discount on (A) |
| $3,502,500 | 1,764,000 | 1,717,500 | (B) Revolving credit note |
| 1,244,000 | 2,203,760 | 3,555,448 | (C) Term notes |
| 365,272 | 322,122 | 348,252 | (D) Mortgage notes |
| 253,153 | 63,551 | 18,842 | Other |
| 25,000,000 | | | (E) Revolving credit note |
| 30,364,925 | 39,139,048 | 40,456,272 | Total |
| 530,082 | 537,964 | 673,688 | Less current maturities |
| $29,834,843 | $38,601,084 | $39,782,584 | Long-term indebtedness—net |

(A) On June 3, 1975, the Company sold $35,000,000 of 8⅞% Notes due May 15, 1983. The outstanding balance on the revolving credit note (E) was repaid from the proceeds. The 8⅞% 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 9.2% at May 28, 1977.

(C) The term notes are repayable in French Francs and Canadian Dollars and are due through 1982 in annual installments ranging from $494,000 to $922,000. Interest rates range from 9.2% to 11.4%.

(D) The mortgage notes payable are due in annual installments of $50,200, plus interest at rates ranging from 4½% to 7½%. Facilities with an original cost of $1,500,000 are pledged as collateral. One note is repayable in Dutch Guilders.

(E) The revolving credit note was due under a $25,000,000 commitment with Morgan Guaranty Trust Company, which the Company terminated in May 1976.

7. RECLASSIFICATION OF EXPENSES:

Selling expense has been reduced and manufacturing cost of sales increased by $2,242,641 in 1973, $3,011,896 in 1974, $4,020,156 in 1975, and $4,505,385 in 1976 to conform to statement classifications adopted in 1977.

8. PROFIT SHARING, PENSION, AND INCENTIVE PLANS:

Most permanent employees receive cash and deferral 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 the parent company 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.

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 accrue as pension expense the normal actuarial cost for the year plus amortization of all unfunded actuarial liabilities by the declining balance method using approximately a 20 year life. Charges to payroll expense for the period from plan adoption to May 31, 1975 were $2,450,000 and for the years ended May 29, 1976 and May 28, 1977 were $4,968,000 and $5,569,000 respectively. The unfunded past service liability at May 28, 1977 was approximately $26,000,000 and vested benefits exceeded fund assets by approximately $1,100,000.

In November 1974, the Company adopted an Earnings Per Share Growth Plan to provide incentive compensation for key employees. The plan provides for compensation based on the improvement in earnings per share over a three-year period. Charges under the plan are included in profit share expense and amounted to $100,000 for 1975, $450,000 for 1976, and $2,493,000 for 1977. The expense for 1975 and 1976 relates to awards covering the three-year period ended in 1977; the expense for 1977 relates to those awards and to a greater number of awards to an increased number of key employees covering the three-year period ending in 1979.

9. EMPLOYEE STOCK OPTION AND SHARE PURCHASE PLANS:

Under qualified stock option plans for employees, 369,474 common shares of the Company were reserved at May 28, 1977. Shares available for options not yet granted were 11,694

at May 28, 1977 (8,494 shares at May 29, 1976). 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 28, 1977, options to purchase 357,780 shares were outstanding for which the option price, ranging from $11.02 to $32.33 per share, amounted to $6,693,836 and options to purchase 105,726 shares were exercisable, for which the option price amounted to $2,562,928. During the year then ended, options became exercisable for 75,548 shares at option prices per share ranging from $10.82 to $30.05 with market prices per share at date exercisable ranging from $28.73 to $33.95. Options were exercised for 58,848 shares at option prices per share ranging from $10.82 to $30.05 and market prices per share at date of exercise ranging from $28.33 to $34.25.

Option and market prices for options which became exercisable and for options which were exercised in the five years ended May 28, 1977 were:

| | Options Which Became Exercisable | | Options Exercised | |
|---|---|---|---|---|
| Year | Option Price | Market Price | Option Price | Market Price |
| 1977 | $1,500,420 | $2,395,637 | $1,246,194 | $1,867,974 |
| 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 |

Under a non-qualified stock option plan for employees, 193,000 common shares of the Company were reserved at May 28, 1977. Shares available for options not yet granted amounted to 125,000 at May 28, 1977 and May 29, 1976. 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 28, 1977, 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 28, 1977, options to purchase 68,000 shares were outstanding for which the option price, ranging from $12.13 to $18.58 per share, amounted to $867,013 and options to purchase 15,300 shares were exercisable, for which the option price amounted to $196,019. During the year then ended, options became exercisable for 18,250 shares at option prices per share ranging from $12.13 to $18.58 with market prices per share at date exercisable ranging from $29.23 to $33.95. Options were exercised for 5,000 shares at an option price per share of $12.19 and market prices per share at date of exercise ranging from $30.60 to $33.95.

Option and market prices for options which became exercisable and for options which were exercised in the two years ended May 28, 1977, were:

| | Options Which Became Exercisable | | Options Exercised | |
|---|---|---|---|---|
| Year | Option Price | Market Price | Option Price | Market Price |
| 1977 | $231,988 | $541,525 | $60,938 | $159,700 |
| 1976 | 228,500 | 325,313 | 24,375 | 41,975 |

Under a new "Employee Share Purchase Plan" which became effective in January 1977, 375,434 common shares of the Company were reserved at May 28, 1977. (At May 29, 1976, 311,384 shares were reserved under a prior plan.) The share purchase discount provided in the plans, which is not material in amount, has been charged to income.

10. COMMITMENTS:

The companies are committed under long-term building and equipment leases in the aggregate amount of $11,660,000 payable $2,461,000 in 1978, $2,165,000 in 1979, $1,703,000 in 1980, $1,313,000 in 1981, and $4,018,000 thereafter.

Rental expense charged to income, including short-term leases, was $1,705,000 in 1973, $2,719,000 in 1974, $4,678,000 in 1975, $4,976,000 in 1976, and $5,505,000 in 1977.

Capitalization of financing leases would not have a material effect on earnings.

11. INCOME TAXES:

The provisions for income taxes for the five years ended May 28, 1977 consist of the following: (in thousands)

| 1973 | 1974 | 1975 | 1976 | 1977 | |
|---|---|---|---|---|---|
| $ 9,845 | $11,600 | $12,400 | $17,894 | $21,837 | United States |
| 990 | 1,400 | 1,625 | 2,095 | 3,050 | State |
| 2,905 | 4,144 | 6,475 | 5,161 | 6,888 | Foreign |
| $13,740 | $17,144 | $20,500 | $25,150 | $31,775 | 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)

| 1973 | 1974 | 1975 | 1976 | 1977 | |
|---|---|---|---|---|---|
| $14,630 | $18,478 | $22,478 | $26,515 | $36,358 | Computed income taxes based on 48% rate |
| (1,288) | (2,257) | (3,269) | (706) | (3,067) | Effect of certain foreign subsidiary earnings taxed below 48% |
| 1,548 | (1,717) | 1,225 | | | Provisions for (reversal of) deferred income taxes on undistributed earnings of foreign subsidiaries |
| (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 |
| 575 | 721 | 845 | 1,090 | 1,655 | State income taxes, net of Federal income tax benefit |
| (265) | (564) | (1,099) | (957) | (991) | Investment tax credit |
| (160) | (331) | 320 | (792) | (2,180) | Other—net |
| $13,740 | $17,144 | $20,500 | $25,150 | $31,775 | 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 legislative uncertainty regarding 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 $99,000,000 at May 28, 1977. Except for accumulated deferred income tax provisions of $15,729,979 (primarily related to DISCs) relating to approximately $37,500,000 of such reinvested earnings, no provision has been made for additional United States income taxes which could result from the transfer of undistributed earnings to Tektronix, Inc., because the company has no present intention of transferring such earnings. If the undistributed 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)

| 1973 | 1974 | 1975 | 1976 | 1977 | |
|---|---|---|---|---|---|
| $ 1,548 | $(1,717) | $ 1,225 | | | On undistributed earnings of foreign subsidiaries |
| | 4,803 | 3,160 | $ 3,202 | $ 1,587 | On undistributed earnings of DISCs |
| | | | (428) | (1,199) | Other—net |
| $ 1,548 | $ 3,086 | $ 4,385 | $ 2,774 | $ 388 | Total deferred income taxes |

12. REPLACEMENT COST INFORMATION (UNAUDITED):

The following replacement cost information for Tektronix, Inc. and its subsidiaries has been estimated in accordance with the requirements of the Securities and Exchange Commission. This information should not be interpreted to indicate that Tektronix has present plans to replace its productive capacity or that actual replacement would take place in the manner assumed in developing the information. Although the replacement cost of facilities is higher than the historical cost, it should be noted that such costs might be somewhat offset by improved productivity of the new assets. Furthermore, the calculations do not give recognition to the effect of price increases which would normally follow cost increases. The imprecise assumptions in the computations, therefore, should cause the users of such data to proceed with caution in making any business judgements from it.

The estimated replacement cost of productive capacity was developed by comparing recently experienced plant construction costs, engineering estimates, and vendor prices with government price indexes. Since they compared with only minimal differences the replacement cost was calculated by applying the appropriate indexes to historical cost data.

Depreciation for replacement cost purposes was calculated using the straight-line method to the historical depreciation periods currently in use.

Replacement cost of inventories is based on pricing year-end inventories at cost, on a first-in, first-out basis, which approximates replacement cost for such inventories.

Since only subsidiary inventories are not based on the last-in, first-out (LIFO) method, the cost of products sold by the subsidiaries was increased by using the indexes of price changes applied to the inventory turnover to determine the cost of sales adjustment.

The estimated replacement cost data and its historical cost equivalent are as follows: (in thousands)

| Estimated Replacement Cost | Comparable Historical Cost | |
|---|---|---|
| | | As of May 28, 1977: |
| $129,500 | $118,423 | Inventories |
| $231,200 | $153,553 | Facilities |
| (92,600) | (72,155) | Less accumulated depreciation |
| $138,600 | $ 81,398 | Facilities—net |
| | | For the Year Ended May 28, 1977: |
| $196,300 | $195,281 | Manufacturing cost of sales |
| $ 2,800 | $ 2,323 | Depreciation in manufacturing cost of sales above |
| 10,700 | 9,603 | Other depreciation |
| $ 13,500 | $ 11,926 | Total depreciation |

The following table reconciles the historical cost amounts for which replacement cost data are provided to the related totals shown in the consolidated financial statements: (in thousands)

| Inventories | Facilities | Accumulated Depreciation | Manufacturing Cost of Sales | Depreciation | |
|---|---|---|---|---|---|
| $118,423 | $169,227 | $ 73,852 | $196,055 | $ 12,781 | Totals as shown in the accompanying consolidated financial statements |
| | | | | | Less amounts for which replacement cost data have not been provided at cost: |
| | (6,495) | | | | Land |
| | (4,697) | | | | Construction in progress |
| | (3,843) | (1,455) | (774) | (774) | Rental instruments |
| | (639) | (242) | | (81) | Leasehold improvements |
| $118,423 | $153,553 | $ 72,155 | $195,281 | $ 11,926 | Historical amounts for which replacement cost data have been provided |

13. QUARTERLY FINANCIAL INFORMATION (UNAUDITED):

The following is selected quarterly financial data for 1977. In the opinion of management, the quarterly data includes all adjustments necessary to present fairly the results of operations for the periods presented (in thousands except Earnings per Share).

| 12 Weeks Ended Aug. 21, 1976 | 12 Weeks Ended Nov. 13, 1976 | 16 Weeks Ended Mar. 5, 1977 | 12 Weeks Ended May 28, 1977 | 52 Weeks Ended May 28, 1977 | |
|---|---|---|---|---|---|
| $89,543 | $100,007 | $140,100 | $125,308 | $454,958 | Net Sales |
| 38,376 | 44,608 | 61,306 | 51,765 | 196,055 | Cost of Sales |
| 12,251 | 14,028 | 19,416 | 18,350 | 64,045 | Selling |
| 7,573 | 8,248 | 11,922 | 10,914 | 38,657 | Engineering |
| 7,681 | 8,913 | 12,360 | 11,336 | 40,290 | Administration |
| 7,606 | 7,839 | 12,113 | 11,781 | 39,339 | Employee Profit Share |
| 962 | 922 | 1,290 | 955 | 4,129 | Interest Expense |
| (562) | (697) | (1,070) | (974) | (3,303) | Other Non-Operating Expense (Income) |
| 15,656 | 16,146 | 22,763 | 21,181 | 75,746 | Income Before Income Taxes |
| 7,237 | 7,424 | 10,105 | 7,009 | 31,775 | Provision for Income Taxes |
| 8,419 | 8,722 | 12,658 | 14,172 | 43,971 | Earnings |
| 48¢ | 49¢ | 72¢ | 80¢ | $2.49 | Earnings Per Share |

# Tektronix Consolidated Financial Statistics

(DOLLARS, SHARES AND SQUARE FEET IN THOUSANDS)

| 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | Fiscal year or year end |
|---|---|---|---|---|---|---|---|---|---|---|
| **135,021** | **151,011** | **168,939** | **149,442** | **167,482** | **202,855** | **271,428** | **336,645** | **366,645** | **454,958** | **NET SALES** |
| 91,521 | 100,302 | 107,007 | 86,816 | 101,310 | 122,137 | 155,764 | 196,323 | 217,931 | 284,527 | United States |
| 43,500 | 50,709 | 61,932 | 62,626 | 66,172 | 80,718 | 115,664 | 140,322 | 148,714 | 170,431 | International |
| **13,810** | **14,572** | **15,005** | **9,904** | **11,764** | **16,739** | **21,353** | **26,329** | **30,089** | **43,971** | **EARNINGS** |
| $.82 | $.86 | $.88 | $.58 | $.69 | $.97 | $1.23 | $1.52 | $1.71 | $2.49 | *Per Share |
| 10.2% | 9.7% | 8.9% | 6.6% | 7.0% | 8.3% | 7.9% | 7.8% | 8.2% | 9.7% | % of Sales |
| 16.5% | 14.5% | 13.0% | 7.8% | 8.5% | 10.8% | 12.2% | 13.0% | 13.0% | 16.0% | % of Equity |
| **25,825** | **26,379** | **26,398** | **16,806** | **21,008** | **30,479** | **38,497** | **46,829** | **55,239** | **75,746** | **INCOME BEFORE TAXES** |
| 19.1% | 17.5% | 15.6% | 11.2% | 12.5% | 15.0% | 14.2% | 13.9% | 15.1% | 16.6% | % of Sales |
| 46.0% | 44.6% | 43.2% | 41.1% | 44.0% | 45.1% | 44.5% | 43.8% | 45.5% | 41.9% | Effective Income Tax Rate |
| 137,000 | 157,000 | 169,000 | 145,000 | 174,000 | 232,000 | 297,000 | 329,000 | 376,000 | 513,000 | Orders Received |
| 13,000 | 19,000 | 19,000 | 15,000 | 21,000 | 53,000 | 74,000 | 61,000 | 70,000 | 128,000 | Unfilled Customer Orders |
| 7,892 | 8,813 | 9,957 | 9,091 | 8,334 | 10,580 | 12,693 | 12,664 | 12,970 | 14,637 | Number of Employees |
| 17.1 | 17.1 | 17.0 | 16.4 | 20.1 | 19.2 | 21.4 | 26.6 | 28.3 | 31.1 | Sales per Employee |
| **41,625** | **49,214** | **60,281** | **56,338** | **58,609** | **70,949** | **94,258** | **116,511** | **121,404** | **150,106** | **PAYROLL BEFORE PROFIT SHARE** |
| **13,542** | **13,360** | **13,144** | **8,275** | **10,462** | **14,875** | **18,706** | **22,257** | **26,533** | **39,339** | **PROFIT SHARE** |
| 1,711 | 1,813 | 2,111 | 2,329 | 2,429 | 2,612 | 2,940 | 3,420 | 3,705 | 3,906 | Facilities in Use (Sq. Ft.) |
| 78.9 | 83.3 | 80.0 | 64.2 | 69.0 | 77.7 | 92.3 | 98.4 | 99.0 | 116.5 | Sales per 1000 Square Feet |
| **47,638** | **59,256** | **76,146** | **81,381** | **84,947** | **89,681** | **111,302** | **140,288** | **155,245** | **169,227** | **COST OF FACILITIES** |
| **6,644** | **12,269** | **17,289** | **6,047** | **4,915** | **7,075** | **23,530** | **31,706** | **18,812** | **22,174** | **INVESTED IN FACILITIES** |
| **3,470** | **3,870** | **4,904** | **5,898** | **6,394** | **6,834** | **7,525** | **9,388** | **11,635** | **12,781** | **DEPRECIATION** |
| **18,955** | **22,348** | **26,789** | **32,140** | **37,726** | **43,514** | **49,947** | **57,668** | **66,682** | **73,852** | **ACCUMULATED DEPRECIATION** |
| **107,552** | **127,813** | **155,619** | **157,808** | **173,743** | **206,599** | **251,061** | **306,616** | **344,860** | **415,328** | **TOTAL ASSETS** |
| **22,873** | **27,428** | **29,165** | **27,113** | **32,833** | **44,417** | **55,230** | **61,269** | **70,138** | **87,292** | **ACCOUNTS RECEIVABLE** |
| **35,289** | **41,599** | **59,252** | **63,085** | **56,066** | **72,904** | **97,230** | **111,246** | **101,186** | **120,926** | **INVENTORY AND SUPPLIES** |
| **74,840** | **86,728** | **101,506** | **101,991** | **120,539** | **151,033** | **176,405** | **217,075** | **248,347** | **310,245** | **CURRENT ASSETS** |
| **22,183** | **27,042** | **38,674** | **28,963** | **31,802** | **46,644** | **68,484** | **63,623** | **60,540** | **84,277** | **CURRENT LIABILITIES** |
| **52,657** | **59,686** | **62,832** | **73,028** | **88,737** | **104,389** | **107,921** | **153,452** | **187,807** | **225,968** | **WORKING CAPITAL** |
| **988** | **501** | **429** | **1,930** | **1,288** | **1,100** | **973** | **30,365** | **39,139** | **40,456** | **LONG-TERM DEBT** |
| 16,912 | 17,110 | 17,144 | 17,176 | 17,204 | 17,302 | 17,302 | 17,458 | 17,585 | 17,675 | *Year-end Shares Outstanding |
| **83,824** | **100,297** | **115,841** | **126,338** | **138,488** | **155,630** | **175,488** | **202,321** | **232,003** | **274,122** | **SHAREOWNERS' EQUITY** |
| **7,507** | **7,774** | **8,325** | **8,889** | **9,357** | **12,158** | **12,213** | **14,258** | **15,707** | **17,914** | **COMMON-SHARE CAPITAL** |
| **78,320** | **92,546** | **107,532** | **117,467** | **129,186** | **144,140** | **163,966** | **188,375** | **216,307** | **256,219** | **REINVESTED EARNINGS** |

*Adjusted for 2-for-1 share split effective May 9, 1977.

## 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

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EARL WANTLAND, *President and Chief Executive Officer*
LESLIE F. STEVENS, *Group Vice President—Finance*
LEWIS C. KASCH, *Group Vice President*
LAWRENCE L. MAYHEW, *Group Vice President*
WILLIAM J. POLITS, *Group Vice President*
WILLIAM D. WALKER, *Group Vice President*
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ELWELL E. SWANSON, *Controller and Assistant Secretary*
ERIC JORGENSEN, *Assistant Secretary*
R. ALAN LEEDY, JR., *Assistant Secretary*

## SHAREOWNERS' MEETING

The annual meeting of shareowners of Tektronix, Inc., will be held on Saturday, September 24, 1977, 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

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