

Tektronix, Inc. 29th Year Ending May 31, 1975

**ANNUAL
REPORT**



Tektronix 1975 Financial Highlights

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

1974	1975	Increase
\$271,428,000 100%	\$336,645,000 100%	\$65,217,000 24%
248,004,000 91.4%	287,813,000 85.5%	39,809,000 16%
23,424,000 8.6%	48,832,000 14.5%	25,408,000 108%
250,075,000 92%	310,316,000 92%	60,241,000 24%
98,353,000 36%	121,112,000 36%	22,759,000 23%
124,248,000 46%	155,807,000 46%	31,559,000 25%
7,525,000 3%	9,388,000 3%	1,863,000 25%
19,949,000 7%	24,009,000 7%	4,060,000 20%
21,353,000 8%	26,329,000 8%	4,976,000 23%
\$2.47	\$3.04	57¢ 23%
20¢	20¢	—
297,255,000	329,244,000	31,989,000 11%

RECEIVED BY THE COMPANY

For sale or rent of products

TEST AND MEASUREMENT
INFORMATION DISPLAY

RELATED COSTS AND EXPENSES

TO OUTSIDE SOURCES

To pay for raw materials, purchased parts, rent, utilities, insurance, advertising, interest and other business expenses.

FOR EMPLOYEES

To pay the men and women who design, make, sell and service our products—including profit share, social security and other employee benefits.

FOR USE OF FACILITIES OWNED

To provide for depreciation in value of buildings, machinery and furniture resulting from use, wear and age, mostly computed by sum-of-years-digits method.

FOR TAXES

To pay U.S., foreign, state and local taxes.

RESULTING IN EARNINGS

Reinvested in expansion of our business after payment of dividends.

EARNINGS PER COMMON SHARE

Dilution if all outstanding share options had been exercised would not have reduced primary earnings more than two cents.

DIVIDENDS PAID PER SHARE

ORDERS RECEIVED

Customers' orders measured at catalog price.

1974	1975	Increase (Decrease)
\$176,405,000	\$217,075,000	\$40,670,000
68,484,000	63,623,000	(4,861,000)
107,921,000	153,452,000	45,531,000
61,355,000	82,620,000	21,265,000
973,000	30,365,000	29,392,000
175,488,000	202,321,000	26,833,000
73,970,000	61,264,000	(12,706,000)
21,840,000	40,509,000	18,669,000
12,693	12,664	(29)

Current Assets

Current Liabilities

Working Capital

Facilities—Net

Long-Term Indebtedness

Shareowners' Equity

Unfiled Customers' Orders

Measured at catalog price.

Finished Product Inventory

Available for sale measured at catalog price.

Number of Employees at Year End



The Harvest: A Summary

- *A harvest year*, someone called it. Intensive product and organizational efforts from the years before bore rich fruit. Our financial results, in an off year for both the US and other economies, were outstanding: Sales, earnings and orders all hit new highs. *Page 5.*

- *Yet down the road* we could see the recession's delayed whammy coming: Productivity rising, backlog falling, orders weakening. To guard against expenses in the coming year getting out of balance with orders, we extended three holidays with 14 days of company shut-down. *Pages 5-6.*

- *Several financial influences* aren't spelled out in the tables. One was assumption of \$35 million debt financing; another was a decision to adopt a more realistic method of valuing inventory (thereby, by choice, reducing our reported earnings); third was the migraine caused by international currency fluctuations. *Pages 6-7.*

- *With our divisional structure* expanded, Tektronix now has two major groups, comprising seven goal-oriented divisions. *Page 10.*

- *Some of the products* and product areas that contributed most this year—or offer greatest benefits for the near future—are described starting on *page 13.*

- *A fairly common shareholder* question—Just what are your markets?—is, surprisingly, not all that easy to answer. We've taken a cut at it, though. *Page 16.*

- *One interesting market* is among the suddenly wealthy oil nations—a “Fourth World” of undeveloped yet rich countries, presenting opportunities of an unprecedented sort. *Page 22.*

- *Caught in the vise* of economic pressures, Tek took a hard look, top to bottom, at its many activities. The resulting efficiency improvements are too numerous to mention. We'll mention some of them anyway. *Page 25.*

- *In the coming year*, despite the many uncertainties (and the many known obstacles), we once again total up far more reasons to smile than frown. None can ever be more important than the men and women who brought us successfully through the past difficult year, as a strong and healthy company. *Page 27.*

PRESIDENT EARL Wantland (left) and Chairman Howard Vollum (center) meet with Secretary Jim Castles.



1975: A Most Gratifying Year

If economists can get by with coining a bumpy word like “stagflation,” corporations certainly deserve to invent an equally needed term—one that describes how it feels to have done well in a very difficult year. Gratification, plus frustration; we suggest “gratification.”

For Tek, it's been a **most** gratifying time.

Our business continued through its third straight year of strong growth, more than doubling our sales in those three years.

Sales were up 24 per cent, to \$336,645,000 from \$271,428,000; **earnings** kept pace, up 23 per cent, to \$26,329,000 from \$21,353,000. **Earnings per share** were \$3.04, a 23 per cent increase from \$2.47. **Incoming orders**, off marginally in the later months, still were up 11 per cent, to \$329,244,000 from \$297,255,000.

International sales increased 21 per cent, to \$140,322,000 from \$115,664,000, again representing about 40 per cent of our business.

Information Display sales increased 108 per cent, from 8.6 to 14.5 per cent of total sales.

In each of the prior five fiscal years, Information Display products represented less than 10 per cent of total Tektronix sales, while Test and Measurement products—chiefly oscilloscopes—accounted for the rest.

We maintained our strong lead in the mature but steadily growing oscilloscope market. Strongest gains there were made by storage scopes (those able to retain waveform displays for study). Our sophisticated signal-processing systems, mating scopes to computers, had exceptional growth, including in energy research. Tek portables remained the favorites of the computer industry, among other users. Reflecting thinner pocketbooks, the moderate-priced 5000-series lab-scope sales grew faster this year than the top-line 7000 series.

In TV test instrumentation, we remain the world's standard setter for the industry.

We made noteworthy gains in spectrum analysis—ranking second in the world, with no close third (no close first, either) and in

general instrumentation, with the spreading popularity of our TM500 series.

Tektronix is one of the two largest test-instrument makers in the world. In **Fortune** magazine's listing of major US companies, we've moved to 519th—up 54 places.

More-dramatic indication of our increased stature was shown in a recent **Electronics** magazine poll. In it, customers were asked to name their “favorite suppliers.” Tektronix competed in a broad category that included not only other test and measurement instrument companies, but also component suppliers.

In that same poll just three years ago, we ranked 12th.

This year we were third.

Murphy's Law states: If something can go wrong, it will. Finnegan's Corollary maintains: Murphy was an incurable optimist.

This year, we tended to side with Finnegan.

Double-digit inflation, insidious and insistent, raged like a fever through much of the Free World, racking its individual economies. Stateside, “double-digit” also described interest rates on borrowed money. The US continued to “stagflate”—but enough has been said about that (and you've lived with it long enough) not to bemoan it again here.

The international “market” (actually many independent markets) functioned in an especially uncongenial atmosphere. Some nations tottered on the edge of bankruptcy; some suffered inflation rates in excess of 30 per cent; and, influenced by who has oil and who hasn't, the dramatic shift in monetary resources continued from oil buyers to oil sellers.

The typical US corporation didn't do too well. Many had to face the trauma of large layoffs (or equally difficult alternatives to them), and a paring of capital-expense budgets.

We had our tough choices, too. Despite the year's very high sales, our situation by late winter looked like this: Product output was increasing. Sales were exceeding orders, whose

rate had flattened and then tilted a bit down. Backlog was being rapidly reduced.

To forestall a costly imbalance between production and expenses on the one hand and anticipated orders on the other—and to retain all our people for the upturn that's bound to come—we scheduled three summer shutdown weeks (14 days). Each was an extension of normal holidays. Of those, one remains to be taken, the week before Labor Day.

We announced the decision early so our people could plan their summers. Also, to minimize financial hardship, they were allowed to use, or even borrow, vacation during the first two shutdown weeks.

All in all, it was the sort of year that could

have given you a case of the Corporate Blaahs.

Nor can we breathe easy, for the year is over only on paper, where fiscal years officially “end.” The same volatile mixture of factors continues as this is written.

There seems little doubt any more that electronics is among the vital, dynamic industries—more resistant to economic haymakers than autos, steel or some of the other traditional giants. Add to that, Tektronix' long-time, carefully nurtured reputation with customers, reduced manufacturing cost of sales, a very effective marketing network and an excellent line of essential products, and you have some of the reasons for our profitable year in the face of harsh economic winds.

A Funny Thing Happened on the Way to the Bottom Line

The cowboy hero who “leaped on his horse and rode off in all directions” has nothing on the company accountant trying to keep up with inflation, currency fluctuations, taxes, interest rates and a growing spate of governmental guidelines, some of them readable.

It's hard to manage technology, because the field keeps changing so fast. It's getting just as tough to manage corporate finance, for much the same reason.

But: Unlike technological changes, which tend to be in rapid evolution (i.e., progress), the multitude of fast-changing financial influences don't move in any single discernible direction.

The tables that constitute a lot of this report can at best only sketch Tektronix' year. They require a lot of elaboration. (Hence, the several pages of detailed Notes, in large print in the report's back pages.)

Three financial matters deserve mention in the narrative also: One because it provides financing to facilitate future growth, one because

it shaved our earnings figure this year, and the third just because it's a doggoned nuisance.

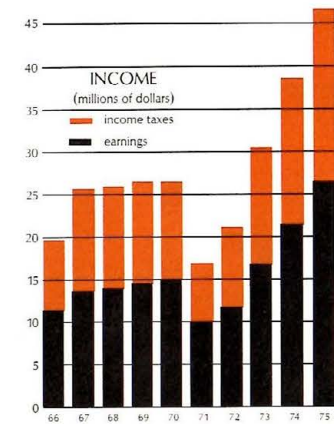
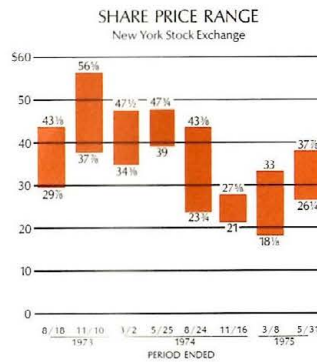
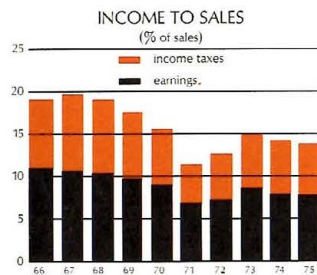
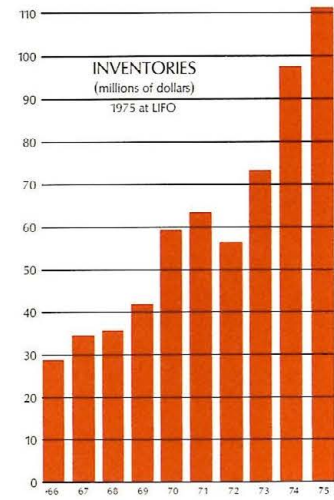
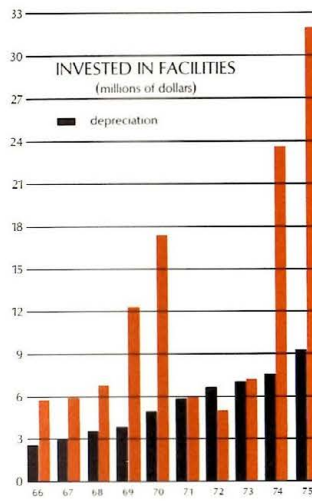
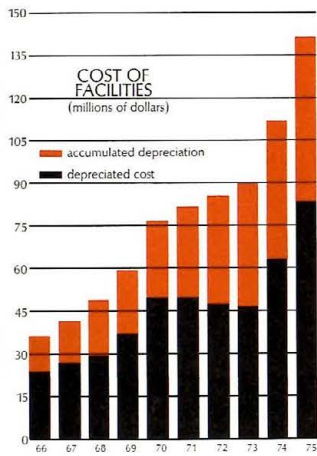
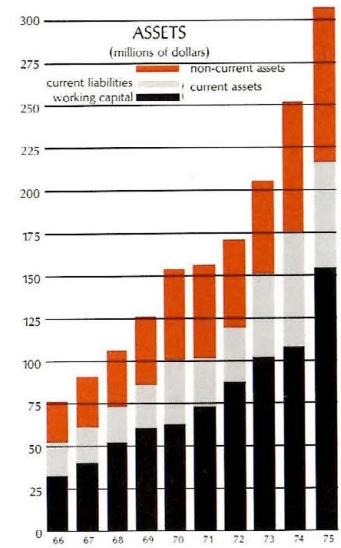
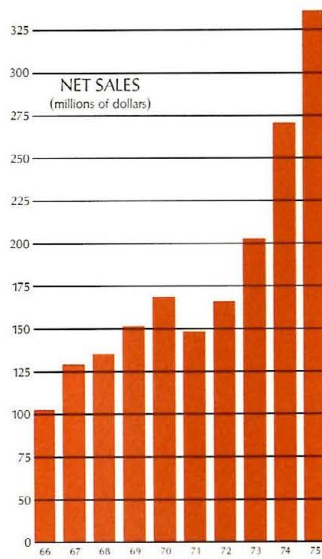
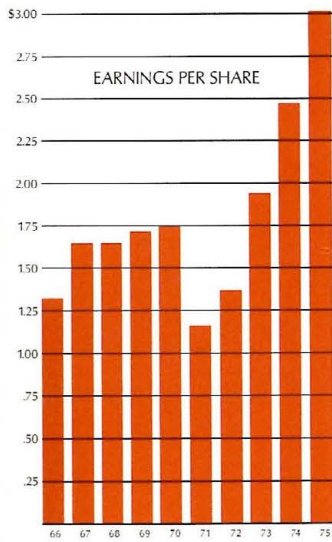
A Financial Insurance Policy

With many new avenues opening for Tektronix growth, might this expansion be limited simply by our ability to finance it?

Historically strong financially, Tek has supported most of its growth by reinvesting its earnings. If our future need to invest for expansion becomes so great as to exceed earnings, we'll have three choices: (1) Try to borrow, (2) sell more shares, or (3) restrain our growth to what is financible.

Recent financial experiences have been unprecedented: Not only record US inflation and interest rates but also a credit crunch that made borrowing difficult for all but the largest and highest quality companies—and costly even for them. It could happen again.

To play it safe, we took advantage of recent availability of financing to sell to the public





\$35 million in 8 $\frac{7}{8}$ per cent notes, due May 15, 1983. (Besides this, we'll retain other borrowing arrangements for peak needs. Also, we'll continue borrowing foreign moneys, for two reasons: One is to finance overseas operations. The other is to keep our assets and liabilities in a given currency near a balance. The more equal they are, the less risk should that currency's values change.

This assumption of debt financing is one indication of how promising the future looks to us. We believe the return on the money invested in Tektronix' future will well exceed the cost of borrowing it.

Inventory: FIFO to LIFO

A common way for companies to figure what their inventory is worth is by valuing it first-in, first-out (FIFO). It assumes that the first items put **into** inventory are the first ones **out**.

That's all well and good. But, with high inflation pushing the price of everything up, all your inventory has to do is just sit around awhile and, bang, you realize a "profit" on it.

But FIFO may be misleading, in that it distorts profits as a measure of company effectiveness; it tends to imply you did something right when, in fact, you may have done nothing at all.

So Tektronix, Inc. changed this year to LIFO (**last**-in, first-out), which assumes that the value of an item leaving inventory is its replacement cost. This method, by better matching current costs with current revenues, minimizes inventory "profits."

This change, as you might guess, cuts into "Earnings." Had we stayed with FIFO and its enlarged inventory values, reported earnings would have been higher by 26 cents a share.

But not really.

The Ups and Downs of Currency

Reportedly, only two people in the world understand the international monetary system. And **they** don't agree.

The weakening of the US dollar this year affected our business. But there's no knowing exactly how much.

What **can** be said is that the visible impact

of currency fluctuations on our financial results isn't significant—a loss of \$369,000. Not peanuts by any means, but well down from last year's \$1 million-plus.

That net figure includes both losses and gains. Our subsidiaries' changing their currencies into dollars to pay for the Tek products they buy cost us a **foreign-exchange loss**. A modest offset to that was a **translation gain** from converting foreign currencies on our consolidated books into dollars.

(In the four years since the world's currencies were allowed to "float," the effect on Tektronix has been a net gain of \$372,000.)

The really aggravating part of these monetary wobbles-about is that their precise effect on our sales and earnings can't be determined. It would take a complex, very costly system to keep tabs on the many variables.

Even if everything else held still, shifting currencies alone would be enough to keep up with. But other things **don't** hold still: Inflation jumps ahead, at different rates in different countries; and subsidiary and distributor prices go up and down in reaction to the fast-changing financial environment.

So the precise effect of currency fluctuations gets lost amid the maze. All we know is that our international sales and earnings this year benefited from those fluctuations. Period.

Given the high inflation in many of our market countries, it's some consolation to know that the seller of US-made products has an advantage over those who sell products of local manufacturers: That is, his prices may be kept lower, since they reflect US manufacturing costs and thus only the low (pause for readers to chuckle) US inflation rates.

Among other effects of inflation plus currency fluctuations are: Inventory and backlog values rising and falling, often within brief periods; and products sold at one price going up or down in value by delivery time.

As this report noted last year, it would be better if these kinds of things—things beyond our control—would stay out of the works. But they won't; and shareholders will just have to get used to them as relatively permanent muddier-uppers of the financial picture.

Inside Information

If you were to measure pizzazz (on a scale from zero to 10), announcements of organizational changes, etc., typically would rank only about 1.5, or just a tad above yesterday's menu for the company cafeteria.

And that's too bad, since the way a company is organized may have as great and lasting an impact on its fortunes as any other single factor.

The Board Goes to Europe

A long-planned event happened in May. The entire board of directors visited our major European manufacturing operations and some European marketing facilities (and set a Tek record for duration of a single board meeting: Five days).

The visit more than met our hopes. The board members became more closely familiar with the individual operating problems (which seem far less abstract when viewed from the same side of the ocean).

Although little has been made of it in annual reports, we believe our board of directors is a major, if unsung, Tektronix asset. They play not only an active but also (through monthly rather than quarterly meetings), a **continuous** role in our management. They're a far cry from the ritualized picture of aloof directors seated around the stereotyped oak table in the stereotyped board room. (Come to think of it, we don't even **have** a board room.)

Division Structure Expanded

Our Information Display division (IDD) was formed in 1970 to pioneer, nurture and then achieve a pre-eminent position in a market that didn't even exist: Low-cost interactive graphics for computer users. It has done its job well—as increased competition testifies.

Two other divisions followed, in 1973: Communications and Systems. Each has developed a sharpened focus on its markets, and improved both sales and profitability.

The division approach having thrice proven itself, we formed two more this year: Laboratory Instruments and Service Instruments.

They'll concentrate, respectively, on the precision and flexibility required in laboratory, some industrial and many educational environments; and the ruggedness, portability and ease of use needed to service and maintain electronic (and other) installed equipment.

Four divisions, each with appropriate manufacturing, engineering, marketing and administrative functions, will constitute the Test and Measurement group. It's headed by Bill Walker, group vice-president.

The Information Display group, led by Larry Mayhew, vice-president, has formed three divisions: Information Display *Products*; Information Display *OEM*; and Information Display *Systems*.

Test and Measurement Group

Communications—Television waveform and picture monitors, TV signal generators, vectorscopes, other TV diagnostic products; Grass Valley television line and terminal equipment; spectrum analyzers; cable testers.

Systems—Automated measurement systems, both floor models and bench-top; semiconductor curve-tracers; transient digitizers; signal-processing systems.

Laboratory Instruments—Sophisticated lab scopes, and a wide variety of plug-ins for them, including counters and digital multimeters; TM500 modular test and measurement instruments; small display monitors; probes; mobile oscilloscope carts; trace-recording cameras.

Service Instruments—Portable oscilloscopes; digital service products.

Information Display Group

Graphic computer terminals, large display monitors and hard-copy units; scientific programmable calculators and related products.

These changes continue our momentum toward an organization optimized for business development.

Our Long Suit: Tek vs. US

In the hallway of the US Court of Claims, a graven message reaffirms that: "Justice delayed is justice denied."

Now, **they** said that; we didn't. But it serves as a reminder that our suit against the US government, for infringement of our patents by their contractors, is now moseying into its 15th year. The suit was filed in 1961, and we **won** it in 1971. What's going on—and on—is the accounting stage.

That stage is to determine what the infringements are worth. On that point, we and they are farther apart than, say, the Arabs and Israelis.

More so-called "briefs" are being filed, and the matter continues, in an unhurried manner, toward an eventual settlement for Tektronix.

Other Litigation

Tektronix always has believed that good human relations and good business walk hand in hand, and that unfair, discriminatory employment practices would impair both.

Since back when "equal opportunity" meant more than just legislation, we've tried hard to follow practices—and instill attitudes—insuring fair hiring, pay and promotion.

When individual acts have contradicted this policy, we've corrected them; in most cases they were inadvertent. No such acts have ever been condoned. We believe our practices are nondiscriminatory, and that our reputation in the community for fairness in this respect wouldn't exist if they were not.

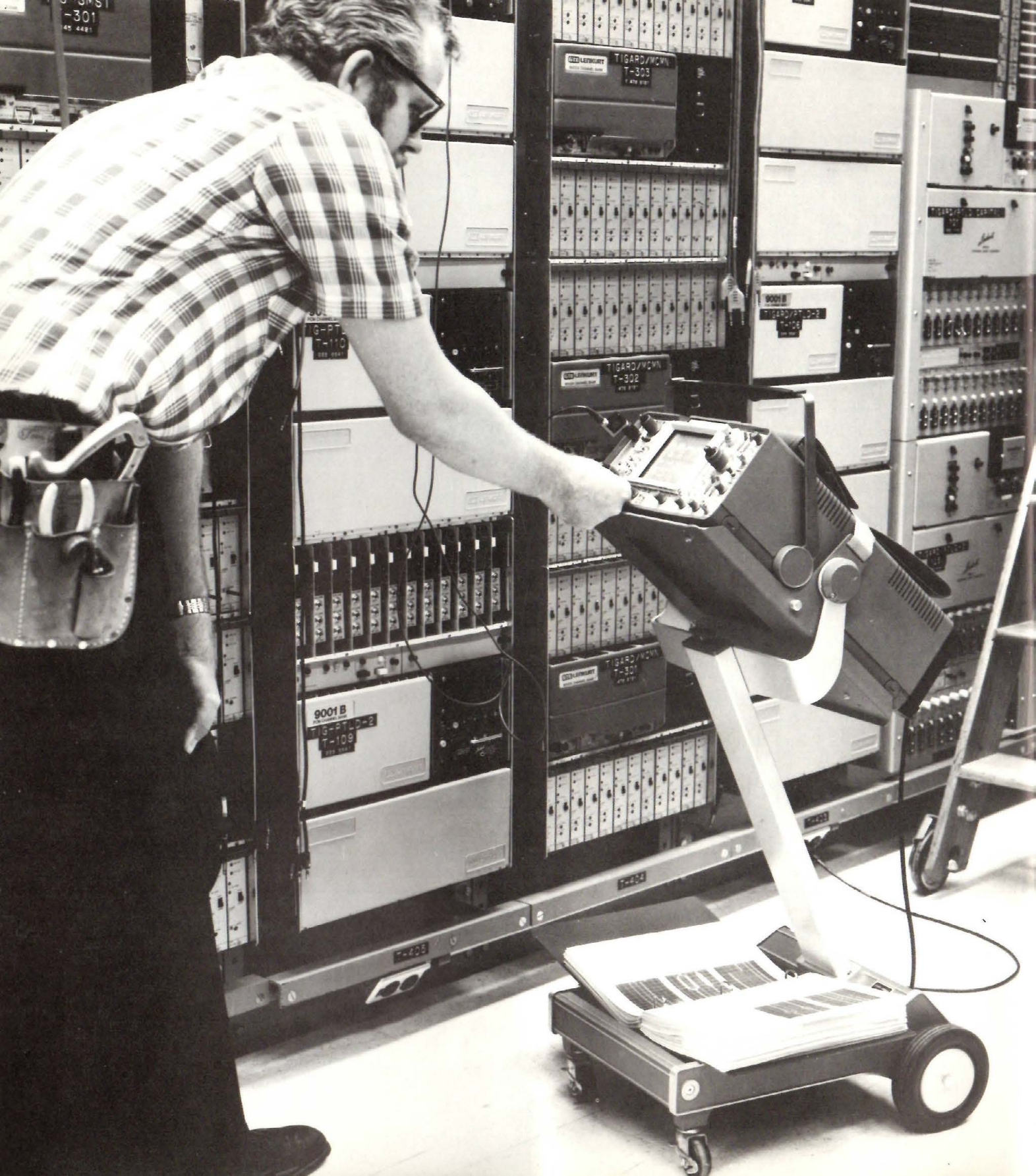
Now, that having been said:

This year an employee has sued Tektronix in US District Court, alleging that we deny women equal opportunities for advancement in employment; further, that we harass women and—when they actively seek these opportunities—that we retaliate against them.

She alleges that she represents all Tek employees denied these opportunities because they're women. She asks, among other things, back pay, damages and pay increases for herself and for them, plus punitive damages against Tektronix and an injunction to halt the alleged practices.

ENGINEERS "talk shop" during their coffee break.





Products: The Road to Ubiquity

Business Week called the oscilloscope “the ubiquitous instrument used in every lab.”

Well, maybe not **every** lab, but ubiquitous it is—the most common electronic instrument, whose markets span almost all disciplines.

An oscilloscope graphs some electrical event—or any of the wide variety of phenomena that can be converted to electrical signals: Heat, sound, pressure, strain, velocity, nuclear events, biochemical signals . . .

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

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

Such a product, complex in design and exacting in manufacture, depends on an in-house integration of many advanced skills: Physics, chemistry, microelectronics, computer expertise, optics, metallurgy and other disciplines whose names are new or foreign.

Obviously, you don’t just “pop into” the scope business any more. So we expect our competition to continue coming largely from integrated, broadly talented, well-financed companies like ourselves. These include several of the world’s electronics giants.

It’s worth mention here that, in over two decades of technological arm-wrestling, the toughest of these tough competitors remains only a distant second in the scope market.

To many users, “oscilloscope” and “Tektronix” are just two ways of saying the same thing. We intend it to stay that way. This year, led by strong sales of storage scopes, we held our long-standing lead.

The Advantages of Storage. Storage oscilloscope sales grew twice as fast as those of

scopes overall. A storage CRT retains the waveform of a signal after the event has ceased.

This is a really valuable feature. Most trouble-shooting of digital logic circuits—as in computers or telephone switching systems—amounts to trapping non-repetitive or random glitches. These irregular events, which seem to happen just when you’re rubbing your eye or looking the other way, would vanish without a trace if you used a non-storage scope.

Also, many mechanical events are so slow that their “display” on a conventional CRT wouldn’t be seen as a waveform; merely a bright spot poking along across the screen.

As a matter of fact, storage offers so much that probably most users would like it as an added feature. But until a few years ago it was a matter of “either-or.” To get storage meant trading-off bandwidth or other performance.

But no longer. Storage now comes from Tektronix in a wide variety of packages and prices, and without the trade-off. **Bistable** storage retains the image until erased; in **variable-persistence** storage, the trace gradually fades; each type has its uses. We also have high-speed storage; storage enhanced by plug-in versatility; storage in portables and mini-portables; and, this year, storage in low-cost scopes.

TEST AND MEASUREMENT

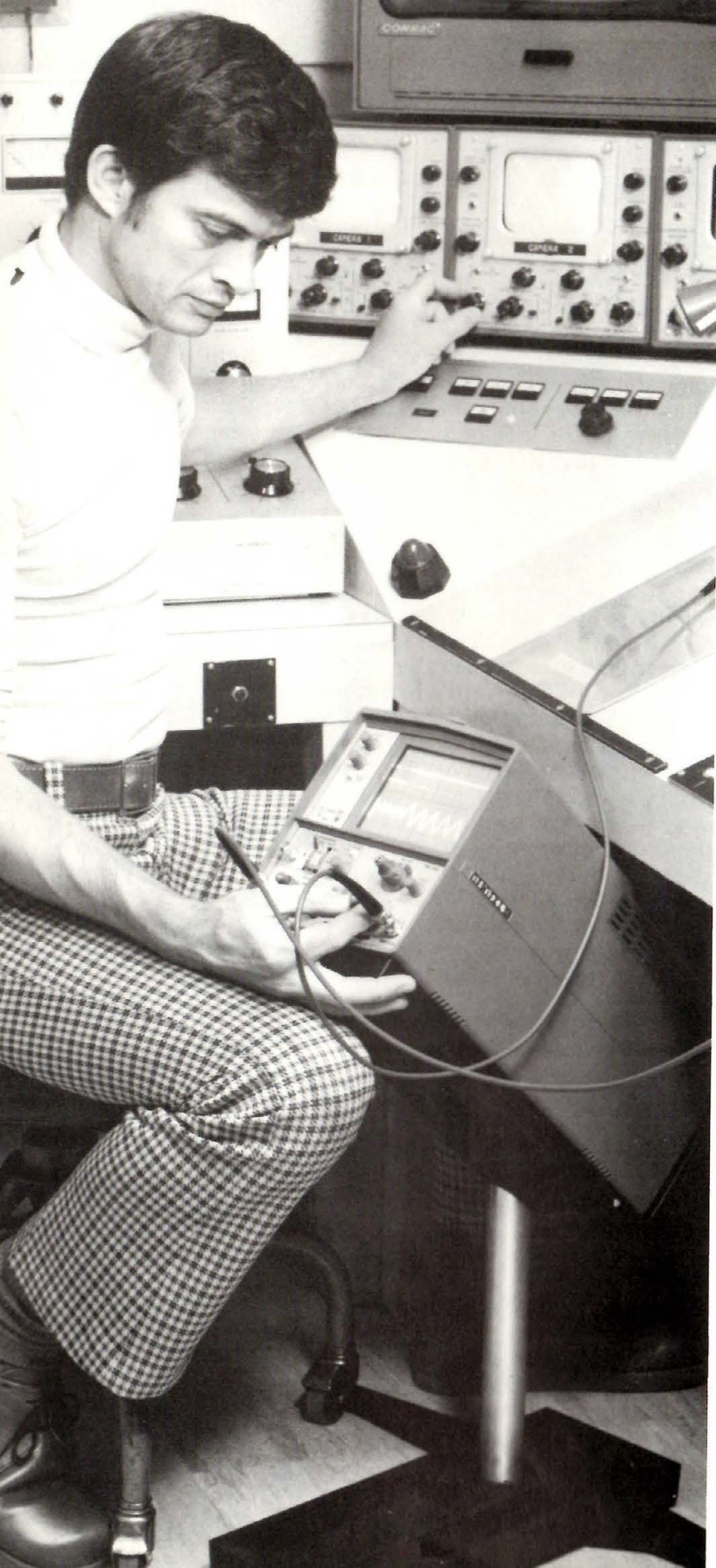
T900: Low Cost, No Frills. With its first five models out in September, the T900 line offers a “new generation” of low-cost scopes.

We hope to benefit both from Tektronix’ worldwide reputation in oscilloscopes and from customer familiarity with our Telequipment line, which has been selling well for years into the low-cost market.

The T900s (cost: \$695 to \$1250) will be a family of no-frills oscilloscopes whose price/performance value is bound to increase our share of the scope market, particularly in industry, education and government.

The first five family members cover a range

TELEPHONE system servicing is a major use of the 50 MHz 455, newest of our popular 400-series portables.



of performance—10, 15 and 35 MHz, single and dual trace, single and delaying sweeps. And, probably most significant of all: Storage as well as conventional display.

The 10 MHz T912 has a storage CRT—the first time this very valuable capability has been offered to low-cost scope buyers. We fully expect it will win their hearts.

A T900 is lightweight (approximately 15 pounds) and easy to operate. Its active components are pre-aged and the entire scope given a week's on-off cycling to minimize early failures. It's housed in a rugged plastic case.

And, importantly, it bears the Tek name, with all **that** connotes not only in quality but also in service and after-sale attention.

Other Portables: Modular and Mini. Fitting into a slot between the T900 family and the very popular workhorse 465 portable is the new 50 MHz 455, which has been welcomed by users who don't need the 465's bandwidth or special features.

The 455 is not an enormous state-of-the-art breakthrough. But it **is** significant for the large number of manufacturing innovations it contains. One is wide use of machine-inserted components (in circuit boards); another is the presence of Tek-made laser-trimmed hybrid circuitry. And, for the first time in a full portable, it uses modular construction something like our plug-in scopes do, with the vertical amplifier and timebase each a separate module.

The difference is that this is a "monolithic," not a plug-in, scope; the modules are not interchangeable by a customer. However, this construction enables very fast servicing or replacement, thus minimizing downtime. It also allows many economies in manufacture, plus the great advantage of letting us make design improvements quickly.

The dual-trace delaying-sweep 455, with many features for ease of use, is encased in a reinforced shock-resistant plastic housing.

Also new to our product line—look closely—is another tiny miniscope, the fifth model in our 200 series. This one, the 1 MHz 213, is unique in that it's also a 3½-digit multimeter

T922 CHECKS OUT signal displayed on TV monitor.

(measuring voltage, current, resistance and temperature), allowing both digital readout and waveform display.

This product combines in one hand-held package the two most popular service devices.

Like all our minis, this is a compact, handy, double-insulated little (3.7-pound) lab or field tool, easy to carry and tough enough not to crumple if you **should** drop it (and then, of course, step on it).

The Fastest Dual-Beam. Another important product this year was the dual-beam 7844, two scopes in one.

The 7844's CRT has two electron beams; each may be turned on and off independently and run at its own sweep speed. The complex dual-beam circuitry and packaging problems usually cause compromises in bandwidth.

The 7844 has changed all that. At 400 MHz, it's the world's fastest dual-beam oscilloscope. (Second best is 50 MHz.) More than that, no company outside of Tektronix offers a scope **of any kind** with as great bandwidth.

Dual-beam enables comparisons of two signals at once: As an example, spectrum analysis coupled with real-time measurements. Or simultaneous cause-and-effect displays, such as—in nuclear-fusion work—those of a laser pulse and the resulting energy output.

Grass Valley Products. Enthusiasm in the television industry greeted the Grass Valley Group's largest and newest production switcher, the 1600-7G, which advances the state of the art in "chroma-keying"—a technique that enhances the realism of superimposed TV images (a newsman "standing in front of" the White House, for instance).

Completion this year of a 28,000-square-foot manufacturing building has about doubled production capacity. The space was much needed; GVG business increased very significantly this year, and its large backlog grew.

Cable Testers. The 1502 and 1503 are our only products whose market potential can be measured in miles.

Suppose you were to take all the electrical

cable now in use, and lay it end to end. You'd certainly have (besides a bunch of people mad at you) millions and millions of miles of cable. Any of it can develop trouble.

The small, lightweight, ruggedized 1502 and 1503 trouble-shoot cable faults—in homes or buildings; shipboard; on airplanes; wherever.

They not only identify the nature of the cable problem but also tell you how far along the line the defect occurs. This saves having to rip up the floor or walls or street to learn these things. The 1502 can pinpoint the fault to within fractions of an inch; the 1503, to within a yard, up to about three miles away.

The Intelligent Spectrum Analyzer. Computer-like functions built into products are being called, for lack of a more exact term, "intelligence." In most cases the brains are tiny microprocessor chips, that can do a variety of complex computation.

This year Tektronix gave the world the first intelligent spectrum analyzer, the 7L5. It was hailed for its "unique combination of digital and synthesizer technology," and will increase our share of the market.

The 7L5 is a plug-in unit. It fits any of our 7000-series scope mainframes, using the CRT for both analog display and six-digit readout of frequency. Frequency-domain measurements, essential in communications, are useful in many areas, like vibration analysis.

Spectrum analyzers have always been notorious for the number of knobs that must be set. The 7L5 microprocessor makes things much easier. The operator need only set two knobs; the microprocessor senses what's up, goes through the necessary complex arithmetic, and adjusts other control settings for optimum operation. Much like the smooth trouble-free one-button tuning of (your neighbors') TV sets.

(Probably "microprocessor," although vaguely defined, is among the year's top buzzwords, meant to show that this company or that one is technically "with it." But they're not all that new. Our first was used in the 576 semiconductor curve tracer, 'way back in pre-buzzword 1969.)

INFORMATION DISPLAY

When Tek got into this market, there really wasn't any market to get into. Only a few customers needed computer graphics, and the only existing graphic systems cost plenty—around \$200,000. Our first terminal was priced at a small fraction of that.

But cost wasn't all. Just as important, most terminal users were used to working in words and numbers, often on mechanical teletype-writers. Tek's job became to convince them graphics was a valuable problem-solving tool.

By now they're convinced. So is our competition; we hear the unmistakable sounds of other engineers scurrying about their labs. It will be no surprise next year to look back and see strong new challengers in hot pursuit. But there are worse wounds than nibbled heels.

With a 108 per cent growth in sales, IDD made its biggest dollar contribution ever to Tektronix: \$48.8 million. Graphic terminal and hard-copier sales to end users were very good,

although OEM business (terminals and display monitors) were badly hit by recession, and slackened at year's end.

Our star once again was the 19-inch-screen 4014 terminal. It was well accepted for mapping and computer-aided design. We'd expected that; what we **hadn't** looked for was its popularity also for general-purpose display, with people who liked its large screen and probably would otherwise have bought our smaller, lower-cost 4010. A pleasant surprise.

Softened orders at year's end—especially in OEM areas—suggest that the delayed whammy from the US recession has finally hit.

We have a lot going for us. World leadership in graphic problem solving; consolidation in new quarters, with room to grow; a raft of competitive new products on the way; and at least a break in the US economic weather.

However, we'd not be candid if we suggested growth in the year ahead can equal the rate of the year past. It doesn't seem in the cards.

Define “Market”

Most of the things you own, or use, or consume had a Tektronix product in their research, design, manufacture or testing. Of the 500 largest US companies, as listed annually in **Fortune**, over three-quarters are Tektronix customers. (The proportion worldwide would be pretty close to that also.)

We have upwards of 35,000 commercial customers in science, industry and education. No one of these accounts for as much as 4 per cent of our business.

There are many ways to talk about markets: Geographically (the “European market”); by product (the “terminal market”); and so on. The way that makes most sense to us is by end user. But even then a certain amount of market definition must be arbitrary.

For instance: Say a Tek display monitor is bought by an electronic systems manufacturer to become part of an information-retrieval system sold to a hospital. Should that sale be

credited to the “medical” market? Or the “electronic equipment” market?

You see the problem. Well, anyway:

Electronic and Electrical Equipment—One of the largest customer groups constitutes makers of: Electrical motors, industrial controls (for steel mills, sewage plants, traffic systems); radio and TV sets; telephone equipment. Things as involved as communication satellites. Or as commonplace as light bulbs.

Electronics has by now ingratiated itself with most of us, and is a growing part of our daily lives. Not only is it an industry of its own; it also is a part of many others (electronic watches, electronic ignition for automobiles) and an influence on more (in publishing, much typesetting is electronically controlled).

So this customer list is growing fast. This year it represented just under a quarter of total Tektronix business.

TM 515 “TRAVEL-LAB” can combine five TM 500 instruments—or four, including a two-hole SC502 oscilloscope.





Tektronix plug-in oscilloscopes, TM500 instruments and display monitors are widely used throughout the whole range of industrial electronics, from giant companies to small shops: For R&D, incoming inspection, in-process test, quality control and field maintenance.

(Our monitors are usually sold as OEM components; that is, a manufacturer buys them, builds them into his own products and markets them. So you won't see our name on them; but Tek is the worldwide leader in monitors.)

Our portable scopes are popular and fit in anywhere from a lab to a mobile van to, in the case of our pint-size "minis," a coat pocket or glove compartment or . . . You may sometimes forget just where you **did** put it.

The semiconductor industry has had its ups and downs. This year it was the downs, roller-coasting there from the preceding year's high business level. But it has two strong segments: Semiconductor memory, challenging traditional magnetic core memory in computers; and LSI, large-scale integration of micro-miniaturized circuitry. These LSI circuits are key elements of microprocessors, the long-heralded and fast-emerging "computers-on-a-chip." Our automated test systems have given us a lead in testing both memory and LSI, fields looking to healthy growth.

Terminals and related hard-copiers find wide use as "electronic drawing boards" in computer-aided design.

Spectrum analyzer use in these markets is widespread. Audio applications include testing consumer-oriented hi-fi equipment; commercial recording; sound-reinforcement systems; noise testing, and acoustics and speech R&D. Other markets include test and maintenance of avionics gear and two-way radio.

The most popular portable scope is our 100 MHz dual-trace 465, competitively priced and more than adequate for most field-service tasks. Our 50 MHz 455, just introduced, offers an equivalent price-performance value for users who don't need 465 capability.

After September, when the first Tektronix low-cost T900 oscilloscopes will hit the trade papers, we expect to further penetrate this industrial market.

We also expect their acceptance in field service, not only of industrial equipment but also—a new market for us—of consumer products: TV, stereo, digital radios, microwave ovens . . . As those products grow more complex, so must the serviceman's tools.

Continued broadening of the TM500 line (now four mainframes and 30 plug-ins) should impact both lab and service markets.

We expect service engineers will see the TM500's unique multi-function packaging as more and more valuable, as equipment in the field grows more sophisticated. With TM500, you can "mix or match" up to six instruments in one portable test system.

An innovative package, just out, is our TM515 "Travel-Lab." Open, it's just what the name says: A custom electronics "tool kit." Its five compartments accept whatever combination of instruments the job requires. Closed, you'd swear it was a suitcase—a nice feature for the traveling service person who wants to carry the lab along, say, on an airplane, where it stows neatly under the seat.

Computers—Even though our markets are so diverse, the rumor persists (at least among folks who haven't read our annual reports) that, when a computer designer catches cold, a Tek engineer sneezes; in short, that we march in lock-step with the computer industry.

Not true. This year, that industry accounted for something under a quarter of our business.

Yet, that's certainly a significant customer group. Thus we've worked cooperatively since 'way back to be sure the instruments they needed were there when they needed them.

This year we've received all the major computer-company oscilloscope contracts but one. We're the leading supplier of portable scopes to that industry globally. Tek's commanding lead in computer field servicing should lengthen with the introduction of our low-cost scope line and of new non-scope digital products.

Tek's graphic terminals are sold here mostly as OEM components. Our automated measurement systems aim at computer memory testing. Our lab scopes and test instruments are in heavy use in both product design and

OUR TV TEST instruments—picture and waveform monitors, and vectorscopes—have wide use in studios.



TEKTRONIX
Electronic Instrumentation

TEKTRONIX

testing of components. In manufacture of mainframes and peripherals, wide use is made not only of semiconductor curve tracers but also of SPS (signal-processing systems).

Government—About 9 per cent of this year's business was direct sales to US government agencies. Adding in local and state governments brings that figure to over 10 per cent.

We've a long-standing practice of not accepting R&D or production contracts for non-catalog items. The government buys our standard commercial products.

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

Major civilian use of Tektronix products is in the energy and environment area. The goal, an energy-sufficient America, has spurred heavy funding of controlled-fusion research. Our SPS systems using the R7912 waveform digitizer have no equal in investigating single-shot or other nuclear phenomena.

This market hardly existed before the SPS came along. We're there with a headstart; and the complex technology required will deter the faint of heart from competing. But hardy competitors do exist; and, given the expected high growth rate of the market, we'd be naive to expect them to just spit and whittle while Tektronix lays claim to the whole field.

As nations continue to show their readiness to beat their plowshares into swords, our national defense remains a paramount concern. Tek products widely useful here include laboratory scopes, SPS systems and related instruments for laser testing, communications and aerospace applications; spectrum analyzers, to test microwave relays, and portable field-service instruments. Although commercial products, these all must have the ruggedness to withstand the knocks and shocks and rigorous miscellany of field use.

Education—Sales for classroom use, teaching labs and university research provided just about 10 per cent of this year's business. But that figure may mislead, in light of education's great influence on other markets.

The student who learns electronics (or other disciplines) on Tektronix products will be likely to "think Tek" when he or she pursues a career. Also, many research projects conducted in the academic area (often government-funded) pay off as new scientific or economic pursuits. Here, too, it helps for Tek products to be involved from the word "go."

Education is an important market for both high-performance and moderate-priced plug-in oscilloscopes, the former most common in forward-looking R&D work, the latter more likely in price-sensitive classroom applications: low-frequency scopes in medical schools, and TM500 general instruments.

As Tek further develops the low-cost scope market, we expect more sales to electronics labs in vocational schools, community colleges and universities. Although growth of the education market is faltering somewhat, use of instrumentation in education is greatly increasing—more instruments per square student.

Our terminals (and hard copiers) are growing in favor with the innovator segment of graphics users, typical of graduate-level scientific work.

Instrumentation—The same range of Tek products sold to electronic manufacturers is bought also by makers of instrumentation.

The over 6 per cent of our business accounted for by this market could be a much higher figure. You see, it doesn't include Tek itself, a major user of its own products.

But the list **does** include a lot of our competitors; that pleases us. We've come to know these people the hard way—as tough in-fighters in the marketplace—and to respect them as hardnosed, astute judges of quality and value. (And we'd say this even if they **weren't** large buyers of Tek products.)

Broadcast and Other Television—Here's another somewhat misleading figure. Although we record under 5 per cent of our sales as coming **from** the television industry, TV-related business is far broader. On our large customer list of electronic/electrical equipment manufacturers (already described) are makers of TV cameras, video-tape recorders for cable

TOURING DISPLAY cruiser has met with great success reaching otherwise hard-to-get-at groups of customers.

and closed-circuit television, and a variety of equipment makers serving broadcast TV.

Spectrum analyzers are used in the R&D and manufacturing portions of broadcasting and cable TV.

We're easily the world's largest and most diversified source of video test equipment; and our Grass Valley Group is the premier supplier of TV production and routing switchers.

This Tektronix product area keeps growing at a rate faster than that of the industry it serves. That's due in large part to the FCC's continued insistence that your TV set get better and better pictures. They keep setting tighter standards with that end in mind.

The fastest-growing segment consists of the emerging nations, all needing TV installations and many increasingly able to afford them.

Other Markets—Although "Other" has probably come to be synonymous with "Dullsville," this lackluster heading, covering one-quarter of Tek customers, includes some of our most exciting future areas of growth.

Important users of graphic terminals are such fast-growing markets as *petroleum*, by no means lagging the nuclear industry in the national hunt for energy; and *chemicals*, also a booming area. Typical uses are, in petroleum, geophysical mapping and analysis; and, in chemicals, graphic output for "automated laboratories" and process-monitoring systems.

Terminals and hard-copiers also are well accepted in *transportation* (including automobiles) for automated design; and *printing/publishing*—surprisingly, the fifth largest US manufacturing industry—for display-ad and full-page layout, formerly a manual chore.

A small but rapidly developing Tek market is *medicine*. Into it we sell largely low-frequency, high-gain oscilloscopes (typically storage versions), useful for biochemical applications; and portable patient monitors, for both anesthesiologists and neonatologists.

"Neonatology" is doctor talk for care of the newborn, and is fittingly named, since that field is itself newborn—just about now being formally recognized as a distinct area of medicine (but already a Tek market).

THE FOURTH WORLD?

It's a convenience, nothing more, to lump the entire non-US marketplace under "International." Actually these many distinct markets are often as unlike as they are similar—which makes it that many times harder to analyze the past year and forecast the next.

But international sales—once again about 40 per cent of total Tektronix business—were strong, up 21 per cent. Orders from those markets did level off, however, as the year progressed.

This year the flow of petroleum one way was again matched by a flow of money the other way, as the massive redistribution of the world's financial wealth continued. But, other than in a few countries (including resource-starved Japan and fiscally shaky Italy, where our sales took drubbings), the fact that the oilers are growing richer and the oilies poorer didn't disrupt our order level. Reduced demand somewhere was backfilled by increased demand somewhere else.

The relative handful of oil nations, mostly Arab, have always been thought of as part of the so-called "Third World"—the less developed countries outside the industrialized community that does most of the world's trading. But whereas the Third World is largely impoverished, the oil producers aren't that.

So you have a new kind of market to deal with, neither industrialized **nor** poor—one with great potential, once things get ironed out.

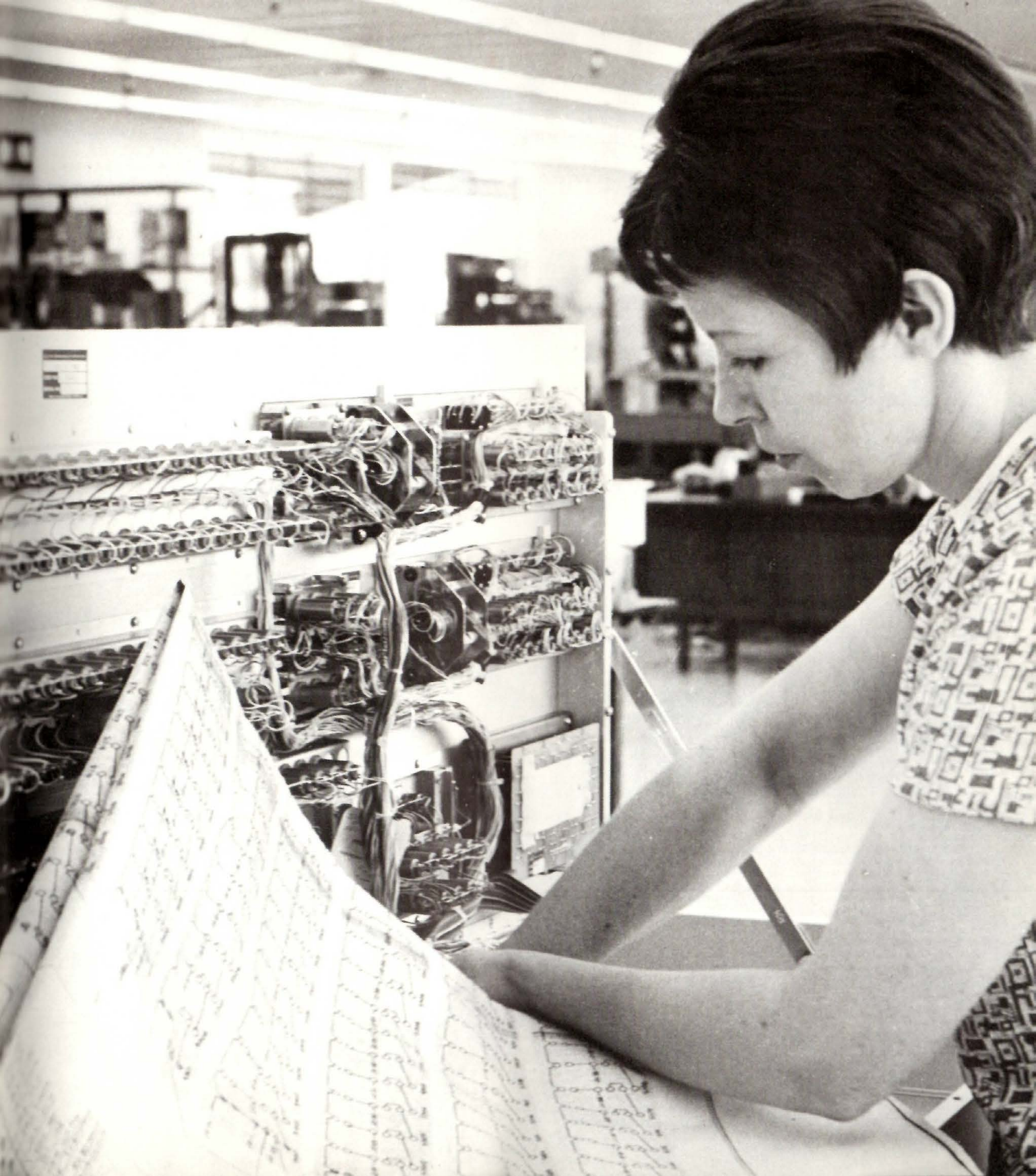
However, "petrodollars" have made their way into our vocabulary far faster than they have into global circulation. The idea is, of course, to "recycle" this vast and growing monetary supply, but just how that all will come about isn't clear at this writing. What **is** sure is that it's not going to happen overnight.

Bootstrappers and Leapfroggers

Tektronix sales increased manifold in most petroleum countries. But the figure they multiplied was small to start with. "Oil dollars" remain far more significant to us as a promise.

The promise is substantial. We've done business with less-developed countries for years, but almost none of them has had the oil

ONE OF MANY models of television production switching systems is assembled at The Grass Valley Group, Inc.





countries' capacity for "instant technology."

That sort of progress in most of the Third World has had to be slow. First comes education, training the scientific infrastructure; second, developing an industrial base to employ them. That base, in turn, generates the need for more-advanced technology; and so on—the classic bootstrapping operation. It takes time.

The oil-rich nations won't have to go through all that. Why bootstrap when you can leap-frog? Among the immediate needs they seek to meet are those for schools; for communications systems, serving the dual function of education and information; for medical facilities—and, at least in the less-relaxed portions of the world, for defense. All demand technology.

Technical education requires a longer gestation period, however. Meanwhile, as those nations build their own indigenous base of talent, some have opted simply to **import** technology, and technologists, often American.

These technological hired hands will require sophisticated tools, such as Tektronix instruments. Technical education should provide markets for our lower-cost product lines. And a variety of Tek products will find a place in the development of communications.

To provide technical support to our distributors, one Tektronix field engineer is situated in Tehran, Iran, another in Beirut, Lebanon, and a third in Riyadh, Saudi Arabia.

This isn't to knock the bootstrappers. Less dramatic but steady increases in Tektronix business took place in others of the world's lesser markets. Beaverton Export—serving South America, New Zealand and Southeast Asia—has marked up a 100 per cent increase in sales in the last two years.

Although the US government limits what products we may sell behind the Iron Curtain, sales to those Eastern European socialist countries showed a healthy increase.

Productivity: No Free Lunches

Wishful thinking aside, the only real answer to inflation, and certainly the keystone of profits, is improved productivity. Harder work; smarter work.

We're pleased that Tektronix continues to become more productive.

Efficiency increased this past year, for five reasons:

1. We did little hiring, and little training.
2. A lot of production "bugs" were swatted from new products.
3. Major new buildings were occupied.
4. Material and component shortages almost vanished.
5. In tough times, you take tougher looks at **everything** you do. This year we did.

The ratio of cost of sales to sales continued to drop—to 47.4 per cent. That was down from 49 per cent the year before, 49.5 per cent the year before that and 51.7 per cent three years ago. This percentage change, although it may appear small, represents a substantial in-

crease in earnings over that period of time.

1. **Experienced Employees.** Since August 1974, Tektronix has done almost no hiring, other than to acquire or replace critically needed skills. Normal attrition has brought the work force down to 12,664 at year's end, from its peak of 13,478.

The crew is thus increasingly experienced and productive—turning out well over a product a minute. Last year's ending backlog of \$74 million was dropped to \$61 million (still not low). By contrast, the preceding year, which saw a net gain of over 2000 people, required "brute force" production, inherently inefficient.

2. **The New Rubs Off.** In theory, every new product is easily digested by Manufacturing. But real life is something else; you always get some burps. Most production problems have been worked out of the preceding year's new

AMONG the wide variety of courses offered in Tektronix' in-house education program are those in electronics.

products. One result has been improved deliveries, thus less risk of order cancellations.

3. Elbow, Leg, Etc. Room. New buildings have provided needed space. More important, they've brought together related functions that had suffered from separation. The Information Display division, now moving into its home on our new 255-acre Wilsonville tract 20 minutes from Beaverton, had been strewn over seven locations. The Communications division has moved into the 200,000-square-foot multi-purpose structure at Beaverton.

Worldwide, Tektronix owns over 3 million square feet of manufacturing, engineering, warehousing and related space. At our Beaverton headquarters, 26 buildings account for 2.3 million square feet.

Besides its 60,000 square feet in Grass Valley, California, Tektronix owns five US field offices or service centers totaling 68,000 square feet, and leases another 40, comprising 182,000 square feet. Completed this year were field service centers at Santa Clara, Cal. and Dallas. Scheduled for occupancy this year are those at Chicago and Boston.

Outside the US, in 10 countries, Tektronix and subsidiaries own 332,000 square feet of buildings and lease 157,000 square feet more.

Our manufacturing facilities in the US are situated at and near Beaverton; at Wilsonville, and at Grass Valley. Overseas manufacturing plants are at three locations near London; on the Channel Isle of Guernsey; at Heerenveen, The Netherlands; and in Tokyo.

4. Running Out of Shortages. Sometimes a pair of problems will offset one another. As the recession lengthened, Tek suppliers who had been running behind in product deliveries began to accumulate ample inventories. As a result, shortages are now almost no problem.

5. A Closer Squint at Everything. No matter how tight an operation you try to run, there's always slack somewhere. Economic hard times act like a magnifying glass, allowing closer scrutiny not only of how things are done but whether they should be done at all.

To insure a stable permanent work force and to cope with surges and ebbs in demand, we've made good use of two resources:

- Reliable outside suppliers for some of the components and materials we've been building for ourselves: For instance, circuit boards and some mechanical and plastic parts.

- "Farm-in" operations, a collection of quickly learned assembly activities being done in leased off-site buildings by temporary employees on variable, usually short and sometimes odd shifts.

Off-site operations have given needed employment to many in the community whose life roles (student, mother of schoolkids, etc.) precluded fulltime work or regular hours.

Productivity, in the last analysis, is an employee attitude—toward their jobs, toward their company and toward themselves. A big part of that attitude is a continuous search for personal and job growth, and an eagerness for self-renewal.

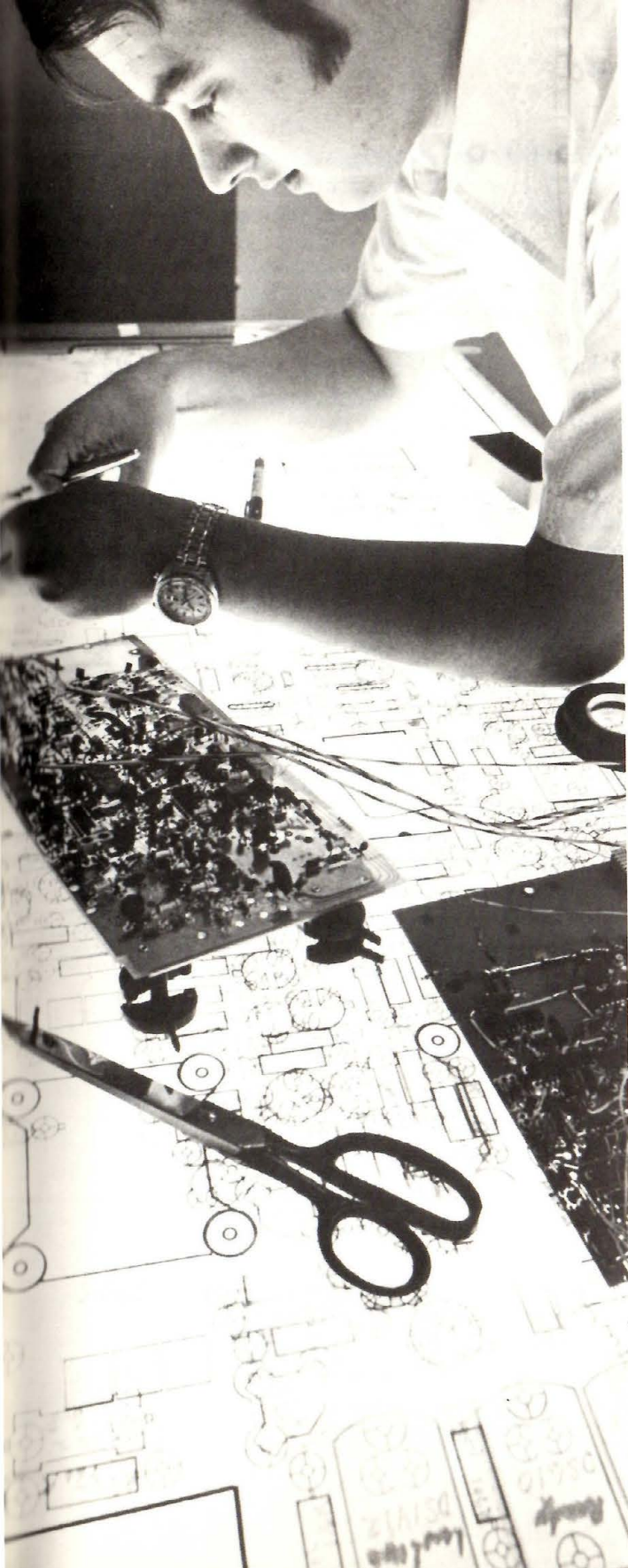
It may just be that Tektronix is the only place in the world whose people can earn college degrees by attending classes entirely on the company premises.

We took pride this year in our first employee to receive his master's degree in electrical engineering, a program begun in spring of 1973 with Oregon State University and taught largely by its faculty members. Sixty-one of our employees participated this year.

Two cooperative programs with University of Portland continued, a master's program in business administration and a bachelor's program in EE. The former has had 30 graduates, 10 this year; and 74 of our people are active in it. The BSEE program has had its first three graduates, with 125 participants this year.

Tektronix provides the facilities, the utilities and even a few of the instructors for technical courses—everything but caps and gowns. Graduates who wish to take part in commencement ceremonies at the university may do so.

Voluntary after-hours educational programs on the Tek campus this year included 275 courses and 4454 registrations. Tuition refunds were granted for 1609 courses successfully completed outside the company by Tek people.



Next Chapter:

With our strong and growing customer base, broad array of advanced products and deep technological “bench strength,” Tektronix’ fortunes look excellent—on a relative scale and over the long term.

The latter are not weasel words. The Absolute Scale is **very** hard to determine, dependent as it is on the shifting political/economic realities of the world about us. And the short-term road is lined with experts calling our attention to its chuckholes.

Not every doomsayer can be right, of course. If **all** the gloom forecast five years ago had come about, think where things would be:

The Dust Bowl would again have smothered the Midwest, due to drastic changes in weather patterns; California would have quaked itself clear off the mainland and into the drink; and our brains (and bodies) would have turned to pudding from watching too much 3-D TV while computers took out the garbage. (That is, if we were around at all. Which we wouldn’t be, the civilized nations having already N-bombed each other until the human race was deceased, leaving the world’s remnants to the rats and quackgrass.)

Still, there are certainly enough concerns to go around, in the year ahead:

Chief among them remains the uncertain state of most of the Free World’s economies. If the US is truly “bottoming out” (an ill-defined process of indeterminate duration), it’s not at all sure when other nations will be. Some are going broke (others have already arrived); their fast-shrinking monetary resources may not withstand another rise in the cost of petroleum. Some nations are living daily with inflation rates that a year or so ago would have been unthinkable. The US dollar continues to waver in value (until recently on the weakish side), making it harder to keep our books straight.

As to political changes abroad, who knows what they mean? The swing to the left in some

CIRCUIT-BOARD design is a highly complex skill.

nations (with Communist gains in Portugal and Italy) may portend policy changes that will affect free trade. Then again, they may do no such thing. On the other hand, the gradual parting of the Iron Curtain has meant a commensurate increase in East-West trade—and the potential markets out yonder are large.

The weak dollar and (relatively) low US inflation made American products good buys abroad. A growing concern is that, with their balance of payments deteriorating, some countries may lend a hand to domestic companies by imposing duties and non-tariff barriers against things made in America.

The corrosive effect of inflation—**anywhere**—can hardly be overstated. It eats the hearts of companies, countries and individuals, by destroying their sense of financial security. Its byproducts range from apathy to social unrest and—if allowed to run amok—economic grief of the bitterest kind.

Well, what can we do? Two things: First, put utmost stress on improving our own productivity; second, bring what political and moral forces we can to bear on those institutions and leaders whose decisions help shape the economic fortunes of the world.

Tektronix has tended to lag the US economy both into and out of recessions. If that pattern holds, our growth in the first two quarters of this year will be subdued. Maintaining high productivity in the face of that will put us to a stern test; but it's a company objective second to none.

How Things Look. When a mountaineer tells you a particular peak will offer you an “interesting” climb, watch out. It means you'll most likely be hanging to the cliffs by your fingernails. In somewhat the same sense, we might say the coming year looks interesting.

Yet—although it doesn't justify calling out the Rah-Rah Boys—the year ahead is also one of great promise for Tektronix. There's more going for us than against us.

You probably suspect what's coming next: The old List of Company Strengths. Well, that's right; what's more, give or take one or

two items, it's the same list we go through every year at just about this point.

But it's a list worth repeating. For, don't forget that, taken all together, these are the strengths that helped Tektronix flourish in a year when many companies were hard put just to survive.

It includes:

- Growing product strength (we lead, or are second, in most of our markets); a breadth of technology that enables investigation of promising avenues that a narrower-based company would have to pass up (and the kind of reputation that opens doors should those product ventures be pursued); a much-envied field-marketing organization.

- Customer loyalty in markets long served (computers, worldwide communications) and growing recognition in new ones. If we haven't said it before, we affirm it now: Tektronix has the highest appreciation for this faithful customer base; we will spare no effort to continue deserving that loyalty.

- Headstarts in such diverse areas of high growth as energy research, and LSI and semiconductor memory testing.

- An improving US economy which, if a rising tide does raise all ships, should also have a positive effect elsewhere; and a triple buffer at Tek against any slack in the US recovery: Improved productivity, a \$61 million backlog and excellent new lower-cost products.

- A new goal-oriented division structure; and, in general, increasing skill in the unique and very complex interrelationship of disciplines that is technical management.

Still, when all's said and done, the list boils down to a single ingredient:

Human Beings. Each year, come what may, our people have justified the high esteem in which we hold them. Broadly talented; rich in innovation; challenging as well as seeking challenge; often outspoken in their impatience to make things better, they have repeatedly shown a far-beyond-the-call-of-duty concern over the welfare of their company.

With people like this, how can we lose?

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—Teleequipment instruments;
SONY/Tektronix Corporation, Tokyo, Japan—Serving Japan.

MARKETING SUBSIDIARIES

Australia—Tektronix Australia Pty. Limited, Sydney, Melbourne and Adelaide;
Austria, Röhde & Schwarz-Tektronix GmbH & Co. K.G., Vienna;
Belgium—Tektronix S.A., Brussels;
Canada—Tektronix Canada Ltd., Montreal, Toronto, Ottawa, Calgary, Vancouver and Dartmouth;
Denmark—Tektronix A/S, Copenhagen;
France—Tektronix, Paris, Toulouse, Nice, Lyons, Rennes and Nancy;
Japan—SONY/Tektronix Corporation, Tokyo, Osaka and Nagoya;
Sweden—Tektronix A.B., Bromma and Gothenburg;
Switzerland—Tektronix International A.G., Zug and Geneva;
The Netherlands—Tektronix Holland N.V., Voorschoten;
United Kingdom—Tektronix U.K. Ltd., Harpenden, London, 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;
Pakistan, Pak-Land Corporation, Karachi;
Peru, IRE Ingenieros, Lima;
Philippines, Philippine Electronics Industries, Rizal;
Singapore, Mechanical & Combustion Engineering Co., Ltd., Singapore;
Taiwan, Heighten Trading Co., Ltd., Taipei;
Thailand, G. Simon Radio Company Ltd., Bangkok;
Venezuela, Coasin C.A., Caracas.

MARKETING REPRESENTATIVES

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

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

*Does not include Information Display products.

Tektronix United States Facilities

UNITED STATES

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

FIELD OFFICES

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

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

Increase as Compared to Prior Fiscal Year (amount in thousands)					Ratio to Net Sales (%)		
1974		1975			1973	1974	1975
Amount	%	Amount	%				
\$68,573	34	\$65,217	24	Net Sales	100.0	100.0	100.0
32,727	33	26,556	20	Manufacturing Cost of Sales	49.5	49.0	47.4
11,364	45	11,854	32	Selling Expense	12.6	13.6	14.5
4,365	24	5,754	25	Engineering Expense	9.0	8.3	8.4
6,764	45	5,101	23	Administrative Expense	7.4	8.1	8.0
553	83	3,544	290	Interest Expense	0.3	0.5	1.4
8,018	26	8,332	22	Income Before Income Taxes	15.0	14.2	13.9
4,614	28	4,976	23	Earnings	8.3	7.9	7.8

The table above sets forth the increase in certain items of the Company's Statement of Consolidated Income for fiscal 1975 as compared to 1974 and fiscal 1974 as compared to 1973 and the ratios of those items to net sales for 1973, 1974 and 1975. The following discussion should be read in connection with the information in the table and the Company's Statement of Consolidated Income and accompanying notes.

The sales increases for fiscal 1974 and 1975 reflect primarily increased unit sales attributable to the Company's increased selling efforts, to sales of improved products introduced during the last five years and to continued demand in the capital goods markets. Increased sales for fiscal 1975 also reflects reduced backlog, two general price increases instituted following expiration of federal price controls and the additional week included in the 1975 accounting period. During fiscal 1974 the Company was subject to price controls and the effect of price increases on sales was not significant.

The increase in manufacturing cost of sales in 1974 and 1975 reflects primarily increased sales and, in 1975, the change to the LIFO method of accounting for inventories. The change to the LIFO method had the effect of

increasing manufacturing cost of sales for fiscal 1975 by approximately \$6,580,000. The Company attributes the decline in the ratio of cost of sales to sales during the last three years primarily to economies of scale as volume increased and to improved product design and productivity.

Since 1971, selling expense, including advertising costs, has increased both in amount and as a percentage of sales, reflecting inflationary pressures and management's decision to expand significantly the Company's marketing activities and service support programs. The increase in selling expense for fiscal 1975 is also attributable in part to the implementation of a special incentive compensation program for most employees engaged in selling activities. The incentive program replaced the cash portion of the Company's Profit Sharing Plan for participating employees.

Administrative expense increases are attributable primarily to increased business activity and expenses incurred in connection with facilities expansion. Engineering expense increases reflect the Company's continuing program for developing new products.

Profit sharing expense increases directly with income before taxes. Effective December 1, 1974, the parent company adopted an Em-

ployee Pension Plan to augment the benefits under the retirement portion of its existing Profit Sharing Plan. Charge to expense for the plan from the time of adoption to May 31, 1975 was \$2,450,000.

Borrowings during fiscal 1974 and 1975 increased substantially as the Company invested in inventory and facilities in amounts which exceeded the cash generated from operations. Borrowings during fiscal 1975 ranged from approximately \$22,000,000 to approximately \$52,000,000 as compared to borrowings ranging from approximately \$9,600,000 to approximately \$24,000,000 during 1974. The increased borrowings, together with the high level of interest rates, resulted in a substantial increase in interest expense. In June 1975, the Company sold \$35,000,000 principal amount of 8 $\frac{7}{8}$ % Notes due May 15, 1983. The proceeds from the sale of the Notes were used primarily to repay other indebtedness.

Other nonoperating expense (income) in-

cludes foreign currency translation and exchange gains and losses which reflect the effects of variations in the relative value of the U.S. dollar and the currencies of other countries in which the Company has operations. The Company attempts to reduce the exposure of its foreign assets and operating results to such gains and losses by borrowing in foreign currencies or by entering into hedging contracts.

The provision for income taxes, including provision for United States income taxes on undistributed earnings of subsidiaries, is discussed in Note 6 of Notes to Financial Statements.

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

ACCOUNTANTS' OPINION

TEKTRONIX, INC:

We have examined the statements of consolidated financial position of Tektronix, Inc. and subsidiaries as of May 31, 1975, May 25, 1974, and May 26, 1973 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. The aforementioned consolidated financial statements as of May 26, 1973 and for the year then ended were previously restated to include the accounts of The Grass Valley Group, Inc. (see Note 2). We have not examined the financial statements of The Grass Valley Group, Inc. as of December 31, 1972 and for the year then ended; these financial statements have been examined by other accountants, whose report has been furnished to us.

In our opinion, based on our examination and the report of other accountants referred to above, the accompanying statements present fairly the financial position of the companies as of May 31, 1975, May 25, 1974, and May 26, 1973 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, with which we concur, in method of costing parent company inventories as explained in Note 3 to the financial statements) on a consistent basis.

Haskins & Sells

Portland, Oregon
July 17, 1975

Tektronix Consolidated Income And Reinvested Earnings

(THOUSANDS OF DOLLARS)

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

1971	1972	1973	1974	1975
149,442	167,482	202,855	271,428	336,645
81,791	86,552	100,335	133,062	159,618
67,651	80,930	102,520	138,366	177,027
50,111	60,992	73,645	99,969	126,229
15,949	19,241	25,459	36,823	48,677
14,534	17,976	18,208	22,573	28,327
11,353	13,313	15,103	21,867	26,968
8,275	10,462	14,875	18,706	22,257
17,540	19,938	28,875	38,397	50,798
1,160	697	669	1,222	4,766
(426)	(1,767)	(2,273)	(1,322)	(797)
16,806	21,008	30,479	38,497	46,829
6,902	9,244	13,740	17,144	20,500
4,237	6,419	9,845	11,600	12,400
661	700	990	1,400	1,625
2,004	2,125	2,905	4,144	6,475
9,904	11,764	16,739	21,353	26,329
107,532	117,467	129,186	144,140	163,966
—	—	(1,785)	(1,781)	(1,734)
31	1	—	—	(186)
—	(46)	—	254	—
117,467	129,186	144,140	163,966	188,375
8,572	8,590	8,632	8,646	8,672
\$1.16	\$1.37	\$1.94	\$2.47	\$3.04

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

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

GROSS PROFIT

OPERATING EXPENSE AND PROFIT SHARING

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

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

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

PROFIT SHARING (Note 7).

OPERATING INCOME

INTEREST EXPENSE Cost of borrowed money.

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

INCOME BEFORE INCOME TAXES

PROVISION FOR INCOME TAXES (Note 6) Estimated income taxes related to the taxable income of Tektronix, Inc. and its consolidated subsidiaries including U.S. income taxes on dividends that may be repatriated from subsidiaries.

U.S.
STATE
FOREIGN

EARNINGS The measure of company performance.

REINVESTED EARNINGS AT BEGINNING OF YEAR.

DIVIDENDS PAID 20¢ per share annually since October, 1972.

PROCEEDS FROM SALE OF TREASURY SHARES IN EXCESS OF (LESS THAN) COST

ADJUSTMENTS RELATED TO POOLED COMPANY (Note 2).

REINVESTED EARNINGS AT END OF YEAR (Note 8).

WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING DURING YEAR (Thousands) (Note 2). Adjusted retroactively for shares issued to acquire The Grass Valley Group, Inc.

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

Tektronix Consolidated Financial Position

(THOUSANDS OF DOLLARS)

May 26, 1973	May 25, 1974	May 31, 1975
151,033	176,405	217,075
2,620	3,018	5,182
27,871	15,655	31,090
44,757	55,683	61,890
(340)	(453)	(621)
3,221	5,272	8,288
1,475	1,981	2,353
71,429	95,249	108,893
46,644	68,484	63,623
10,600	23,000	12,220
141	336	530
11,867	16,706	13,334
8,153	8,246	12,749
7,499	8,429	12,572
5,156	6,698	5,792
2,422	3,612	4,255
806	1,457	2,171
104,389	107,921	153,452
46,167	61,355	82,620
45,883	46,769	59,349
39,666	48,230	60,437
286	586	601
(43,514)	(49,947)	(57,668)
1,942	2,996	5,473
1,904	12,721	14,428
2,243	1,685	983
7,156	11,616	5,938
(959)	(637)	(29,835)
(3,366)	(6,452)	(10,837)
155,630	175,488	202,321
12,158	12,213	14,258
(668)	(691)	(312)
144,140	163,966	188,375

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

CASH Mostly in checking accounts or deposits in transit.

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

ACCOUNTS RECEIVABLE Amounts due from customers for sales on credit.

ALLOWANCE FOR DOUBTFUL ACCOUNTS

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

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

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

CURRENT LIABILITIES Obligations due to be paid within one year.

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

CURRENT PORTION OF LONG-TERM INDEBTEDNESS (Note 5) Installment payments due within one year.

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

U.S., STATE AND FOREIGN INCOME TAXES (Note 6) Taxes not yet paid.

EMPLOYEE PENSION AND PROFIT SHARING (Note 7) Due employees and their retirement funds.

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

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

INTEREST AND MISCELLANEOUS TAXES

WORKING CAPITAL Current Assets minus Current Liabilities.

FACILITIES AT DEPRECIATED COST (Note 5) The cost of buildings and equipment used in the business, reduced by depreciation.

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

MACHINERY AND FURNITURE Cost of furnishings.

LEASEHOLD IMPROVEMENTS Cost of remodeling rented space.

ACCUMULATED DEPRECIATION Reduction of value for use, wear and age claimed as an expense of doing business, mostly computed by accelerated depreciation methods.

LAND Cost of land used in business.

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

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

INVESTMENTS AND LONG-TERM RECEIVABLES (Note 2) The investment in and advances to 50% owned companies and one half their reinvested earnings. Also included are installments of sale and lease contracts receivable due after one year.

LONG-TERM INDEBTEDNESS LESS CURRENT PORTION (Note 5) The unpaid portion minus payments due within one year of amounts borrowed for more than one year.

DEFERRED INCOME TAXES (Note 6) Future taxes on dividends from subsidiaries.

SHAREOWNERS' EQUITY (Notes 8 and 9) The net assets or book value owned by shareowners. This is equal to the assets minus liabilities. Shareowners' equity is made up of:

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

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

REINVESTED EARNINGS The accumulation of earnings reinvested in the business.

The accompanying notes are an integral part of these financial statements. 33

Tektronix Consolidated Changes In Financial Position

(THOUSANDS OF DOLLARS)

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

1971	1972	1973	1974	1975
15,821	19,862	24,416	31,497	39,403
9,904	11,764	16,739	21,353	26,329
5,898	6,394	6,834	7,525	9,388
496	673	644	584	344
(477)	(602)	(834)	(1,051)	(1,043)
—	515	(515)	—	—
—	1,118	1,548	3,086	4,385
2,827	1,978	4,459	1,576	43,600
277	161	143	341	373
579	467	2,802	55	2,045
330	549	1,295	774	1,053
1,452	—	—	—	29,910
189	205	107	109	9,852
—	596	112	297	367
8,452	6,131	13,223	29,541	37,472
6,047	4,915	7,075	23,530	31,706
51	685	160	323	712
1,992	244	45	27	9
115	44	3,402	3,516	3,131
247	243	756	364	180
—	—	1,785	1,781	1,734
10,196	15,709	15,652	3,532	45,531
486	18,547	30,494	25,371	40,670
(338)	19,847	1,640	(11,819)	17,599
(2,052)	5,720	11,583	10,814	6,039
3,851	(7,016)	16,511	23,820	13,644
(975)	(4)	760	2,556	3,388
(9,710)	2,838	14,842	21,839	(4,861)
(3,601)	(1,181)	1,972	12,596	(10,586)
(1,250)	1,016	7,791	8,220	(2,921)
(2,662)	2,346	1,400	930	4,143
(2,197)	657	3,679	93	4,503
62,832	73,028	88,737	104,389	107,921
73,028	88,737	104,389	107,921	153,452

WORKING CAPITAL PROVIDED FROM OPERATIONS:

EARNINGS As shown on INCOME STATEMENT.

DEPRECIATION OF FACILITIES The amounts deducted from net sales representing the decrease in value of buildings, machinery and furniture resulting from use, wear and age. Most were computed by the sum-of-years-digits method.

AMORTIZATION OF INTANGIBLE ASSETS The amounts deducted representing the write-off of cost of intangible assets.

EQUITY IN EARNINGS OF 50% OWNED COMPANIES less cash dividends received including equity in net gain on translation of their monetary items. These amounts added to investment.

RESERVE FOR CURRENCY VALUATION Amount reserved to offset anticipated losses in translation of foreign currencies.

DEFERRED INCOME TAXES Amounts not to be paid currently.

WORKING CAPITAL PROVIDED FROM:

DISPOSITION OF TREASURY SHARES Net proceeds from sale of Tektronix, Inc. treasury shares to employees as part of our employee share purchase plans and stock option plans.

ISSUANCE OF COMMON SHARES Net proceeds from sales of unissued shares to employees exercising stock options.

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.

LONG-TERM INDEBTEDNESS INCURRED.

REDUCTION OF INVESTMENTS Amounts sold or becoming current assets due within one year.

OTHER

WORKING CAPITAL USED FOR:

ADDITIONS TO FACILITIES Cost of land, buildings, machinery and furniture purchased or constructed.

REDUCTION OF LONG-TERM INDEBTEDNESS Amounts becoming current liabilities due within one year, and reduction in estimate of purchase price of business acquired.

INTANGIBLE ASSETS Amounts paid for patents and trademarks and accrued in excess of values ascribed to the net tangible assets of the businesses acquired (goodwill).

INVESTMENTS Long-term securities, receivables and advances to 50% owned companies.

PURCHASE OF TREASURY SHARES Cost of Tektronix, Inc. common shares acquired by company.

PAYMENT OF DIVIDENDS Includes The Grass Valley Group, Inc.

RESULTING INCREASE IN WORKING CAPITAL Made up of

INCREASE (DECREASE) IN CURRENT ASSETS Minus

CASH AND CASH EARNING INTEREST

ACCOUNTS RECEIVABLE—NET

INVENTORIES

SUPPLIES, PREPAID EXPENSES AND DEPOSITS

INCREASE (DECREASE) IN CURRENT LIABILITIES

NOTES PAYABLE AND CURRENT PORTION OF LONG-TERM DEBT

ACCOUNTS PAYABLE AND OTHER CURRENT LIABILITIES

EMPLOYEE PENSION AND PROFIT SHARING

U.S. STATE AND FOREIGN INCOME TAXES

WORKING CAPITAL AT BEGINNING OF PERIOD Plus increase in working capital equals

WORKING CAPITAL AT END OF PERIOD As shown on FINANCIAL POSITION STATEMENT.

Notes To Financial Statements: Tektronix, Inc. And Subsidiaries

1. SIGNIFICANT ACCOUNTING POLICIES:

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

Foreign Currency Translation—Facilities and related depreciation, inventories, and other non-monetary assets of foreign subsidiaries are translated into U. S. dollars at historical rates of exchange. Monetary assets and liabilities are translated at year-end rates of exchange. Income and expenses, other than cost of sales and depreciation, are translated at rates prevailing at the end of each four-week accounting period. Translation and exchange gains and losses 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 FIFO.

Facilities and Depreciation—Facilities are carried at cost. Expenditures for maintenance, repairs, and betterments which do not add to the value of the related assets or materially extend their lives are expensed as incurred. Accelerated methods of depreciation are generally used both for financial accounting and tax purposes based on estimated useful lives of the facilities which vary from 10 to 40 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.

Intangible Assets—Intangibles consist primarily of the excess of the purchase price over the value ascribed to the net tangible assets of business acquired. These amounts are being amortized on the straight-line method over periods not exceeding 15 years.

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

Income Taxes—In addition to provisions for applicable income taxes in each country and state, provisions are made for additional United States income tax on undistributed subsidiary earnings which may not be indefinitely employed in the subsidiaries' operations and, beginning in 1974, for income taxes allowed to be deferred by the Company's Domestic International Sales Corporations (see Note 6).

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

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

2. SUBSIDIARIES AND 50% OWNED COMPANIES:

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

<u>May 29, 1971</u>	<u>May 27, 1972</u>	<u>May 26, 1973</u>	<u>May 25, 1974</u>	
\$3,443,393	\$3,214,907	\$4,657,960	\$6,088,174	Sales
574,740	546,627	1,065,727	1,470,212	Earnings

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

<u>May 26, 1973</u>	<u>May 25, 1974</u>	<u>May 31, 1975</u>	
\$44,073,016	\$58,817,780	\$76,374,909	Current assets
7,881,677	8,870,345	10,093,513	Facilities—net
1,125,785	966,797	823,249	Other assets
6,738,803	11,128,112	19,107,933	Current liabilities
226,810	200,400	4,671,690	Long-term debt

Earnings of foreign subsidiaries included in the consolidated financial statements were \$4,465,919 in 1971, \$5,589,782 in 1972, \$5,471,825 in 1973, \$8,994,473 in 1974, and \$13,371,253 in 1975.

Translation and exchange gains (losses) included in other non-operating income were as follows: 1971,

\$56,644; 1972, \$1,151,315; 1973, \$606,008; 1974, \$(1,016,161); and 1975, \$(369,096).

The Company's share of the earnings and net assets of 50%-owned companies was:

<u>May 26, 1973</u>	<u>May 25, 1974</u>	<u>May 31, 1975</u>	
\$ 834,182	\$1,087,294	\$1,076,470	Current year's earnings
2,880,899	3,949,936	4,993,288	Net assets

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 during periods of rising prices, and thereby minimizes inventory profits. The effect of the change for 1975 was to reduce inventories \$6,579,572, earnings \$2,224,000, and earnings per share 26¢.

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

Inventories consisted of the following:

<u>May 26, 1973</u>	<u>May 25, 1974</u>	<u>May 31, 1975</u>	
\$14,663,378	\$21,146,875	\$ 33,904,696	Finished Goods
36,276,327	43,657,506	52,473,441	Work-in-Process
20,489,231	30,444,758	29,095,066	Purchased Materials
		(6,579,572)	LIFO Reserve
<u>\$71,428,936</u>	<u>\$95,249,139</u>	<u>\$108,893,631</u>	TOTAL

4. SHORT-TERM NOTES PAYABLE:

The Company has short-term borrowing arrangements with domestic and foreign banks which aggregated \$46,409,000 at May 31, 1975. Average compensating bank balances of 10% are informally required on \$19,000,000 of such arrangements.

The May 31, 1975 balance of notes payable bears interest at an average rate of 8.9%. Average borrowings during the year, based on period-end balances, were \$28,935,000 at an approximate weighted average interest rate of 12.7%. Maximum period-end aggregate short-term borrowings during the year were \$44,154,190. During the year ended May 25, 1974, average borrowings were \$11,843,000 at an average interest rate of 9.5%.

5. LONG-TERM INDEBTEDNESS:

<u>May 26, 1973</u>	<u>May 25, 1974</u>	<u>May 31, 1975</u>	
		\$25,000,000	(A) Revolving credit note
		3,502,500	(B) Revolving credit note
		1,244,000	(C) Term note
\$ 260,060	\$ 236,737	365,272	(D) Mortgage notes
791,663	708,628	230,000	(E) Contract payable
48,691	27,763	23,153	Other
<u>1,100,414</u>	<u>973,128</u>	<u>30,364,925</u>	Total
<u>140,630</u>	<u>336,337</u>	<u>530,082</u>	Less current portion
<u>\$ 959,784</u>	<u>\$ 636,791</u>	<u>\$29,834,843</u>	Long-term indebtedness—net

(A) This revolving credit note was due under a \$25,000,000 commitment with Morgan Guaranty Trust Company. Interest varies with the bank's minimum commercial lending rate and was 8.25% at May 31, 1975. The commitment is cancellable at any time by the Company, and, on July 17, 1975 the Board of Directors authorized a reduction of the commitment to \$10,000,000.

On or prior to April 25, 1977, the Company may elect to borrow up to the amount of the commitment under a term note to mature April 25, 1982, using the proceeds, to the extent required, to repay the outstanding balance under the revolving credit note. Until an election is made to borrow under a term note, fees of 1/4 of 1% of the total commitment and 1/2 of 1% of the unused portion are also required. Average compensating bank balances of 10% of the commitment are informally required. In consideration of interest rates in excess of the bank's minimum commercial lending rate, no additional compensating balance is required on amounts borrowed.

On June 3, 1975 the Company sold \$35,000,000 of 8 $\frac{7}{8}$ % notes due May 15, 1983. The outstanding balance on the revolving credit note was repaid from the proceeds.

(B) This revolving credit note repayable in Pounds Sterling is due June 1, 1978. Interest varies with the London Interbank Offering rate and was 14 $\frac{1}{2}$ % at May 31, 1975.

(C) The term note repayable in French Francs is due \$248,800 annually. Interest varies with the Paris Base Rate and was 10 $\frac{5}{8}$ % at May 31, 1975.

(D) The mortgage notes payable are due in annual installments of \$51,282, plus interest at rates ranging from 4 $\frac{1}{2}$ % to 7 $\frac{1}{2}$ %. Facilities with an original cost of \$1,500,000 are pledged as collateral. One note is repayable in Dutch Guilders.

(E) The contract payable represents the discounted estimated contingent portion (which estimate was revised downward during the years ended May 31, 1975 and May 26, 1973) of the purchase price of the assets of an electronic calculator business acquired in May, 1971. Contingent payments are based on sales of calculator products to May, 1976. The Company is amortizing the contingent portion of the purchase price as the payments accrue.

6. INCOME TAXES:

The total provision for income taxes for the years ended May 31, 1975 and May 25, 1974 resulted in overall effective income tax rates of 43.8% and 44.5% respectively, and were approximately \$1,978,000 and \$1,334,000 less than the amount 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:

<u>May 25, 1974</u>	<u>May 31, 1975</u>	
\$18,478,000	\$22,478,000	Computed income taxes based on United States statutory rate of 48%
(2,257,000)	(2,044,000)	Effect of certain foreign subsidiary earnings taxed at rates lower than the United States statutory rate
2,814,000		Provision for deferred income taxes of DISCs relating to years prior to 1974
(1,717,000)		Prior provisions for tax on undistributed earnings of foreign subsidiaries restored to income
721,000	845,000	State income taxes, net of Federal income tax benefit
(564,000)	(1,099,000)	Investment tax credit
(331,000)	320,000	Other—net
<u>\$17,144,000</u>	<u>\$20,500,000</u>	Provision for income taxes

The overall effective income tax rates for the three years ended May 26, 1973 ranged from 41.1% to 45.1%. The variances from the United States statutory income tax rate resulted primarily from the effect of certain subsidiary earnings taxed at rates lower than the United States statutory rate and from tax reductions relating to DISC operations.

Undistributed reinvested earnings of subsidiaries including the DISCs amounted to approximately \$82,000,000 at May 31, 1975. Except for accumulated deferred income tax provisions of \$10,836,895 relating to approximately \$26,000,000 of such reinvested earnings, no provision has been made for additional United States income taxes which could result from the transfer of such reinvested earnings to Tektronix, Inc.

because it is anticipated that they will continue to be employed indefinitely in the subsidiaries' operations. If such reinvested earnings were to be transferred to Tektronix, Inc., foreign tax credits would be available to partially offset the amount of United States income taxes otherwise payable.

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. Such provisions charged to income were approximately \$1,500,000 in 1973, \$1,300,000 in 1972 and \$700,000 in prior years. Also, in 1974, the Company made provision for \$4,802,902 of deferred income taxes due to future uncertainty allowing indefinite deferral of taxation of the undistributed earnings of its Domestic International Sales Corporations (DISCs). The provision represented the tax effect of the accumulated undistributed earnings of the DISCs, including transfers to one DISC from the Company's Export Trade Corporation subsidiary.

Deferred income taxes, which relate solely to undistributed earnings of subsidiaries including the DISCs, are included in the provisions for United States income taxes as follows: 1971, none; 1972, \$1,118,000; 1973, \$1,548,000; 1974, \$3,086,000; and 1975, \$4,385,000.

7. PROFIT-SHARING, PENSION AND INCENTIVE PLANS:

Under the terms of the Company's profit-sharing plan, approximately 35% of income before income taxes, profit-sharing, charitable contributions, and executive incentive compensation is provided for profit-sharing for employees. Approximately 80% of the profit-sharing pool is distributed currently in cash and the remainder is contributed to retirement profit-sharing for employees of participating companies. In lieu of retirement profit-sharing, most foreign subsidiaries have various governmental and privately insured pension plans.

Effective December 1, 1974, the parent company adopted a pension plan for its employees which will augment the benefits of its retirement profit-sharing plan. The Company's policy is to fund pension costs accrued, plus amortization of past service costs over a period of 20 years. Estimated cost of the plan for 1976 will be approximately \$5,000,000 and charges to expense for the period from plan adoption to May 31,

1975 were \$2,450,000. The unfunded past service liability at May 31, 1975 was approximately \$26,000,000 and vested benefits exceeded fund assets by approximately \$5,300,000.

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

8. SHAREOWNERS' EQUITY:

Authorized capital consists of 20,000,000 common shares without par value. Issued and outstanding shares (adjusted retroactively for the pooling of interests described in Note 2) are as follows:

<u>May 26, 1973</u>	<u>May 25, 1974</u>	<u>May 31, 1975</u>	
8,668,732	8,670,507	8,737,493	Issued
18,127	19,463	8,992	Held in Treasury
<u>8,650,605</u>	<u>8,651,044</u>	<u>8,728,501</u>	Outstanding

Under the Company's revolving credit commitment agreement with Morgan Guaranty Trust Company (see Note 5), distributions for the payment of dividends (other than stock dividends) or for the purchase, redemption or other acquisition of the Company's Common Shares are restricted to 25% of consolidated earnings subsequent to May 25, 1974 plus \$4,000,000. As of May 31, 1975, \$8,668,427 of reinvested earnings was not restricted under the agreement.

9. EMPLOYEE STOCK OPTION AND SHARE PURCHASE PLANS:

Under qualified stock option plans for employees, 256,240 common shares of the Company were reserved at May 31, 1975. Shares available for options not yet granted were 47,097 at May 31, 1975 (41,952 shares at May 25, 1974). 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 31, 1975, options to purchase 226,538 shares were outstanding for which the option price, ranging from \$19.64 to \$60.10 per share, amounted to \$7,810,006 and options to purchase 79,043 shares were exercisable, for which the option price amounted to \$2,793,725. During the year then ended, options became exercisable for 122,613 shares at option prices per share ranging from \$19.64 to \$60.10 with market prices per share at date exercisable ranging from

\$19.10 to \$42.70. Options were exercised for 73,934 shares at option prices per share ranging from \$19.64 to \$32.15 and market prices per share at date of exercise ranging from \$26.65 to \$42.70.

Option and market prices for options which became exercisable and for options which were exercised in the five years ended May 31, 1975 were:

Year	Options Which Became Exercisable		Options Exercised	
	Option Price	Market Price	Option Price	Market Price
1975	\$3,872,652	\$4,544,819	\$2,200,123	\$2,626,826
1974	3,028,478	2,984,354	231,072	342,324
1973	1,674,898	1,853,539	2,695,908	3,402,591
1972	2,388,433	2,025,083	465,520	577,024
1971	2,702,120	2,007,047	579,102	673,254

The Company adopted a non-qualified stock option plan in September 1973, under which 100,000 common shares are reserved. 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. During the year ended May 31, 1975, options to purchase 34,500 shares were granted at a total option price of \$840,075, equal to 100% of the fair market value of the shares at dates of grant. These 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. No options have been exercised or were previously granted under the plan.

Under an "Employee Share Purchase Plan", 155,692 common shares of the Company are reserved. The share purchase discount provided in the plan (which may not exceed 15% of market value on the date of purchase), has been charged to income as follows: \$12,057 in 1975, \$7,244 in 1974, \$3,431 in 1973, \$9,219 in 1972 and \$17,674 in 1971.

10. COMMITMENTS:

The companies are committed under long-term building and equipment leases in the aggregate amount of \$9,585,000 payable \$2,614,000 in 1976, \$2,190,000 in 1977, \$1,876,000 in 1978, \$1,065,000 in 1979 and \$1,840,000 in 1980 and beyond.

Rental expense charged to income, including short-term leases, was \$4,678,000 in 1975, \$2,719,000 in 1974, \$1,705,000 in 1973, \$1,399,000 in 1972, and \$1,630,000 in 1971. Capitalization of financing leases would not have a material effect on earnings.

At May 31, 1975, contractual commitments under construction programs for additional plant facilities approximated \$9,000,000.

Tektronix Consolidated Financial Statistics

(DOLLARS, SHARES AND SQUARE FEET IN THOUSANDS)

1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	Fiscal year or year end
102,162	129,961	135,021	151,011	168,939	149,442	167,482	202,855	271,428	336,645	NET SALES
72,105	94,878	91,521	100,302	107,007	86,816	101,310	122,137	155,764	196,323	United States
30,057	35,083	43,500	50,709	61,932	62,626	66,172	80,718	115,664	140,322	International
11,111	13,620	13,810	14,572	15,005	9,904	11,764	16,739	21,353	26,329	EARNINGS
\$1.33	\$1.64	\$1.64	\$1.72	\$1.75	\$1.16	\$1.37	\$1.94	\$2.47	\$3.04	Per Share
10.9%	10.5%	10.2%	9.7%	8.9%	6.6%	7.0%	8.3%	7.9%	7.8%	% of Sales
20.2%	20.1%	16.5%	14.5%	13.0%	7.8%	8.5%	10.8%	12.2%	13.0%	% of Equity
19,703	25,611	25,825	26,379	26,398	16,806	21,008	30,479	38,497	46,829	INCOME BEFORE TAXES
19.3%	19.7%	19.1%	17.5%	15.6%	11.2%	12.5%	15.0%	14.2%	13.9%	% of Sales
43.6%	46.6%	46.0%	44.6%	43.2%	41.1%	44.0%	45.1%	44.5%	43.8%	Income Tax Rate
115,000	130,000	137,000	157,000	169,000	145,000	174,000	232,000	297,000	329,000	Orders Received
17,300	12,300	12,900	18,700	18,600	14,600	21,300	52,700	74,000	61,300	Unfiled Customer Orders
6,500	7,302	7,892	8,813	9,957	9,091	8,334	10,580	12,693	12,664	Number of Employees
15.7	17.8	17.1	17.1	17.0	16.4	20.1	19.2	21.4	26.6	Sales per Employee
32,605	38,413	41,625	49,214	60,281	56,338	58,609	70,949	94,258	116,511	PAYROLL BEFORE PROFIT SHARE
10,810	13,744	13,542	13,360	13,144	8,275	10,462	14,875	18,706	22,257	PROFIT SHARE
1,441	1,596	1,711	1,813	2,111	2,329	2,429	2,612	2,940	3,420	Facilities in Use (Sq. Ft.)
70.9	81.4	78.9	83.3	80.0	64.2	69.0	77.7	92.3	98.4	Sales per 1000 Square Feet
35,986	41,447	47,638	59,256	76,146	81,381	84,947	89,681	111,302	140,288	COST OF FACILITIES
5,728	5,889	6,644	12,269	17,289	6,047	4,915	7,075	23,530	31,706	INVESTED IN FACILITIES
2,470	3,008	3,470	3,870	4,904	5,898	6,394	6,834	7,525	9,388	DEPRECIATION
13,197	15,929	18,955	22,348	26,789	32,140	37,726	43,514	49,947	57,668	ACCUMULATED DEPRECIATION
76,459	93,348	107,552	127,813	155,619	157,808	173,743	206,599	251,061	306,616	TOTAL ASSETS
17,111	21,675	22,873	27,428	29,165	27,113	32,833	44,417	55,230	61,269	ACCOUNTS RECEIVABLE
28,537	34,305	35,289	41,599	59,252	63,085	56,066	72,904	97,230	111,246	INVENTORY Including supplies
52,975	63,375	74,840	86,728	101,506	101,991	120,539	151,033	176,405	217,075	CURRENT ASSETS
20,935	23,480	22,183	27,042	38,674	28,963	31,802	46,644	68,484	63,623	CURRENT LIABILITIES
32,040	39,895	52,657	54,686	62,832	73,028	88,737	104,389	107,921	153,452	WORKING CAPITAL
610	2,134	988	501	429	1,930	1,288	1,100	973	30,365	LONG-TERM DEBT
8,336	8,323	8,456	8,555	8,572	8,588	8,602	8,651	8,651	8,729	Shares Outstanding
54,938	67,897	83,824	100,297	115,841	126,338	138,488	155,630	175,488	202,321	SHAREOWNERS' EQUITY
6,009	6,009	7,507	7,774	8,325	8,889	9,357	12,158	12,213	14,258	COMMON-SHARE CAPITAL
50,892	64,511	78,320	92,546	107,532	117,467	129,186	144,140	163,966	188,375	REINVESTED EARNINGS

BOARD OF DIRECTORS

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

OFFICERS

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

SHAREOWNERS' MEETING

The annual meeting of shareowners of Tektronix, Inc., will be held on Saturday, September 20, 1975, at 9 a.m. Pacific Daylight Time, in the Assembly Cafeteria Building, S.W. Karl Braun Drive, Tektronix Industrial Park, near Beaverton, Oregon.

<i>Transfer Agents</i>	<i>Registrars</i>
United States National Bank of Oregon, Portland, Oregon	First National Bank of Oregon, Portland, Oregon
Morgan Guaranty Trust Company New York, New York	First National City Bank New York, New York

Mailing Address:

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

QUARTERLY INCOME STATEMENT

First two quarters restated for LIFO
(Thousands of Dollars)

13 Weeks Ended Aug. 24 1974	12 Weeks Ended Nov. 16 1974	16 Weeks Ended March 8 1975	12 Weeks Ended May 31 1975	53 Weeks Ended May 31 1975	
72,840	77,153	104,610	82,042	336,645	Net Sales
35,886	38,517	47,979	37,236	159,618	Cost of Sales
10,449	10,991	14,989	12,248	48,677	Selling
6,320	6,540	8,627	6,840	28,327	Engineering
5,944	6,033	8,172	6,819	26,968	Administration
4,291	4,571	7,656	5,739	22,257	Employee Profit Share
917	1,243	1,751	855	4,766	Interest Expense
(445)	(311)	(381)	340	(797)	Other Non-Operating (Income) Expense
9,478	9,569	15,817	11,965	46,829	Income Before Income Taxes
4,168	4,387	6,796	5,149	20,500	Provision for Income Taxes
5,310	5,182	9,021	6,816	26,329	Earnings
61¢	61¢	\$1.04	78¢	\$3.04	Earnings per Share

