



TEKTRONIX: ITS PEOPLE



"Change has always been part of the human condition. What is different now is the pace of change, and the prospect that it will come faster and faster . . ."

- Max Ways

"We can never be really prepared for that which is wholly new. We have to adjust ourselves, and every radical adjustment is a crisis in self-esteem... It needs inordinate self-confidence to face drastic change without inner trembling..."

- Eric Hoffer



CONTENTS

WINTER 1968

TEKTRONIX: ITS PEOPLE

Self-Renewal: a Symposium

6

Times change. So must a company. So must we all. Three Tektronix managers consider the growing need for broad human beings.

The Individual

16

The poor have a strong friend in Jim Anderson; the deaf have one in Norm Silver.

There Are No Foremen Here

18

The group manager, like a foreman in other companies, guides the people who build the product. But there the similarity ends.

The Individual

24

Interviews with a man who has many bosses, and a couple who have made their dark world bright.

Their Moonlight Job Comes First

26

For Tektronix' working mothers, some words of praise, written by one who knows.

Teks

30

The usual miscellany.

Employees publication of Tektronix, Inc., P. O. Box 500, Beaverton, Oregon 97005. Address mail to Communications department: Joe Floren, editor; Tom Unthank, designer; Josef Oswald, staff photographer; V. K. Sawhney, Laurie Graves, Willie Henning, staff writers. Photomechanical production by Tektronix Photography department; printing by Printing department. © 1968 Tektronix, Inc. All rights reserved.

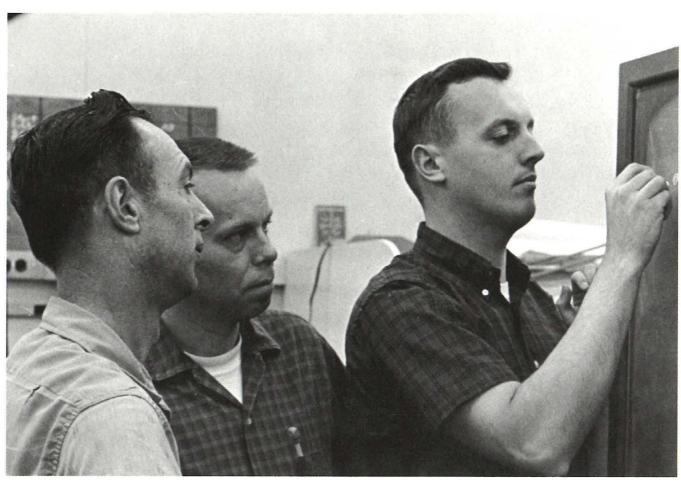
Tek Talk will be sent regularly to persons outside Tektronix who request it.





SELF-RENEWAL:

a tek talk symposium



"The times, they are a-changin'."

- Bob Dylan, folk-rock singer

"It is my belief that we are but at the beginning of mighty changes in our way of working and living, which will make it possible for us as a people to scale undreamed-of heights."

- Henry Kaiser, industrialist

"The years of a man's life now measure not some small growth, rearrangement or moderation of what he learned in childhood, but a great upheaval."

- Robert Oppenheimer, physicist

"The world is undergoing a transformation to which no change that has yet occurred can be compared—either in scope or rapidity."

- Charles DeGaulle, Frenchman

"Wise are those who foresee what time is bringing, and endeavor to shape institutions . . . in accordance with the change that is silently surrounding them . . ."

- John, Viscount Morley

And a character in a current novel asks: "How come nothing's like it was until it's gone?"



Times always have been a-changin'—far back into prehistory, when dinosaurs thrived, then faltered and finally, through unplanned obsolescence, died out, leaving their bones in tarpits.

Today's "dinosaurs" are all around us: A general geared up to fight yesterday's war, a company too rigid to respond to today's changing demands, an individual who chooses to stop growing, all will become 'extinct,' for the world will pass them by.

It used to be that you could show what a corporation "looked like" by drawing an organizational chart in the form of a pyramid of blocks. But that chart hardly fits any more; it is itself a 'dinosaur' of sorts, on its way to extinction.

To accurately depict the successful large company of today, any "organizational chart" would need height, breadth and depth; be in continuous motion, and never repeat. Like a kaleidoscope display, only in three dimensions.

The corporation's task is a tough one: It must structure itself to operate efficiently, yet it must at the same time "stay loose" so it can respond to any change it may face. This tricky balancing act will succeed only if the company

has the right kind of people. That is, people who themselves are willing to change, eager to grow.

In a company viewed merely as a production machine, its human components tend to become cogs. Which is fine, if all you need is for commands from the top to be translated into output at the bottom, as used to be the case. But the dynamic corporation of today (Tektronix is an example) needs, not cogs, but human beings—human in the broadest possible sense. It has by now become trite to say "the Company is people." But it's so.

In the changing industrial atmosphere, relationships between employee and employer also are changing. "A day's work for a day's pay" is no longer an adequate contract. The employee—no matter what his job—often finds the opportunity for far deeper, richer and more personal involvements in the fortunes of his company. His interests and goals, and those of the company, are not separate, but blend and criss-cross at many and sometimes unpredictable points.

So, his continuing self-renewal is a matter of concern not only to him but also to the company of which he is a part. For this reason, he and Tektronix both need to address themselves to these questions, among others: How important is the need to change and grow? What directions should individual growth take? How may this human development be attained? And how is the responsibility to be shared?

Tektronix, since it began over two decades ago, has been an example of participative corporate development—with, we feel, reasonable human and economic success. Thus the following discussion, although new in format, is as old in subject as the company itself.

In it, Vice-President Mike Park, Personnel Director Guy Frazier and President Howard Vollum share their ideas on the need for self-renewal—for Tektronix, for its people.

How does the pace of change, in technology and jobs, affect the individual's need for self-development?

Guy—I don't know the exact rate of shift, as it relates to the kind of training a guy needs. But the vocabulary and the techniques (in my own field of psychology, for instance) are obviously changing a hell of a lot. This kind of thing can happen to anybody, in any field.

For someone working day to day at one job, it's tough to get a perspective on the rate of change, or on the relevant changes going on.

Changes are occurring faster and faster; the more information we have, the more we need. The competitive nature of business increases this acceleration.

So it's easy to get left behind, particularly (but certainly not exclusively) in the fields of science. And the time is going so fast you might not get there at all.

So, Tektronix' need is to upgrade the knowledge and skills of all our people.

We can look at future Tek products and extrapolate the kinds of jobs and processes they will bring about. And we can look at national trend lines, detect a growth toward certain kinds of jobs (more white-collar, fewer blue-collar, for instance), make reasonable estimates as to where this is leading, and tailor our educational policies accordingly.

How large a factor is automation in forcing the employee to upgrade himself?

Mike—That idea is overworked. You can't downplay the effect of change and automation, but there are more vital reasons for self-development.

The ability to teach, and to learn, is coming along so fast—we can get access to, and absorb, information and experiences so much better—that it's a crime **not** to take advantage, for our personal growth and satisfaction.

Guy—Also, it's hard to talk about automation; the word itself gets people startled. Howard—As in many other forward movements, the overall good from automation is great, but there may be severe dislocation for some. Yet you can't **not** do these things—unless you want to penalize everyone.

Guy—Of course, here at Tek for years, routine processes have been replaced by automated or semiautomated production.

Howard—Yes, and Tek has had good growth; people have moved to other jobs within the company. If you don't have growth, it's harder because there isn't always another job being created.

Still, we've had fairly high mobility even when there wasn't a lot of growth, largely because such a wide variety of jobs are needed in making our product.

The industries who have to automate to save money compound the problem. The person "automated out" often has a hard time getting another job, since his skills may be obsolescent everywhere.

Mike—In direct-labor jobs, we'll never have an automation problem. Skills training is already being done well, as our manufacturing methods change. It's amazing how fast a person can adapt.

Do you think Tek's goal of job stability is ever misinter-preted?

Mike—Yes, sometimes. What we mean is stability of employment. We don't, however, mean guaranteed permanent tenure in a particular job.

There's no point trying to retain the status quo, to preserve a specific job or way of doing things. Nothing can hold back the onslaught of technical improvement. If a job artificially stays put in the face of this onslaught, it still will be wiped



GUY FRAZIER

MIKE PARK

out someday—and progress will have passed the jobholder by

Guy—"Lame-duck" jobs, such as you're speaking of, may be perpetuated in a number of ways—by a labor union, or maybe by the jobholder himself.

I've often asked myself: If the company has the option of automating, what are its non-economic considerations? I suspect most automation comes about because of an expected advantage to all employees.

Hopefully, the total result of automation is that people lead better lives. But there may be some disjointing along the way, as Howard said.

Mike-True growth, though, is more than merely adapting to machines.

I think it's the company's obligation to provide the opportunity for broad growth and, with it, the opportunity for the employee continually to take the necessary risks.

How do you think Tek is doing in its educational efforts?

Guy—Our in-plant program has many more courses than most companies have. We have no real QC on them, however; they're as good as the guys who teach each class make them. Often, that's very good.

Yet our emphasis is cafeteria-style; we don't force-feed any program to employees, such as Management Development courses and so on, as some companies do.

And, as in any "cafeteria," user demand causes the desirable items to be kept, the poorer ones dropped or improved.

Our courses aim at specific training as well as very broad development. What are the relative values of these two aspects, to the company?

Howard—Certain skills (running a typewriter, or operating a tool) you just have to learn. I regard this as training. Training can be done at the mental level also—learning what numbers to put in what columns. . . .

Still, the most important thing a person brings to a job—any job—is his good judgment.

And judgment will be improved by broad education?

Yes. Of course, it's bound to come more easily to some than to others.

I once heard you say you felt that a person, by studying poetry, might become a better employee.

Yes. It's kind of like exercise. No one thing will develop a general facility—but many kinds of subject can give you input. For instance, literature is the expression of someone's thoughts. If they've lasted a long time and survived the examination of knowledgeable people, they're probably worth something to you—whatever your job.

Guy—The value of a liberal-arts education is in developing a broad person—a well-integrated, total person, who sees value in doing a great variety of things.



That is, a human being is greater than the sum of his total capabilities. And the company made up of totally developed people will be a more successful company.

Howard—Broad education also provides background for specialized training. It does you little good to do a job well unless you have outside interests, and understanding, and are pleased with yourself as a person. In our programs, we do hope to help develop a broad human being, not merely a better employee. Our lives aren't that compartmentalized, anyhow.

Is a broad education most valuable for those with broader responsibilities?

Howard—The broader your job, naturally, the more you're called on for broad decisions. But this kind of education can be satisfying to anyone, in any job.

I think training should be done so as to produce an educational effect also. The best teachers use subject-matter training as a vehicle for educating.

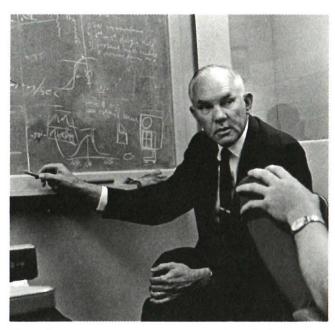
Also, learning to do something well increases your confidence to try something else; nothing succeeds like success. As someone said, "Education is what's left over when you've forgotten all you've learned...."

Is the "day of the specialist," then, over? Or did it ever exist?

Mike—If "specializing" means "self-narrowing," then of course that day should be over. Technical specialists are one sort of thing; specialists in the humanities are another; there, for sure, you need broadness.

One thing you do know: Whatever your specialty is, it's going to change dramatically.

HOWARD VOLLUM "... The most important thing a person brings to his job—any job—is his good judgment ..."



Howard—Also, what was once a specialized field may have become very broad. A lawyer "specializing" in international law is hardly involved in a narrow subject.

Mike—I think the real test is a person's total volume of knowledge and ability, understanding and insights—not the number of his skill areas, or the extent of any one of them.

Guy—A person, by participating in broad educational experiences, helps make sure he's as equipped to deal with whatever changes occur as any other person is.

We need a program and philosophy that will allow a guy to be a specialist, yet not a limited individual.

Is industry demanding broader people?

Guy—I think so. But, whether it is or not, I'm sure that the more broad or flexible a person is, the more likely he is to be able to do whatever his job requires and thus be satisfied with himself. On the other hand, another guy may never leave the lab, and still be a very happy person.

Howard—As long as he's not hurting anyone else, like his family, there's no reason he shouldn't devote his time to his work if he wants to. But if he hurts others, it's undesirable.

Mike—But we don't want people to put their total life into their jobs. A person "married" to his job will find that the job can't give back what a normal marriage demands. Outside interests are a necessary part of the whole person.

It's one thing to have deep and competitive people, but if the rest of their lives aren't balanced and "happy," we'll be a failure as a total company.

Because it does need broad people, and to keep itself healthy, a company must assume the responsibility to upgrade its personnel. The other side, though, is that each of us needs to set his own goals, and to assume the responsibility for reaching them.

The idea of willingness to take risks is a key one with you, isn't it, Mike?

Mike—Yes, it is. In an ideal setup, one of the things I'd like to see is that individual employees can take the amount of risk each feels comfortable taking.

But, with the speed of technological change today, can they afford not to take risks?

Mike—No, they can't. But, as I said, ideally they should. In reality, sometimes there aren't the necessary opportunities, or we're not bright enough to create the ideal situation.

Inherent in risk is the chance of failure. But I'd like it not to be failure based on random chance, so to speak. Nor should failure be seen as degrading

Howard—Isn't "risk" just a way of talking about the whole business of judgment? A person doesn't want to take risks unnecessarily. But his options, as the world changes, keep getting fewer and fewer.

We have a good situation at Tektronix, in that we have many examples of people who have taken risks and have benefited.

If a person is content with his job, then fine; maybe he shouldn't take the risk of trying something more challenging. But he'll have trouble if he wants both the security of his present job and the added benefits of the new one.

Willingness to make this "gamble" is the real test of a person. Sure, he takes a risk one way, but the chances of loss are generally greater if he **doesn't** take it. That is, the job he clings to will almost certainly become no more satisfying, as time goes on

Mike—Jobs that demand higher skills may scare people. Yet the great bulk of people could do them with training, some help—and hard work; you've got to be willing to make the sacrifice. Much of the problem lies in attitude, misunderstanding or misinformation. Most all of us can do far more than we're doing

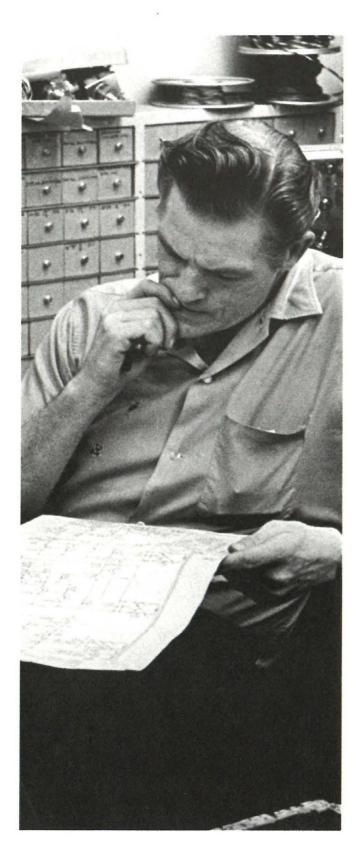
We sure don't want people at Tek whose goal is to get by in a minimal job.

Guy—Still, it's easy to get into a situation where you're satisfied with the job you have. You get paid for it, and you do it well. Who's your boss to say you should do more? It's like telling a .380 hitter he needs to get better because the pitching will be better tomorrow.

The feeling an individual should have is: Here are real opportunities. How can we help him see change as opportunity? is the question.

What is the company's obligation to further its employees' development?

Guy-Ideally, a person may come to a company with the capacity to develop in all the directions he needs to. At the



same time, the company should develop needs compatible with the ultimate use of his capacities. Then, when he's needed, the guy will be ready.

But, in reality, needs don't expand at the same rate that people do. And the wherewithal to carry out this smooth transition often isn't there. Sometimes we have to let damn good guys go for lack of need. And a lot of other things can happen—like competition, "politics," people not retiring when you expect, other companies hiring your people . . .

Some companies use formalized personnel-development plans with color-coded converging-line charts—a hokey kind of approach—showing people growth meshing with job growth, and planning careers way in advance.

No company can do that good a job of calling the shots. The only value to such an approach is that it forces you to give thought to the whole matter.

The big tragedy in an overformalized program is making the wrong fit, or at the wrong time.

Mike—A company can say that in two years there will be a certain kind of job need. It's foolish to say at this time, however, that Joe Blow will do that job; there are far too many unknowns that may get in the way.

Guy—By taking an arbitrary position—as to who will have what job when—you can easily give a guy unrealistic expectations.

Mike—I believe that companies who dwell on this approach do so in error. Still, it is wise, if we need to double the number of technical specialists, to see to it that we develop a whole group of people who will be ready.

Guy—Yes. And you have this obligation to provide growth opportunities whether the person stays with you or not. You have no insurance that he will stay; but we'll win as many as we lose, probably. One thing that's for sure: You'll never win by failing to upgrade your people.

Our managers at all levels must be more aware of changes, direction of jobs, training and so on; think more about those things, and take action in advance to enable their people to be ready.

Can a company predict goals for an individual, and determine the likelihood of his achieving them? I have serious reservations as to how much of that should be done; as a consultant, I often saw this approach fail.

A person can't count on the company to do more than provide a route to some goal; to say: Here's the job opportunity, and here are some things to do to increase your chances of getting the necessary skills to take advantage of that opportunity. But the company can't promise.

What if a person asks you, point-blank, his prospects relative to, say, some rumored promotion?

Mike—In that case, he'd need to know there's a possibility of a job in the future. If, in his judgment, it looks like a good use of his energies to train for that possibility, and if he's willing to run the risk, then fine.

There seems to be no way, then, to completely eliminate the chance of bad guesses—by the company or the employee.

Mike—It's got to be that way. And once you get a job there's no guarantee you'll succeed at it.

Do we have a particular obligation to insiders?

Mike—Tek must look at the best way of getting the job done. Sometimes it's by hiring specialists from the outside; but the most effective way, historically, is to retrain, and broaden, its good, loyal employees.

Guy—Theoretically, the people we hire are the best available, and we are obligated to enable them to get better jobs. Of course, there's a limit to which we can tolerate marginal cases. We must survive—and so we can't put inadequate people into better jobs. Also, new people are fresh blood.

The extent to which we have to hire outsiders for high-level jobs, however, is partly a measure of our failure to do an efficient job with inside potential.

We're most concerned with our 2000 unit wirers. Maybe all the job skill they have is what they learned here. We have a strong obligation to replace their skill with whatever skill the changing needs demand, and to keep them flexible so they can have jobs elsewhere, if they ever choose to.

Howard—It seems self-evident that if they learned those skills, they can learn others, whether they be equal or harder ones.

Mike—We have a joint commitment to have low turnover. Some people come to Tek expecting to complete their careers here. We have an obligation to provide appropriate experiences, so they'll be as ready as they can be. The obligation to be ready, though, is the employee's.

Guy—In fact, he may have a big role in bringing about change. He may decide to try something different because the people available can't do what needs to be done. Tek has historically been very receptive to such suggestions.

Many Tektronix jobs typically grow to fit the job-holder's capabilities. Does this mean the opportunities are, in a sense, limited only by the employee himself?

Howard—Pretty much, yes. For that reason, sometimes, when a person leaves, we need to hire **two** people to replace him. Other times we add no one; existing people can fill the gap very well

Given our obligation to upgrade people who are willing to take risks, what specific things can the company do?

Mike—First, make a formal acknowledgement that this is one of the important things to do—or rather, restate this acknowledgement.

Sometimes a manager who doesn't feel competent to do career counseling tends to shove this responsibility down to a

low level of importance, unless he's reminded from time to time.

Even if he isn't technically competent to do academic counseling, he can sure talk about vocational needs, and help you evaluate where you are today.

Guy—The only real guarantee that a person will move up is company growth. Some guys could end up over their heads in this kind of situation, of course.

We can't avoid low-level jobs but, when we continue to expand reasonably, people continually have new job opportunities.

Theoretically, the bigger you get, the more opportunity you provide. But then, the more resources you have to meet those needs with.

I think it's harder now to provide opportunities than when we were very small and growing extremely fast. Or maybe it just seems harder. Maybe a lot of what passes for "growth" in a small company is just the flexibility that a small operation typically has.

Our not having labor unions also lets us be more flexible in creating job opportunity.

Mike-Attitude toward error also is important.

We are—slowly—coming to truly believe that feedback from errors is a learning process, and that we do not lash out to make someone suffer for wrongdoing. If only the feedback that's helpful in the learning situation is given, we're better off. We've developed an atmosphere that encourages self-extension and so on—so it's not so hard to take a risk.

Howard—An important thing is to put people at first into positions where mistakes don't matter too much, and let them



face those situations with no "cushion." That is, let them make the mistakes, and take the risks.

It can easily happen that we guide a manager so he can't possibly make mistakes. Then, as he progresses to more responsible positions, he's unprepared to take risks. It's like the traditional overprotective mother or father.

Then you see error itself as an educational process?

Howard—Yes. Of course, it would be better to do things without mistakes—but

If we see a growing need for individuals to improve, why is our educational program voluntary?

Guy—I'd hope it's a self-feeding process—the more people learn, the more they want to learn—about jobs, about the world. More, period.

Hopefully, these kinds of good experiences reinforce the person's recognition that continuing education is a necessity and not an option.

The direction for these programs arises somewhere in the boss-subordinate relationship: There's a need for a subordinate to take a certain course, or to obtain certain knowledge.

Also, there has arisen a climate at Tek, requiring its people to be self-directing . . .

Is there some way we can help set their career goals?

Guy—I think it's one of the areas in which we're lacking—partly by choice, since we don't want to create a phony situation with unreasonable goals. But one thing we're doing this year in the educational program is to present a series of general information courses about Tek products and processes. A survey of existing career fields, sort of.



Where can an employee go who wants to know what kind of education would benefit him most?

Guy—I'd hope he can check with his manager—on the less abstract kinds of jobs, anyway. In some measure, the manager does vocational counseling. Arny Labby and Tom Sloan in Employee Relations and the people in Education & Training do some. I do, too.

I see this task as a significant part of the manager's responsibility. And it must be done knowledgeably. Hokey goals may get people bound up, and they may find they've achieved nothing. For instance, certain things—like diplomas—are milestones, not goals.

How accurate an indication do we have of our total employee skills and abilities?

Guy—This is a weakness, also. Our job-posting system sometimes turns up people with unexpected skills. And we can dwell a long time on personnel files. Employee Relations knows most about these resources. But all this still doesn't do the whole job.

We could develop skills inventories, maybe on computerized records. Still, these summarize experiences, and experiences—although a good indicator of ability—are past, not future. How do we know what a person might be able to do?

Howard—I like the Area Representative system, partly for this reason: It often brings leadership abilities to the surface that we might otherwise never have known of.

One hard problem—and I don't know how to go at it—is the "visibility" of our human resources in a company this large. We need a way to know, at a given moment, exactly what abilities are out there.

Once you find these abilities, how can you encourage people to take the risk of trying something new?

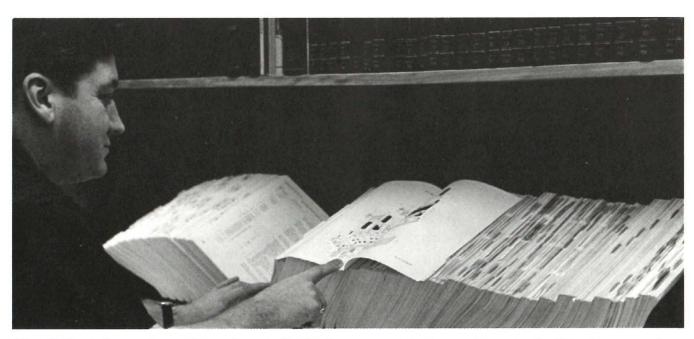
Howard—We can't force, or even too strongly recommend, but we can nudge them from time to time.

One problem we need a lot of work on is people who'll have growing financial obligations that their present jobs won't support. To avoid lots of problems, we work very hard to get them trained beyond that job's requirements.

As Mike said, our attitude toward error is helpful in this regard. Some people have changed jobs and not worked out in the new position—maybe through no fault of their own—then returned and become productive again in the old job, with no stigma for having left.

And, again, the many people who have successfully taken the risks are examples for others.

Guy—Often all the person needs is some encouragement. There's a tremendous lot of pressure within him, to expand his resources—a momentum, throughout his lifetime, to extend himself.



What kinds of changes do you foresee in our educational program, policies or emphasis?

Guy—We are entering into some work-study programs in cooperation with local colleges, and may expand this area of activity—to give a student the feel of the industrial world itself.

As to our in-house educational program, it will continue to have to compete with other educational experiences—and non-educational ones also. So we'll need to make sure our courses are returning the greatest total value.

Howard—As a matter of policy, we'll continue to try to provide for every person an environment that will let him do his job, and support him in doing it.

We start with the assumption that everyone wants to do a good job; there's no need for artificial incentives or controls.

Some elements of the "curriculum" will intensify in the coming years, as our instruments change and as we foresee a different composition of our work force. We can now, for instance, in some areas, almost schedule how many people we'll need, and what their skills must be.

There may also be more emphasis placed on the need to inform, to keep communications open. The higher the level of responsibility you attain, the more you need to inform others of what you're doing.

Mike—We need, in a sense, to "push" our emphasis on education. The whole subject needs management support and reiteration more often, at all levels. Like we do the United Good Neighbors drive.

We all get in our little ruts and, even though there are a lot of things we recognize as good things to do, it's so damn easy **not** to do them—or not to do them today. I think it's reasonable, in the whole area of self-development, to bring pressure to bear to overcome this reluctance.

Increasingly, I'm sure, your manager will see himself as a way to help you further your career goals.

If you were sure exactly what skills you'll need, would you put more weight on specialized training and less on broad education?

Mike—No. Interpersonal relationships, at work or elsewhere, cry out for broad background. Narrow people have trouble working together. It becomes far easier for a broad person to live with himself, let alone with those around him. A distinguishing mark of many older people is their ability to adapt to, and work with, others; they've had all those years of experience

One whole area—still a new one, with many unknowns—is sensitivity training. The question is, how best to make this education available, and to encourage its study.

Howard—Understanding human behavior is an important skill. The more you know about human actions and responses, the easier it is to make the right kind of allowances. If you know that a person, for example, is under stress, his irrationality doesn't shake you so much.

Also, human interrelationships play a greater and greater part in more and more jobs.

Our emphasis on broadness won't do away with the need to have specific courses of study. Development can't take place abstractly; there's a need to study some thing. It might as well be a good and useful thing, while you're at it.

Taking specific courses also is a way to test your progress. College couldn't be just four years of stream-of-consciousness In science classes, for instance, you can't ignore any step as unimportant, or you won't reach the solution.

Another benefit of classes is the contact you have with others, just to find out how they think. You may feel you're an odd-ball for certain beliefs you have, then find in a class situation that others think like you, or in ways equally unique. Thus you gain confidence, which then may extend into other areas.

You all seem to feel that if we can help produce a broad, satisfied person, that these other things—including improvement as employees—will pretty much take care of themselves.

Mike—Yes. One thing you can't train into a guy is being "a basic good man." If you don't have this to start with, you never make it. This says a lot about the importance of our hiring and selection system.

Skills training and so on are short-term problems. But development of the reasonably deep, competent, wholesome person is a long-term thing. Once you have that, you can attain the rest.

"Being broad" means that the guy—and the company, too—has lots more ways to do things, and more tools to do them with.

Still, our in-plant educational offerings need a different emphasis. The object of that game has got to be the continued development of a healthy company—not upgrading people just to upgrade them. Tektronix must be able to meet whatever comes down the road; its only chance lies in being able to shift with changing problems.

I think Tek's education program needs to put its energies into upgrading those people who will make it a stronger company.

Still, the experience of education itself, if an employee is willing to spend time at it, is well worth our tuition-refund subsidy.

Guy—We can go farther and better if our people go farther and better. Tek is more advanced than many companies, because it has provided the kinds of opportunities we've been talking about here. We've always had an orientation toward job advancement, and never seen people as automatons. We've tended to hire flexible people, and have accustomed them to thinking bigger.

Job enlargement at most places is basically a horizontal expansion; but at Tektronix your manager involves you in, and helps you do, things that in many companies are his job. Maybe we can expect him to do even more of this, as well as more career counseling.

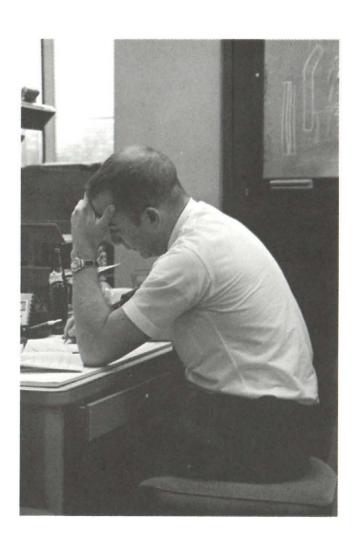
A person who spends time in a poorly chosen educational experience might have some misgivings. Still, the process of learning teaches you how to learn. So a guy doesn't have to view any educational experience as a loss. After all, there's more to life than just your job

I can't visualize anyone saying, "I wish I'd never gotten my education"

Mike—In the long run, really, the only chance is a healthy interchange between you and your manager. You two need to do talking, and lots of it. This may not be the best way, but it's the only way, to generate the necessary enthusiasm, and make the right compromises. And we have a growing Education department. I know of no person in this company, as a matter of fact, who wouldn't be glad to help talk through your personal career.

Second, and most important of all: Each of us has to do more to assume the primary responsibility for his own future.

The minute you give up that right, you've given up a very fundamental thing.



friend in deed



Jim Anderson is a slave.

Or so he says—referring not to his job at Tek, but to his extracurricular interest in working with the poor. (An interest that dates back long before anyone declared war on poverty.)

Jim shrugs off any praise you give. He's driven to this effort, he suggests, by religious dedication, or conscience, or something else in his innards; he can't help himself.

His focus is on Spanish-speaking migrants in Washington county. They offer, he feels, the best chance for the poor to work together to help themselves. In this effort they have a strong friend in Jim.

For several years, he's worked closely with migrants—first on the Community Action Board reviewing county poverty war expenditures; then with Valley Migrant League; and currently also with VIVA, a newer migrant-run group. VIVA seeks to help migrants any way they need it—especially when they want to leave the seasonal agricultural cycle. The reason: Farm work is rapidly automating, the need for seasonal labor is vanishing and the children aren't getting a decent education.

Settling the migrants doesn't always generate enthusiasm in the community, Jim says—not accusingly at all. Some prejudice does exist, in the largely white, largely middle-class "status structure." It takes tact and firmness, as well as very hard work, to make these social changes. But the laws help; so does the fact that many of VIVA's resettled migrants are befriended—and sometimes given financial aid —by a local church.

The big hope is education—a luxury that many migrant children have been denied. Thus the effort to find permanent homes and non-agricultural jobs. About 50 families have settled in the local area; some of them found their new life style too confusing, and returned to the fields; their problems include the fact that most jobs require better transportation than they can provide, and better English than they can speak. But others are slowly making headway, as employees and as community members.

Jim started working with migrants, as he got into others of his many social concerns, through his church—as a volunteer in 1957 to help study migrant conditions in the Willamette valley. This study had legislative authorization but no funds, so it was done by volunteers, and Labor Department staff members working four extra hours a day for free.

Jim is a member of a VIVA support committee that includes lawyers, physicians, nurses, clergymen and other community representatives who help set up and coordinate free medical clinics, a job-seeking circle and many other activities.

VIVA's proposed self-help housing program—migrants cooperating to build their own homes—seeks to "scatter" the families throughout the community. This avoids creating entire migrant neighborhoods; of such approaches are ghettos made

"Working on social matters takes less time than you'd suspect," Jim claims. "Once you have this bent, it becomes a way of life, and you do it more easily without spending a lot of time. Also, as you grow more mature, you find that the things you say have an increased effect on the community—and, you learn whom you can ask for help."

As for himself:

"I'm kind of a slave. Everyone has certain talents; if you don't use them for brotherhood, you're denying your religion, and so you go around giving pious excuses. When you come down to it, your relationship with God is your relationship with your fellow man."

Jim is critical of the rigidity of most organizations, including sometimes his own church. He admits to stooping to "Christian blackmail." (He tells the minister of his church, "If you won't give us support, I think the Baptists may be interested. . . .")

His soft-spoken manner almost (but not quite) hides a hard sell. "You have to put pressure on everybody," he admits. That includes Tektronix; his efforts have helped a dozen migrants obtain jobs, several of them here.

The hiring system in industry historically cuts out the disadvantaged. Tektronix' own program of recruiting from minority groups has recently received favorable press coverage. "Other companies, by exercising similar social responsibility, could dry up the whole job problem," Jim maintains.

Introspective and self-critical, Jim insists that he's not naturally sensitive and considerate. "Like a guy with a microscope, I get focused on one thing at a time. It's easy for me to forget some of the broader picture."

"But it gets results, I guess," sighs Jim Anderson. "As you get older, you get blunter."

placement specialist

Norm Silver (Personnel) is one of 15 persons selected from throughout the United States to participate in the seven-month "Leadership Training Program in the Area of the Deaf" (L.E.A.D.) at San Fernando Valley State college in Northridge, Cal. The program began this January.

Most of the participants come from the educational field; Norm is the first person to be selected from private industry to participate in the program since it began in 1960. The program is sponsored by the college in cooperation with the Vocational Rehabilitation Administration of the Department of Health, Education and Welfare.

Norm will be on a leave of absence from Tektronix while participating in the program, which can lead to a Master of Arts degree in supervision and administration from the college's School of Education.

Born and reared in Portland, Norm is a graduate of Cleveland high school, attended Oregon State university for two years and received his BA degree in social science from the University of Portland in 1954. He was then commissioned a lieutenant in the US Air Force.

While he was assigned in Japan as a flying officer, Norm's wife-to-be, Norma, a graduate of Sacramento City College School of Nursing, went to Japan for the wedding on April 2, 1958.

Less than four months later—on July 25—Norm was flying as navigator-bombardier on a routine training mission when the B-57 Canberra jet crashed into a Japanese village, destroying seven homes, leaving 34 people homeless, killing two Japanese teen-aged boys and injuring 26 residents.

The pilot was killed. And Norm received extensive multiple injuries that required surgery five times and kept him confined to military hospitals in Japan and the United States for two years. He still uses a cane to stabilize his walking; he has limited motion in his left hip because some muscle and bone had to be removed. He also has limited motion in his left knee.

A month after his discharge from Travis Air Force Base hospital in October 1960, Norm came to Tektronix as a production scheduler in Production Planning. He transferred to Personnel in June 1961.

He is now primarily a recruiter in Professional Placement under Dan Thompson. However, his duties also include special placements, a program he developed in 1961; the activity insures that applicants with physical, mental or social handicaps are considered equally with other applicants for jobs for which they appear qualified. He has also been active in counseling handicapped employees with work-related and personal problems.

An article entitled "Examination of Selected Employment Problems of the Deaf", co-authored by Norm and Dr. William N. Craig of University of Pittsburgh, appeared in American Annals of the Deaf in September 1966. The article is scheduled to be published in a forthcoming edition of The Deaf American.

His duties also include coordinating summer employment staffing, which enables promising college students to be placed in meaningful summer jobs. He has been responsible for developing special personnel programs, such as the new-employee orientation program implemented in 1966; he is currently developing a work-sample test for production applicants.

Norm has been active with the annual company picnic, as coordinator for four years; and he organized the Employee Activity Classes program in 1966. The classes offer instruction in recreation-oriented activities for employees and members of their families.

Although not a member of the Jaycees, Norm received the Distinguished Service Award from the Beaverton Jaycees in 1962; and then was selected as one of Oregon's 10 outstanding young men in the annual program, sponsored by Oregon Jaycees and First National Bank of Oregon.

Norm is on the Governor's Advisory Committee on Vocational Rehabilitation and the Governor's Committee on Employment of the Handicapped. He is a director of Epilepsy League of Oregon, and chairman of the League's Employer Relations committee. In October, he was selected to the house of delegates and board of directors of Oregon Society for Crippled Children and Adults.



there are no foremen here



It used to be said that you can't manufacture sophisticated electronic instruments in large numbers. But no longer,

The industry's production abilities, as Tektronix indicates, have come a long way. Keeping pace with the increasing refinement of our instruments have been the techniques and skills of volume manufacturing.

Certainly, praise is due the fact that state-of-the-art oscilloscopes can be designed.

It's equally remarkable—although less remarked about—that they can be built.

Tektronix' product output—in quantities of thousands a week, to meet the industry's toughest performance specifications—doesn't just happen. It takes the coordinated efforts of many human beings.

A good share of the responsibility for seeing that it does happen falls on the shoulders of the group manager.

Those shoulders had better be broad. For his job, guiding the people who produce our instruments, requires administrative and human-relations abilities; mechanical and communications skills; firmness and gentleness. He must encourage his people to do their utmost—or even, sometimes, to exceed what they thought was their utmost—yet he must be understanding and tolerant of human foibles.

And he must never let down. For, to his group, he is The Company.

Reduced to a single line, his job description might read: Get the work done.

Tektronix' requirements on its group managers vary from area to area, although not in basic essentials. This article

describes the job of group manager in one Tek area, Product Manufacturing.

On the face of it, few jobs offer more frustration. Of all the variables with which you may work, none is more variable than a human being. Make that 20 to 50 human beings, and the chances of error are great indeed.

But the good line manager is one who likes to work with people. And there is a special kind of reward, at the end of a day, in seeing the result of your work embodied in the instruments that were produced.

Some group managers —more than you might guess—see their job as a career. Some view it as a rung in an upward ladder; but, says Assembly Manager Tom Sly, the one who sees his job as only a rung is almost certain to fail.

A group manager's job in Product Manufacturing is in many ways like a supervisory job in some other company. But the differences are very important, and they're implicit in his title. He is not a foreman; he is, truly, a manager. There are no foremen here.

How does our line manager differ from a foreman?

The main difference is that we have no rule book.

Certainly our operating manual contains some routine procedures as well as general policies. But our main expectation of each group manager is that he use his human judgment. We try to give him all the support he needs—and all the freedom he can stand. Tek has long been committed to pushing the decision-making responsibility as far down in the organization as we can.

A foreman, by and large, translates instructions into a completed job, by parceling out jobs and by funneling



information passed down to him. He is not, in many cases, seen as part of the management structure.

The group manager hires, terminates and trains his people; coaches them to do better; administers their pay, and listens to their problems. He handles a tremendous administrative load.

Unlike many foremen, the group manager is part of management. To his crew, he is Tektronix; to the managerial levels above him, he is, in a sense, "one of the troops," a spokesman for the people who build our instruments. A group manager in Product Manufacturing may supervise 20 to 50 people, although 50 is high.

But the big difference at Tek is a lack of hide-bound "rules."

A manager bound to a rule book can't go very far wrong, it's true. But, on the other hand, he can't go very far right. If his people see him merely as an automaton, mechanically relaying information and rewards, and executing orders, he appears more machine than human; and you can't build much rapport with a machine.

But if they see him as a manager who may—and must—make a wide variety of decisions about them and their work, they see him as a human being. If he carries out his responsibility well, he will build a bond with his group that, by extension, binds them strongly to the company.

The good group manager has many of the strengths of a good psychologist, including insight into what makes people tick. And he must be, most of all, a real human being himself.

How do you choose a group manager?

In a sense, the "choosing" is done by his peers, his fellow employees. Comments one Product Manufacturing staff member: "You can fool your boss sometimes—if you're good, maybe for quite a while. But you can't fool your peer group. We pick as group managers the kind of people we'd like to work for—as well as those who can grow beyond that job."

Product Manufacturing draws most of its group managers from inside the company. Test and Assembly areas are good sources, but not the only ones. We seldom hire a supervisor from outside the company.

Because the relationship between employee and manager here is so free-wheeling, it would be tough on an outsider to face the baptism of fire that a work group gives any new supervisor. ("I see we've got a new group manager to train," they comment.) The insider seems to weather this "training" better than a stranger.

Maybe no job is less sung about than that of group manager. Maybe, from the outside, that job seems routine. But not to the people who do it, day in and day out.

An informal panel from Product Manufacturing management, asked to draw a mythical job description for the group manager, produced the following:

- Must have high tolerance for shades of gray.
 In human relations, things are never black and white.
 The boss who sees them that way hurts his people, and thus, in the long run, himself.
- Must see problems as challenges, and not frustrations. His greatest reward, one group manager says, is "Seeing a problem, getting down into it and climbing out."
- 3. Must truly enjoy seeing people progress. "How do you feel when someone you hired and trained goes on to a job higher than yours?" a group manager was asked. His answer was unhesitating:

"Wonderful," he said. "Wonderful."

4. Must have strength of character.

No, group managers aren't Boy Scouts. But, says one top Manufacturing manager: "The group manager must have social/moral values that jibe reasonably well with the company value scale—and that are fairly well thought out. Without these character strengths and sensitivities, he can't assume the load of personal responsibility for guiding and helping others. The commercial skills—scheduling, work flow and so on—those he can acquire. If he has the commercial strengths but lacks the others, he's a noise-maker and a danger to everyone."

5. Must have an overwhelming sense of fairness.

He must administer pay and other rewards—and criticism—fairly and impartially. He may **not** play favorites. And, when employees discuss their work and their problems with him, he must keep their comments confidential.

6. Must be bright.

"This is a complex job; you can't tolerate dull people in it."

7. Must be a good coach.

Giving rewards is not enough. Constant guidance is essential, pointing out the bad with the good. No one wants to be the Bad Guy, and criticize. But the manager must, sometimes.

8. Must not need a crutch (including a rulebook).

He must be able and willing to operate on his own, and to live largely by his own decisions. "Everyone deserves the right to fail; and we sure don't hold the group manager's hand to see that he doesn't."

9. Must be very sensitive to "people problems."

Personal problems often affect job performance. First, a manager must be aware of them; second, be able to help the employee discuss them; third, know when outside help is needed.

(The next 10 pages could be filled with real-life instances of "people problems," no two identical.)



10. Must continue to earn his position, the right to manage. He needs to continually broaden his knowledge and abilities. If he fails to grow as his people do, he will find himself left behind.

In addition to these basic requirements, there are the more specific managerial skills-"commercial" ones, if you will. The group manager must be a good administrator, able to handle often-mountainous paper work. He must use the right people on the right jobs, and be able to shift in midfield to respond to sudden orders or component shortages; keep current on company policy and relevant law; boost morale in the face of bad situations; arbitrate interpersonal problems without becoming a participant in them; continually upgrade himself, through reading or education; have mechanical ability (in most cases); maintain Tek standards, even if his crew contains green employees; get his group's support to meet "unreasonable" demands; be an open and effective communications link; decide priority of labor and materials; and know "the people" better than anyone in the company.

Etc. etc. etc. . . .

So much for the job as seen from the "top." But how do the job-holders themselves see it?

Listen now to a fictional group manager (a composite of several in Product Manufacturing) assessing his job:

"Yes, people problems are continuous—but they're not unpleasant. I can think of only once or twice I've faced a problem so negative as to make me upset or angry.

"Trouble-shooting parts shortages sounds routine; but it's tough; material flow is a great problem—to have them when you need them, in the right amounts.

"Good communications are essential. With other groups, for instance, when their needs conflict with yours. The big secret is to understand the other guy's problems.

"When I get new people, fresh from the street, they often know only hearsay about Tektronix. They learn what the company is all about from me, mostly. I must explain policies adequately, so they feel comfortable, and make them feel they're participating.

"On Swing, communication is really important. Swing-shift people live in a different world, out of the mainstream of staff and support activity that you see during days. They want to belong—totally. If Tekweek copies run short, or the pastry isn't too fresh, it matters. And we have to have good contact with the day people, about the work we must jointly do.

"Another problem is how to make the most of an employee's inborn ability to progress. Your own busy schedule must never interfere with this obligation. Some employees are real hotshots. It's a crime not to help them to the limit.

"As to learning, there's no limit on how far you should go—and there's nothing you can learn that won't help you.

"There are so many requirements that often they clash—they have to. But, that's what we're here for."

By encouraging our group managers to rely on their own answers rather than imposing cut-and-dried solutions on them, we do run some risk of chaos. Top Product Manufacturing managers assess the risks this way:

"If a variation isn't disruptive or harmful, we encourage the tendency to vary. Not every manager wants to be a manager; some are foremen at heart. We hope to change their attitudes. . . .

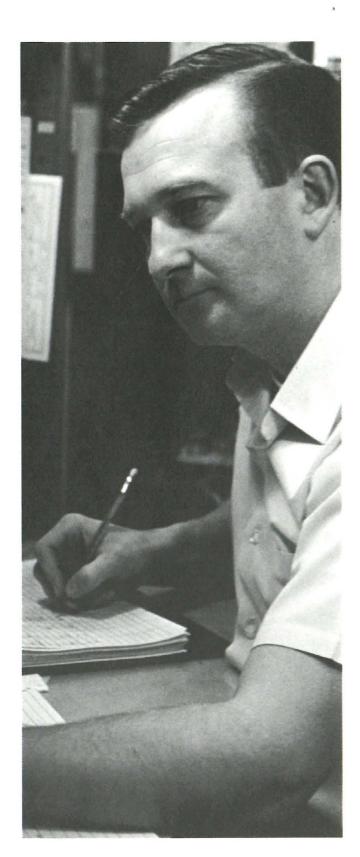
"As we get bigger it's harder to do away with the rule book. The sheer numbers of groups makes it hard to communicate in detail with any one of them; and consistency is more and more important. Thus, more ground rules seem necessary; the narrower the manager's job becomes, and the less freedom he has to be different. It's like flying. The more planes in the sky, the more rules you need. We must keep questioning this tendency, and strike the best possible balance."

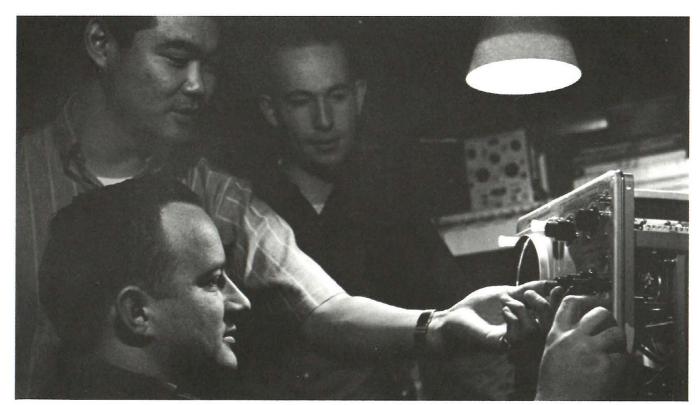
How do you attain this balance?

"In our system, we've chosen to live with a large gray area—and trust in human strength to make it work.

"First, you do need basic ground rules, for consistency's sake. They must be carefully chosen, so the manager is neither cast adrift nor handcuffed.

"We all want maximum freedom, and we all know that people (including managers) grow faster in a free atmosphere. But, in dealing with human beings, we can't allow risks past a certain point."





When individual managers vary in approaches and techniques, we meet the need for consistency by a whole lot of interface up and down, and across, management levels. This direct discussion results in a stronger organization.

"No one is turned loose in a position where he can hurt some other person. He can stumble and fall, lose efficiency, cost us money . . . but we can't allow one person to harm another.

"Everyone needs room to make mistakes—human as well as financial. One way we guard against injustice is to have an atmosphere that says 'This is **not** acceptable—stepping on, or hurting, someone.'

"We work hard, all up and down the line, to keep our common goals revealed, so the manager doesn't need a rule book, but can use his own God-given judgment.

"We must disclose our failures also, if we're going to have a society here that doesn't get forced into following rule books.

"The strength of a company is that people like their bosses. If we let the manager grow, people in his area will necessarily grow—and so will Tektronix.

"If George is free and takes risks and makes human judgments, people see him as a human being to whom they can relate. It's hard to identify with something as abstract as The Company."

What are the rewards of this difficult job? Listen again to our composite group manager:

"I think among the most rewarding things is to say 'I hired' or 'I trained that person.'

"Also, there's no day that something new and different doesn't happen. In a way, it's like going to school.

"Another big reward is to see a problem solved. That's a wonderful thing. Unsolved ones, on the other hand, make life miserable.

"And there's no bigger satisfaction than to upgrade someone's work who is failing."

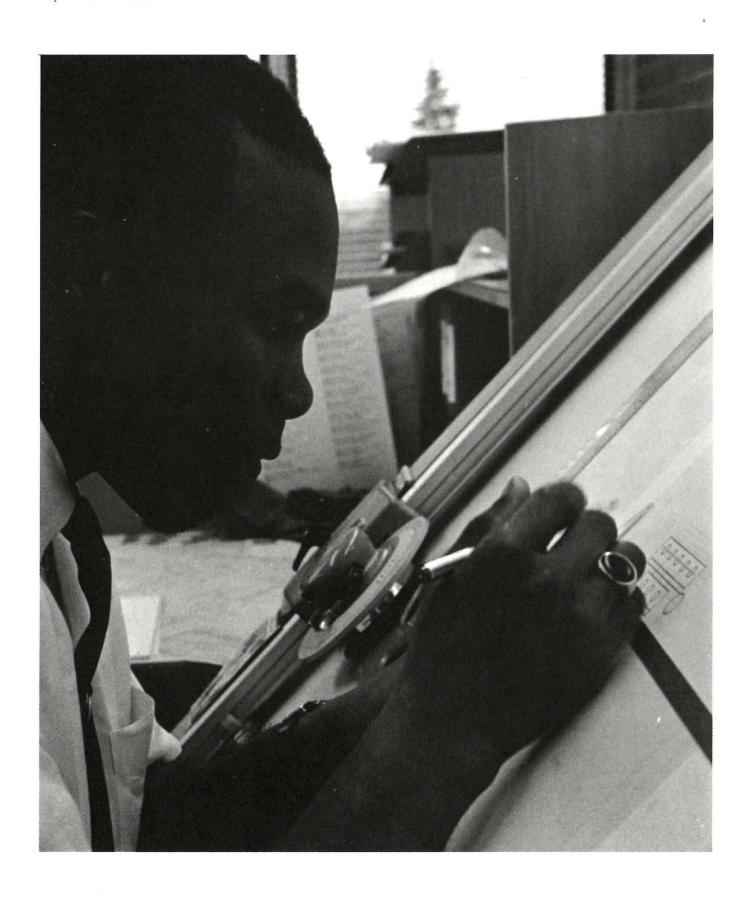
Says Ken Spooner, Product Manufacturing manager:

"A guy who has successfully handled a crew of people and its day-to-day problems has a real feather in his cap. His rewards include having been able to bear out the faith and trust of the people he manages."

Adds Mike Park, vice-president:

"It's a tremendously difficult job. We tend to get impressed with a guy who can run two computers. But an individual who can work with the worries, insecurities and drives of 20 or 30 human beings—who are far, far more complicated than any electronic machine—think how impressed we ought to be with him."

". . . There's a tremendous pressure within a person, to expand his resources . . ."



no time for 'taters



It isn't uncommon at Tek to have a variety of job responsibilities. One person who more than fits this category is Homer Speer.

Homer, for several years, has been Engineering accountant; in addition, he does special accounting assignments for Manufacturing. And, he recently was named Retirement Trust administrator, responsible to the Trust Administrative committee, chaired by Keith Williams.

As Engineering accountant, reporting to Vice-President Bill Polits, Homer helped establish accounting reports and a system to produce them, and define what is needed in Engineering in the way of accounting. His special assignments for Vice-President Mike Park include preparing Manufacturing operating budgets and forecasts, and advising on such problems as accounting reports to see that Mike has adequate cost and expense information.

Homer's latest assignment is trust administrator. The trust office, among other things, maintains all records required by the Administrative committee and acts as liaison between participants (employees and ex-employees) and the Administrative committee.

He is available to speak about the program to employee groups, on request.

The Trust is supported solely by contributions from Tektronix through its profit-sharing program. The amount going to each participant account is a percentage of the profit share based on gross annual pay. Currently the value of the participant accounts is \$30 million; there are about 7000 participants.

Homer came to Tektronix in May 1962 as Fabrication & Molding accountant. He worked with Cost Services and plant personnel in establishing inventory and costing procedures.

Asked why he came to Tektronix, Homer said that, although the company where he was working tried to be fair, he felt he had a lack of free expression and influence. From what he had heard about Tektronix, there would be a lot more opportunity here.

"Compared to other companies, this is the land of opportunity, because the company is people-oriented instead of thing-oriented. This atmosphere is hard to maintain because of the size of the company; what maintains it is a built-in concern for the people. This attitude, to both employees and the community, makes it much easier to be a better citizen; it's hard to be a better citizen when the environment is not conducive to it."

In addition to his other duties, Homer is corporate secretary of University Village Shopping Center in Seattle, a whollyowned business of the Trust. Also, he is vice-chairman of Washington County Planning Commission, which helps formulate long-term land use for the county.

Homer is also corporate secretary and board member of White Rock Bottling Co. of Oregon, treasurer of Tektronix Employees Federal Credit Union, treasurer of Beaverton Elks Lodge and past director of National Association of Accountants.

Homer graduated from Beaverton high school in 1949, and attended Vanport and Lewis and Clark colleges. He was called to active service with the Air Force in 1951 and served 18 months, 17 of them in Alaska. After the Air Force, he finished his schooling at University of Oregon, getting his BS in 1955. He has completed about 30 hours toward his master's degree, and taken numerous Education & Training classes at Tektronix. (In fact, he teaches in that program also.)

Homer, through the Foster Parents program, has a foster child, Lucia, in Ecuador. Homer and his wife, Nancy, regularly correspond with Lucia, and send her money for clothes, blankets, food and medical care.

When he's not involved in other activities, he attends Indian Guides camp with his son. The program, designed to have fathers and sons spend more time together, includes monthly tribal meetings, authentic Indian rituals, craft projects and camping. (The average US father spends about 7½ minutes per day per child, he comments.)

He, Nancy and their two children, Earl and Carolyn, live on a five-acre lot in Beaverton, where he has ponics and sundry other farm-type animals. Homer sometimes wishes he had more time to be a tater-picker than a number-picker, he says.

things look brighter



"We've never seen each other since we got married 27 years ago," says Glen Mathewson. "I promised her then that I'd never look at another woman—and I never have."

These light-hearted remarks typify the attitude of the Mathewsons, Glen and Evelyn, toward their common problem: They are blind.

Glen lost his sight through a dynamite accident in a logging camp in 1938. ("I ruined a good hat in that accident," he comments.) Evelyn lost the use of one eye when she was $2\frac{1}{2}$, the other when she was 9, both in accidents.

They met at a school-residence establishment for the blind. He was taking training to adapt to everyday life with blindness; she was living there while going to college.

They've brought up a daughter and helped with the care of their grandchildren. "There isn't anything Evelyn can't do," says Glen proudly. "She knits, crochets, types—anything she decides to try." Friends add that she's an immaculate housekeeper—more than can be said for some sighted persons who work and keep up households. "A place for everything and everything in its place" is a necessity if someone in the household is blind.

Evelyn and Glen both enjoy bowling, dancing and fishing. Glen has appeared on the "Outdoor Sportsman" television program with Jim Conway, where he demonstrated his fishing techniques. He also won notice as Oregon's handicapped citizen of the year in 1959.

Glen will soon celebrate his 10-year Tek anniversary. He's now working in Plastics, carrying out a number of production functions. His supervisor, Paul Zakrzewski, says Glen's tasks are selected on the basis of whether sight is necessary. "We really have just two categories of work where Glen is concerned," comments Paul: "Work he can't do at all, and work he does outstandingly well."

Blindness can actually be an aid to productivity in some work—and even a boost to safety, because it limits distractions.

Determined independence is perhaps the Mathewsons' most noticeable shared characteristic. Once inside their own building, they get around without help.

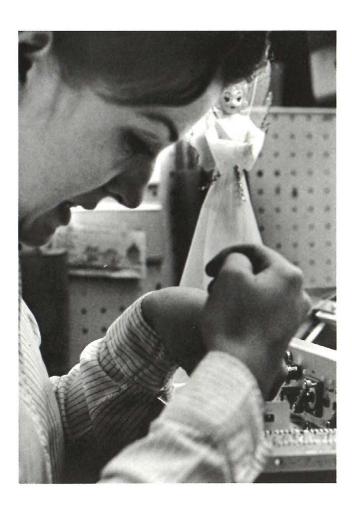
They solve their transportation problem, as many Teks do, by riding to work with another employee from their plant. The only special physical arrangement made for them is a special parking spot reserved near a familiar entrance—and even this was suggested by co-workers, not requested by Glen or Evelyn.

Evelyn, who's been in Plastics $5\frac{1}{2}$ years, is now on leave recovering from an operation that has restored part of her sight. She's had several operations in the past 22 years, working toward this goal. (Tek insurance has proved helpful to them over the years.) She can now, for the first time, distinguish movement. And she can see more clearly the colors of the flowers she loves.

Evelyn's supervisor, Ken Gross, says her productivity and attendance records are very good. He adds that she can compete with sighted persons, in work where touch is more useful than sight. Like Glen, Evelyn also finds that blindness helps concentration in some areas, shutting out visual distractions.

Speaking of her operation, she refuses to get her hopes too high. "I know I can't expect 100 per cent vision, because there wasn't that much potential to work with," Evelyn says serenely, "but any improvement is a step in the right direction. We'll just have to wait and see."

their moonlight job comes first



Holding down two full-time jobs isn't easy. The man who tries, and succeeds, finds that this double duty takes a lot out of him.

But the feat is performed daily by hundreds of Tektronix women. One of their jobs takes eight hours of their day; the other uses 10 to 16 hours—for they are "on call" all the time.

The big job is being a mother. The second job is working at Tektronix. In neither of these responsibilities may she do less than her very best. If she happens to be the only support of her children, her task becomes that much more difficult.

The following story, telling what it's like for a mother to hold down a second fulltime job, is written sympathetically. For Laurie Graves, who wrote it, is herself the mother of four, and an export specialist in our Office of International Operations.

Year by year, as increasing numbers of mothers enter the work force, greater attention focuses on the social and economic effects of this trend.

The working mother with children under 18 faces the most pressing problems: Obtaining adequate care for them during work hours, and budgeting her time and energy to do justice both to her family and her job. Not to be overlooked, though, are mothers working to help older children get through college, and those still working when their children have become at least nominally independent.

Who is the Tektronix working mother? Why is she here? What is she doing for Tek, and what is Tek doing for her?

Tektronix doesn't have statistics specifically on mothers. To get an accurate picture of Teks who are "moonlighting" between the job at home and the job here, a sampling technique is necessary, based on interviews with supervisors and with the working mothers themselves.

Forty-five per cent of all Tek employees are women. Supervisors' estimates and informal observation suggest that perhaps half of them have pre-school children; other mothers have older children only. So the problems of working mothers are a vital personal matter for over one-fourth of all Tek employees—and a major community concern to the rest of us.

Why are they here? With some exceptions, it's because their income is necessary to provide their children a decent living standard. Most of the mothers interviewed are supplementing a husband's income, but a substantial number are widowed or divorced, rearing their children alone.

Supervisors indicate that these employees' productivity and attendance records are substantially the same as those of other women. That is, they are employees who can be counted on to carry a fair share of the work load and do so consistently—quite a contribution.

Does it really pay them to work? Answers to this question range from bitter negatives through enthusiastic affirmatives.

A widow with three primary-school children says that, after paying the babysitter, plus other routine costs of working, she can expect only about \$30 useable income from each check. Meager? Perhaps. But, added to her late husband's Social Security benefits, that \$30 allows her to keep her self-respect and maintain her family decently without asking for help.

Another woman, in somewhat easier circumstances, has five school-age children, and works as much for her own satisfaction as to supplement her husband's income. Her day-care problems are negligible, except in the summer; then, she says wryly, the baby-sitter clears more than she does—about half of every check, in fact. (Many Tek mothers, who regard child care as a necessary and unavoidable business expense, feel it should be tax-deductible, regardless of total family income.)

What happens to the children while Mom works?

Some excellent group facilities are available in the vicinity. Tek mothers who use them praise the care their children get, but bemoan the cost, even though it's reasonable.

In Portland, with help from United Good Neighbors, low-cost nurseries are available to working mothers with low incomes—chiefly those who are supporting their children alone. A few Tektronix mothers qualify for, and live close enough to use, these facilities.

What answer is there for a woman earning, say, \$350 per month and spending \$100 to \$125 of it for child care? She's not "poor" enough to ask for outside help, nor "rich" enough to afford this large a fixed expense.

Suggestions sometimes are made that Tektronix run a nursery for employees' children: In a profit-sharing company, one objection is that this would mean reducing profits for all to provide a service for a minority—although a large one. "But the users could pay for most of the cost, as we do with the cafeteria," is one reply. The rebuttal is that all of us can use the cafeteria, but only a comparative few would benefit from child care. It would tie up Tek funds and manpower in a non-profit-creating activity. Too, a Tek nursery would be no help to a woman with, say, one pre-schooler and another child in primary school outside Beaverton.

Tektronix, however, is far from indifferent to the need for more, better and less costly child-care services.

Arnold Labby, employee counselor, serves on and holds office in committees concerned with every facet of child-care and family problems, ranging from local groups through national ones. One of the greatest and most persistent problems regarding day-care facilities, he feels, is setting and maintaining at least minimal standards.

Says Arny, "I am increasingly aware of the needs of mothers at Tek. However, I can't do much more for them than to share some of my knowledge and experience with them.

"I sometimes feel that I'm being a little hard-nosed about standards—but my experience has brought me into contact with some unbelievable day-care situations concerning infants and other pre-schoolers: Mothers who hadn't much choice, because of the cost, find they've been leaving their children in homes with alcoholic men (and women, too, sometimes), homes where other serious disturbances exist, and homes where the children won't be fed if she doesn't bring them something.

"For the last five years, I've been a bear about standards—and we really have only minimal ones now. My concern isn't so much that we enforce a lot of rigid rules for day-care operators, but that—once we establish some realistic standards—we train the operators so they can meet them. Then they can take pride in offering acceptable day-care services at reasonable cost. And, you know, I don't believe that's an unrealistic goal.

"It's painful enough for a woman to leave her young children each day and go to work. But it's unbearable for her if she can't feel confident that her child will have adequate care. And, when the child is too young to tell her anything, she must have reassurance from some other reliable source. That's what this business of standards is all about."

Recently, Arny and Bill Webber (vice-president) helped present to the state legislature SB32, a bill to certify day-care centers. No action was taken on the bill at this session, however.



IS THERE an "average" Tektronix working mother? It's doubtful. But Patricia Taylor is typical of those women employees who hold down fulltime jobs both at Tektronix and at home. Pat is shown at her job in Assembly, Plant 2, and with her two children, Robbie, 4, and Michlen, 21/2.

As Arny points out, although this concern is a serious one for the entire community, the final responsibility will always rest with the mothers themselves. If enough of them demand that operators provide proper food, sanitation and sleeping accommodations, the pressure of their demands will be felt, be believes. And the actual expense of meeting at least minimal standards might not increase costs by more than a few cents per day.

"While we can't solve people's personal problems," Bill says, "we can help them find their own solutions. And sometimes we can pave the way a little by making our interest known to the right people."

In addition to setting standards, it's important to publicize the need for adequate facilities in our area, and to encourage capable child-care people to locate here. Tek people, including Arny, Bill and Tom Sloan (Employee Relations) have been active in this respect. One example of this effort is a day-care center on Jenkins road, popular with many Tek mothers, whose owner decided to establish it here partly through our encouragement.

What about school children too young to be alone, who arrive home an hour or so before their mothers do?

Community day-care centers can offer some help if situated near the children's school or home. For others, the answer often is a stay-at-home neighbor who'd like to earn some pin money, or an overlapping of shifts for two working parents.

Tek mothers solve their child-care problems in a number of ways.

For many, the solution is a sitter who can come to the house, or one who can take children in her own home. One source of help is Tekweek, company newspaper, where free ads can be placed asking or offering child-care services.

Perhaps most blessed of all working moms is the one with the willing, energetic and available mother or mother-inlaw. Grandma may spoil the youngsters a bit, but chances are she'll give them the best of loving care.

In many families, the parents work different shifts and can arrange for one or the other to be home with the children at any time. This both solves and creates domestic problems, but many young couples striving to establish firm financial foundations consider it an acceptable temporary solution.

What happens if one parent is late getting home, making the other late to work? The consensus among Tek supervisors seems to be that anyone can have a problem now and then. "But," said one, "you have to be fair to the group. If anyone is late or absent too often, I've no choice but to remind her she has a job to do, the same as everyone else."

What about staying home with a sick child? One widow, who is supporting her children alone, finds this a frightening question. Her supervisor has been very patient and understanding, letting her use unscheduled vacation time, she says, but she knows he must consider the whole group. She's had



to take more than average time off for family illness. "What will I do if he can't put up with any more?" she asks, Unpaid-absent time can help a little in a crisis, but too much of that would be unacceptable to the mother or her supervisor.

A child's serious sickness is enough for a mother to face. What can she do when her income is necessary to give that child food and medicine, and she must choose between neglecting either her work or her child? If she's lucky, an understanding friend or relative will help. If not, she'll have to make her own difficult (and often lonely) choice. It's a rare working mother who can afford hiring a practical nurse even for a day or two.

On the positive side, Tektronix parents are assured that their children won't be denied the best medical care for lack of money. One Tek mother lost her preteen daughter after 2½ months of hospitalization in a special room and treatment, including brain surgery, involving a number of specialists. "Of course it was hard for us to accept," she says, "but it made things a little easier knowing that she had everything possible done for her. Tek insurance paid several thousand dollars; we never could have managed that."

Perhaps as valuable as financial help was the emotional support from friends at work. Every Tek who's been through a personal crisis knows what this support can mean.

Mothers of young children aren't the only ones with special problems. A woman with a son in Vietnam can't be expected to pay full attention to her work on a day when the war news is grim. Again, friends help a lot, if only by sharing the good or bad news—and sometimes in more concrete ways. When one mother got word that her son, seriously wounded in the war, would arrive at a California hospital,



co-workers quickly and quietly passed the hat to see that she could go to him without delay. Supporting her family on her own income alone, she'd have found this sudden large expense hard to manage. Her friends' caring this much, she felt, boosted her son's morale, as did her presence.

Many Tek mothers are working to help older children get through college. Some, with children in high school, are starting early to work, and saving toward college goals. More than a few of them are studying along with their youngsters not always for a degree, but maybe to keep up with latest developments, or simply for the pleasure of learning.

An embodiment of the plans and problems shared by Tek mothers can be found in one with four children: A boy in college, two high-school-age sons and a nine-year-old daughter. Although she's working chiefly to help them through college, she also finds personal rewards at Tektronix. Her son in college was a recent Tektronix Foundation scholarship winner—a triumph not reserved for Tek employees' children, but more exciting when Mom and Dad both work at Tek.

She and her husband belong to Rockhound club. Her paintings have been displayed at Tektronix. She feels that working has helped her gain extra respect from her older children; they know their mom is vitally involved in stimulating activities, and that she's competing and holding her own in a demanding commercial world. Her only reservation is that she'd like to have more time with her young daughter—a hard choice like that faced by every mother who decides to take a job.

However, as one career-minded mother puts it:

"I could stay home scrubbing floors, hating every minute of it, and probably put in longer hours than I do right now.

Since I have a good job, I can afford the luxury of hiring someone to do most of the housework. I get home shortly after the kids get in from school, and my evenings belong to them—more than they would if I still had housework to battle. Maybe I'm making excuses because I want to work, but I really believe that my children are very mature and self-reliant, mostly because they've had to depend on themselves and on each other.

"In 20 years or so, we'll know if my theories were any good."

Bill Webber says:

"From the very early days of Tektronix, great dependence has been placed on female employees. Much as we try not to discriminate, women definitely handle some jobs here very well that men find difficult.

"Most of our women employees have been working mothers. I know working has proven difficult at times when children were sick or adequate child-care facilities scarce. Each of them deserves compliments and appreciation for such a fine job here, as well as being a capable housekeeper and mother.

"Many times over the years I've met children of our working mothers, and have been deeply impressed with the fine jobs our gals have done at home as well as here.

"Through the efforts of each employee, and those of Tek management, we strive to build a desirable atmosphere in our company and in our community. For all of those who live and work here, it's a continuing effort, and one that's never finished."

teks



THE LIFE OF an industrial editor has many joys (which we won't bother to list) and at least one frustration—traditionally, anyhow: There's no outlet for humor.

Now this may be debated. Still, when the twin demands of humor in industry are that (a) you should write something about your company, and (b) funny writing must be funny about something, you generally wind up trying to be funny about the company—which entails certain risks, as you might guess. And so the grumble goes.

Comes now one Jack Buckley of Motorola, who has found a place for humor by making one—a funny little publication by the name of Collage, which he sends out, in his words, "from time to time." It contains some interesting and whimsical stuff which, he says amiably, we may freely snitch.

Recently he advised Motorolans on how to deliver technical papers at conventions. The same advice may apply to Teks also, who sometimes fall (or are pushed) into the category of technical-paper-presenters. So here, mauled slightly in the excerpting, are some of his thoughts:

The main one is that no technical chap will listen to a polished speaker: "They'll think you're some kind of PR guy and not take you seriously."

So, he suggests:

- 1. Learn to drawl.
- 2. Use visual aids properly. Make slides from copies of wrinkled Polaroid prints. Show them at least one paragraph after you refer to them. Have the projectionist show half of them upside down.
- 3. Work on your diction. Strive to be completely unintelligible: "A clearly enunciated presentation establishes you as a Marketing type or, even worse, someone who has taken a Dale Carnegie course."
- 4. Learn the art of false climaxes. Under no circumstances put "In conclusion" further down than the middle of your talk.
 - 5. Run overtime.
- 6. Fumble with the microphone. "Pretend you don't know it's working, and tap and twist at it throughout your talk. Keep asking if you can be heard. Learn the technique of the ear-splitting feedback. (Or, conversely, say you don't need one of those clumsy things; then speak in a monotone from a corner of the stage.)"
- 7. Change your topic, to something far afield from what you'd had them list on the program.
- 8. Shuffle your notes; drop your note cards on the floor; reassemble them in a random manner.
- 9. Grow a beard, or rent one. Wear levis, a black turtle-neck sweater, a brown corduroy sportcoat with elbow patches, and dirty white sneakers. Have a pipe that must be relighted every 4-5 minutes.

"The main thing to remember," Jack concludes, "is that a professionally delivered paper establishes one as a fraud."

AT A RECENT COUNCIL meeting, someone was talking about a way to increase Tektronix income. The move he was recommending, he said, wouldn't mean a whole lot of money—in his words, "only about a million dollars."

"Well," commented Bill Walker (Product Planning): "A million here, a million there. It all adds up . . ."





A LOT OF Teks go hunting, but few of them hunt rattlesnakes. Al Swanson (Controller) hunts rattlesnakes.

It sounds risky, and it is. At first, Al admits, you're very particular where you walk.

How did he happen to take up this hobby? His answer makes (some) sense:

"You see," Al explains, "I don't play golf . . ."

MUCH OF this Tek Talk issue tells about our changing company. Undoubtedly, managers who reorganize their divisions and departments in the year ahead will have to spend a lot of time writing Newsletters to explain to folks why the changes were made.

Some managers allow as how Newsletter writing is a chore they don't much like. Others say they hate it. To help them, Tek Talk herewith offers its (patented) Letter-Buddy.

Instructions: After pasting them on cardboard, cut out wheel and pointer, and attach them with a pin through their centers.

Now you're ready to write your Newsletter, using the master in the center of the wheel as your model:

At the first blank, spin pointer; copy

into the blank the indicated word with the same number. Continue to next blank; repeat process until Newsletter is done. There are over a hundred combinations, which ought to cover just about any change you come up with.

The Letter - Buddy, diligently used, should save Tek hundreds of managerial hours, and greatly (1) enhance our (2) operational (3) posture.

