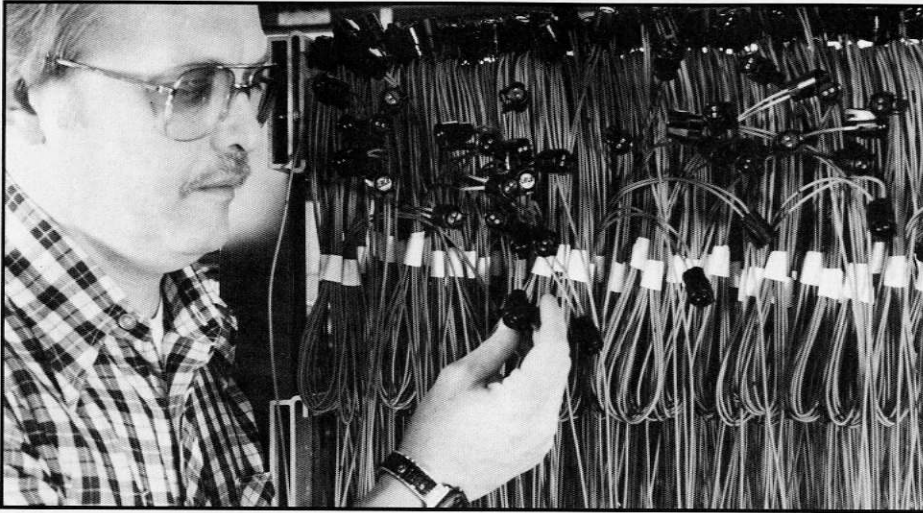




CABLEGRAM
PACKARD ELECTRIC



Bob Talkington, Dept. 4131, examines two-way Pull-to-Seat connector seal assemblies at the Thomas Road plant in Warren. (See story on Page 10)



On the cover: John Gilliam, Dept. 808, checks a fiber optic ribbon to assure proper cutting. This product is used on GMC truck dashboard consoles.

Photo: Richard Clapp Photographic, Inc.

Packard Electric Cablegram

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He isn't kidding

Page 4

Vice President E. Michael Mutchler talks about competitiveness, the future and Packard's importance to General Motors.



Built to last

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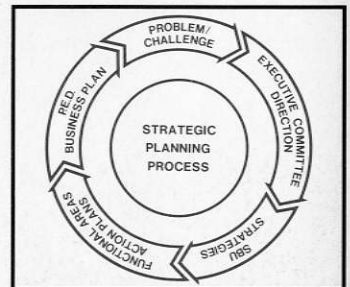
The GM10 is built to last — and so is its Packard harness. Processing requirements help Packard create the superior harness for the superior vehicle.



The business game plan

Page 8

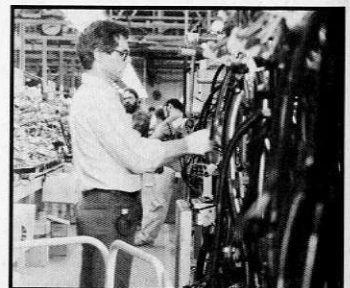
Packard sets its sights on the top prize — competitiveness — with its strategic business plan.



The Quality Edge

Page 10

Nine Packard plants earn awards by knowing their customers. This 1986 Model Year Quality Award may be expanded to include the Excellence concept in the future.



A word from the general manager

Focus on your customer

You've heard a great deal about the Excellence concept lately. At this point you're probably wondering, "When will we begin?" and "What does this mean to me?"

I intend to answer those questions for you. As we progress toward Excellence, the meaning will come into even sharper focus. Because Excellence is one of the division's major objectives, we need a clear understanding of what we need to accomplish and how we're going to accomplish it. Believe me when I tell you we've already begun.

Last year I explained that Excellence would be centered around "Exceeding your customer's expectations." This year we'll see how we're going to get there. You can't

begin to exceed or even meet your customers' expectations until you've identified those customers and focused on their needs.

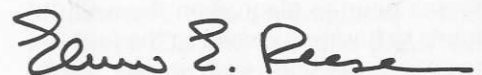
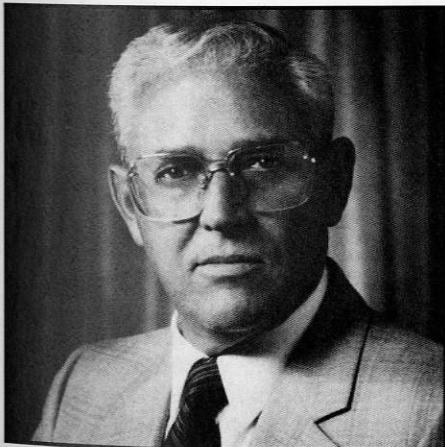
Even now the division is conducting a training course which we call "Excellence 101." Eventually every person working for this division will be schooled in the concepts contained in the course. I consider it an essential first step on the ongoing path toward Excellence.

By February 1 all top managers of Packard will have undergone Excellence 101 training, which is identifying your customers. Excellence 102, which involves identifying services to those customers, is under way. If we're to achieve a change in attitude, that change has

to start at the top. Only then can we ask each and every Packard employee to make a similar change in attitude — an attitude that says we're going to do it right the first time, every time!

Excellence is a habit, a way of life. It's common sense! But as many a philosopher has noted, common sense is not so common. So take some time today to think about your customers, internal and external.

If you do this, then you've taken the first step on the path toward Excellence. We're all together on that path, and I assure you it will be one well-traveled. It's the only way for us to succeed in the marketplace and preserve our futures.



ELMER E. REESE
General Manager
Packard Electric Division

He isn't kidding

Vice President E. Michael Mutchler talks about competitiveness, the future and Packard's importance to GM.

(Editor's note: This interview took place in December, 1986, in Nashville, Tenn., prior to the restructuring of the automotive components groups. At the time, Vice President E. Michael Mutchler headed the Electrical Components Group, which included the Packard Electric, AC Spark Plug, Rochester Products, Delco Products and Delco Remy divisions. The newly-formed Body and Engine Components Group under Mutchler will include the AC Spark Plug, Delco Remy, Fisher Guide, Harrison Radiator, Inland, Packard Electric and Rochester Products divisions.)

By Patricia Reilly

It's a rough market, and it's getting rougher. When Vice President E. Michael Mutchler talks about competitiveness, he isn't kidding.

He expects Packard to keep up with the torrid pace of the electronic power and signal distribution system industry. He's proud of Packard efforts to trim costs and gain new business.

Mutchler noted that when Packard measures its accomplishments, it doesn't point to plaques on the wall. It points to business gained in the face of fierce competition, such as the 1986 addition of Toyota and Saturn Corp. Packard plans to supply Toyota's American-built CVX vehicle and Saturn's new vehicle program slated for the 1990s.

Looking toward the future, Mutchler expanded on the opportunities available to Packard Electric and the other component divisions:

Cablegram: What do you see as the prime opportunities for GM's component divisions in 1987?

Mutchler: The primary opportunity is in the total vehicle sales in the United States, and General Motors'

penetration of the domestic market. General Motors car divisions are our biggest customers.

In the short term, we're tied to the success of the corporation at the vehicle sales level. At the same time, we have some very positive things developing in several of the divisions — they've been able to demonstrate their competitive advantage and start supplying customers outside General Motors. That trend, I'm glad to say, is growing.

Our outside business is getting stronger, and that places those divisions in a much better position to ride the fluctuations of the marketplace.



"You're seen as a progressive and forward-thinking organization."

photo: Reilly

— Mutchler

Cablegram: You point to Packard Electric's potential. What do you expect in terms of accomplishments in 1987, considering what we have achieved so far?

Mutchler: Packard Electric has been reasonably successful in attracting outside business such as Volkswagen,

New United Motor Manufacturing, Inc., and others overseas. I look for more improvement of that nature.

I hope that Packard can continue to attract outside business, as well as continue to demonstrate that it is the most competitively viable option for electrical power and signal distribution systems within General Motors.

Cablegram: You seem buoyant about Packard. Where are the division's strengths as you see them?

Mutchler: I think the strengths of the division lie in the diversification efforts that have been undertaken in terms of product technology, people programs and its supplier network. The division has done an outstanding job of demonstrating its technology responsiveness to its customers, especially since we're being driven by an increased electrical content in almost every vehicle line — our competitors are feeling this pressure also. We have responded very well, and our customers have recognized that.

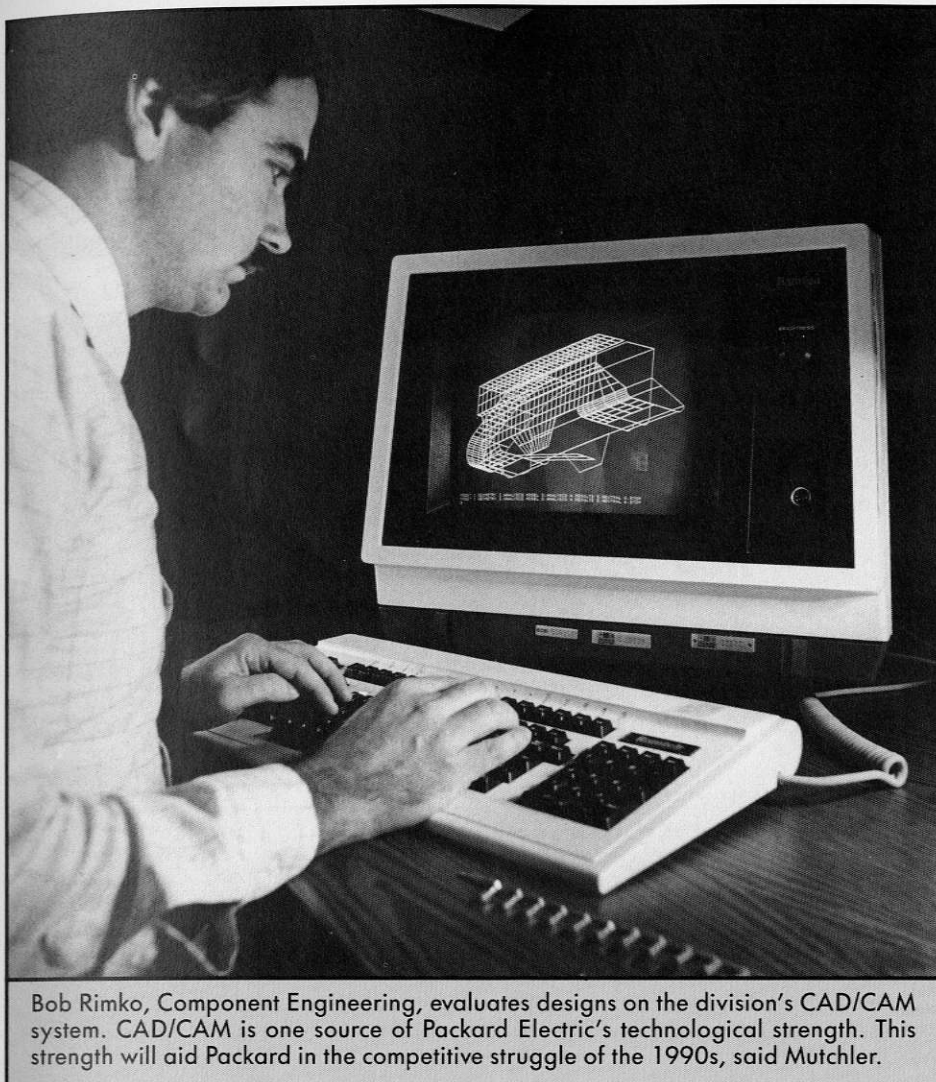
Many of your programs have improved the actual competitive position of the division, in addition to improving the perception of the division in the customer's eyes — programs such as employee involvement, participative management, the local contract and multi-tiered wage structures in Warren and Mississippi.

You're seen as a progressive and forward-thinking organization. Undoubtedly the ties that Packard has made to the supplier network in the United States as well as in Mexico have enhanced the overall competitive position. It has allowed us to not only retain General Motors business but to attract outside business, which contributes to the overall growth in terms of sales for the division, and jobs for the employees.

Cablegram: You mentioned progress. How do you rate Packard with the other component divisions in terms of the various concerns to which you point?

Mutchler: I think you're doing very well. Over the years Packard has demonstrated an exceptional ability to recognize the competition and to initiate innovative ways of beating the competition. I say this from the standpoints of product and process technology as well as people involvement and people management.

It isn't something that began in the last year; I think it probably started 10 years ago. It's gradually evolved into a combination of product and process



Bob Rimko, Component Engineering, evaluates designs on the division's CAD/CAM system. CAD/CAM is one source of Packard Electric's technological strength. This strength will aid Packard in the competitive struggle of the 1990s, said Mutchler.

technology, people involvement, management, and a supplier network that puts Packard in a pretty favorable position.

Cablegram: Packard is moving forward with the Excellence concept. What are your feelings about this, and what assets or advantages do you see associated with Excellence at Packard?

Mutchler: The Excellence concept is outstanding. It's a way of making people aware that everything we do in conducting our daily business is important. Excellence in the way we do our jobs has a direct bearing on customer satisfaction, competitive position, quality of life, and satisfaction of people inside the organization.

I think it's a good way to reach everyone in the division and let them know that what they do is important. It's important to the Excellence of Packard as a manufacturer, and the perception of Packard by customers.

Cablegram: With the GM10 program we've seen people from many disciplines brought together to create

a superior product. To what extent do you expect the division to be involved in such up-front engineering in the future?

Mutchler: Without a doubt I think that all of the divisions will have to be involved more in the future. My peers in the car groups feel the same way. We need an up-front environment from our supplier network inside of General Motors at the component divisions, as well as from those outside. I would expect that component divisions like Packard will be more and more involved in the beginning of vehicle design, from both a product and process standpoint.

Suppliers to Packard will become more involved with the division in that same process. Therein lies a double responsibility for Packard. First, Packard must become involved with the vehicle groups and provide that service to them, but at the same time you must reach backward into your own supplier network to get them involved with you.

Cablegram: As vice president of the Body and Engine Components Group, what do you hope to accomplish in the coming year?

Mutchler: I hope to demonstrate where we have our competitive strengths and weaknesses. We must get a good consensus understanding of those strengths and weaknesses, within both the Body and Engine Components Group and the customer community. That would give us a strong focus as to where we're going in the future — in terms of our resources, human efforts and financial investments. We're all trying to react to the competition in the marketplace.

Cablegram: How do you feel we're responding to competitive pressures?

Mutchler: I think we're on the right track. Like many people in the organization, we're all impatient to see it happen faster. We want to get answers more quickly — so we can give ourselves and our people some positive assurances about where we are and where we're going. We want to tell them which specific businesses will survive.

We've experienced some frustration in getting the answers to all those questions. Our goal is to get the answers out to the organization as quickly as we can.

One difficulty is getting people to realize that we didn't become strong or weak in a competitive environment in just the last 12 months. It's something that has evolved over the long term — probably at least a decade. In many cases it isn't something that's going to be changed in the next 12 months. We hope to identify and focus our efforts on particular product lines in the next year.

Cablegram: What message do you have for Packard Electric's work force?

Mutchler: I would paraphrase what Mr. Reese (General Manager Elmer E. Reese) said in introducing the Excellence concept. That concept, that dedication to Excellence in performing jobs internally and responding to customers, is absolutely essential to the long-term competitiveness of the division. From a personal standpoint, I'd say that the Excellence concept is the only way that the division and the corporation in total are going to realize their total potential strength.

If I were to issue a challenge to Packard, it would be to make that Excellence concept work as fast as you can possibly put it together, in all different areas of the organization.

Built to last

Stringent processing requirements will help Packard Electric assure the GM10 is not just another car

When the GM10 car program makes its debut next fall as General Motors' answer to Ford's Taurus and Sable twins, customers will be getting more than sleek styling and a roomy interior. Thanks to Packard Electric's 14 processing requirements, they should also be seeing fewer wiring warranty incidents and better overall quality.

As the car slated to attract a big portion of the mid-sized market, the GM10 needs to live up to the reputation which will precede it. GM and Packard Electric intend that reputation to be one of World-Class Quality packaged in a futuristically-designed car.

Packard Electric's processing requirements will help the division make a world-class wiring assembly for the GM10, according to Joe Trevis, superintendent, Reliability.

"Our attitude toward our customer has changed. We used to manufacture our product to the best of our ability, package it, and then not worry about it after that," he said. "Now we're concerned that the person who eventually owns the keys to that car is a satisfied customer. We're trying to make sure that everything we can do internally is done to perfection."

Processing requirements are conditions which ensure conformance to specifications in the manufacturing of the product. Together, the division's Reliability and Manufacturing Engineering areas developed a list of systems combining the most successful Packard Electric processing requirements into a single program for GM10.

By culling and modifying the best requirements, Packard Electric aims to make the GM10 the first vehicle to reach World-Class Quality wiring goals as outlined by the corporation, according to Trevis. The success of the GM10 car program will serve as a model for future car programs.

By bringing together 14 stringent processing requirements for a single car program, the division will address any non-conformance in its automotive power and signal distribution systems. This will prevent problems such as unseated terminals; pinched, cut or chafed wires; disconnects and non-conformance to specifications. These are just a few of the problems that can appear between the time the product is manufactured and when the customer drives the vehicle out of the showroom.

"To address these problems we put together a list of systems or technologies which would increase our quality in the problem areas," said Kim Rydzak, Reliability. "This is our first across-the-board attempt to take the best of all worlds and combine it into a single package. Our processing requirements will do that for the GM10 program."

GM10's processing requirements fall into four categories, including:

- Systems — ensure detection of unacceptable parts
- Management — establish internal systems that will produce the best quality parts and will react to problems as they are detected



Don Mathews (right), trainer, Skills Development Center, explains the vision and load cell system monitors to Betty Snell (left), and Rose Marie Norman, both of Dept. 4712. Vision and load cell are part of Packard's GM10 processing requirements.

- Tool — ensure a better product as it is being produced
- Lead prep — deals with problems unique to lead preparation

Each of the individual processing requirements has an owner responsible for implementation of that requirement. Requirements new to the GM10 program are the vision and load cell system, and bump bar holders. The vision portion of this inspection system assures proper preparation of the wire for termination. The load cell in the terminal application presses monitors consistency in the crimping process. Bump bar holders improve the contact between a pin and terminal, which

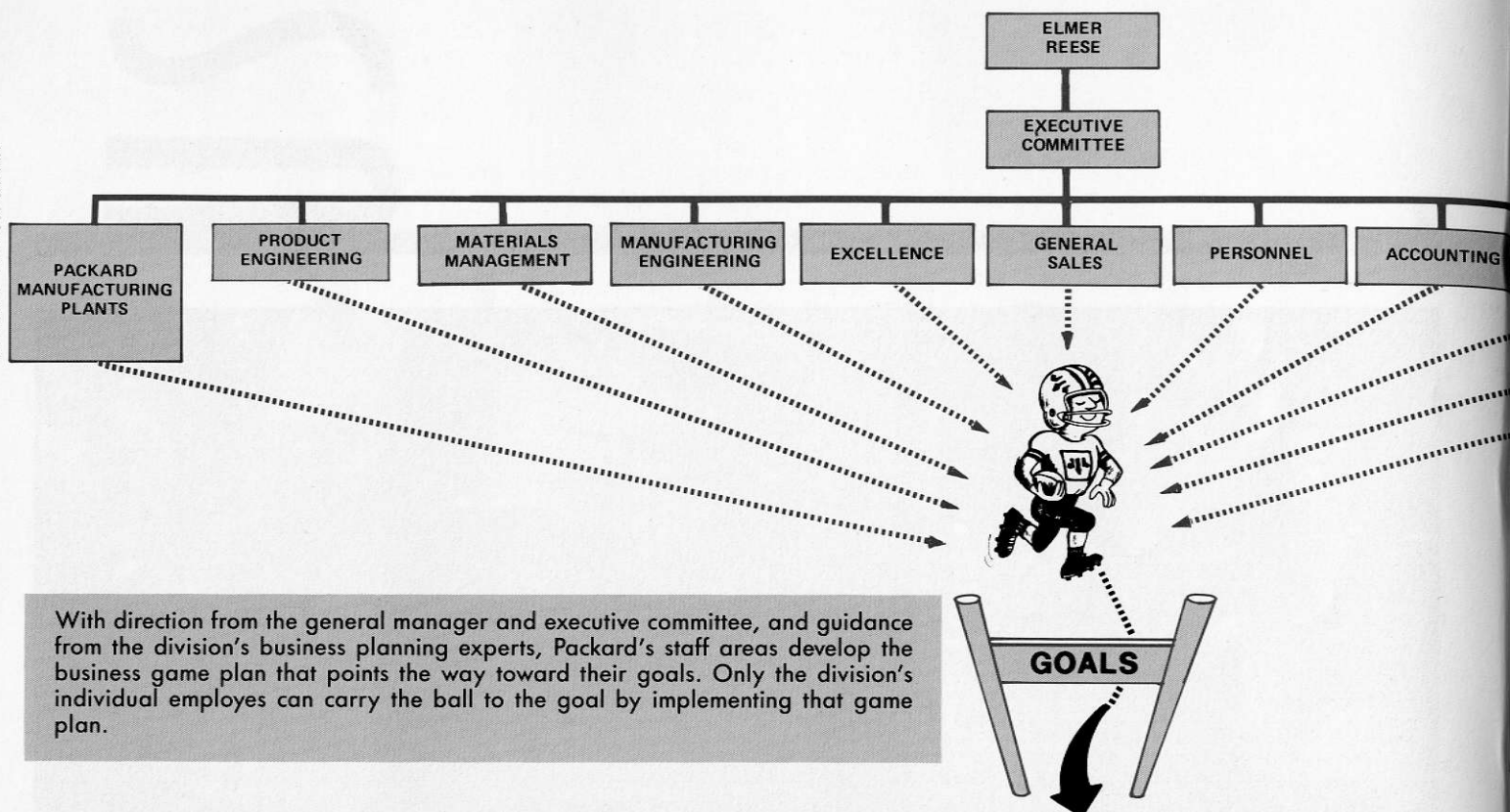
makes ring out easier and prevents product damage.

"Expanded usage of requirements like these will depend on how effective they are," Rydzak explained. "The emphasis for GM10 is on preventing defects, rather than using inspection techniques to find them."

Trevis pointed out that the challenge presented by GM10 is using the processing requirements all together on one car program to create a world-class wiring system. That organizational job falls to Don Corder, who recently replaced Bill Proctor, now executive engineer, as coordinator of the GM10 program for Packard Electric.

Corder coordinates the quality, engineering, manufacturing and financial aspects of the GM10 program for Packard Electric. He provides an organizational focus to assure understanding of and adherence to the processing requirements, and also to begin the task of measuring their impact on vehicle quality.

"Packard Electric and GM have invested heavily in the processing requirements," Corder said. "We must measure their effectiveness in order to provide future quality direction. Ultimately, that will contribute to the success of all General Motors car programs."



With direction from the general manager and executive committee, and guidance from the division's business planning experts, Packard's staff areas develop the business game plan that points the way toward their goals. Only the division's individual employees can carry the ball to the goal by implementing that game plan.

The business game plan affects all staff areas

Packard's five-year business plan is the division's game plan for beating its competition. But the plan is only part of the winning solution. It will take understanding by the players who will execute it — the division's people — to make Packard the winner.

Although Jerry Florence is one of Packard Electric's premier business planners, he claims he has yet to write a single strategy. The reason, according to Florence, manager of Business Planning, is that he and his organization exist to help staff areas develop their own plans — not to create the plans for them.

"Let's face it, there are a lot of difficult issues facing us," Florence noted. "Business planners are there to provide an added look at what the division is doing. We make sure that the tough areas are addressed in the business plan. We don't want to circumvent issues that could come back to haunt us."

An excellent business plan is one which everyone can understand, Florence said. Employees should not need to refer to an elaborate document each time they make a decision.

Reaching the goals of the business plan can only be accomplished through teamwork. For example, im-

plementing cutter bank technology in Packard's Mississippi Operations required the cooperation of engineering and maintenance support systems, as well as manufacturing.

Why a business plan?

"The business plan indicates what's going to be important to Packard five years from now," Florence added. "With current constraints on people and capital, we need to get maximum utilization of our resources, both capital and human."

Maximum profitability can only be achieved through effective use of the division's resources — especially its human resources.

Management's duties are obvious. But what can an individual do on a day-to-day basis to help the division achieve the goals outlined in the business plan?

The division's Mission, Objectives and Strategies (MOS) point to what areas are most important. These objective areas include: Excellence, quality, human resources, competitiveness, technology and growth. Now for a closer look at how individuals can contribute in these areas.

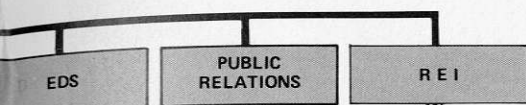
Excellence: Individuals can promote Excellence by making a special effort to exceed their customers'

expectations. That can mean something as simple as answering the telephone with a pleasant tone of voice and trying to help the caller. It may mean making an extra effort to provide neat housekeeping for the work area. The division's Ten Steps Toward Excellence will provide guidance regarding on-the-job improvements.

Quality: Packard people can improve quality by using Statistical Process Control (SPC) charting on the job. They can also remember that quality is aided by "keeping things simple." Simple steps made to improve quality can translate into big gains in customer satisfaction.

Human Resources: One obvious but sometimes overlooked way to make a contribution is for people to be on the job when they are scheduled to work. Compensating for absenteeism can have a draining effect which hurts other areas. Also, employees can foster change through participation in employee involvement groups.

Competitiveness: Individuals can promote competitiveness by working to reduce scrap in their areas. Using the five "whys" to discover the root cause of a problem can increase competitiveness. Asking "why" until the real cause is found prevents wasted



effort on solving a symptom rather than a problem. Employees can also enhance competitiveness by utilizing the Suggestion Plan. An adopted suggestion can enrich both the division and the suggester.

Technology: The division's engineers are currently working to upgrade the use of technology in many areas. Tri Mark II, a vehicle containing a more advanced version of Packard's voice command module, will soon be in existence. As technology progresses throughout the division, it's the skilled tradesmen who keep that technology operating. Even now, individual apprentices are being trained with the latest available technology.

Growth: Growth is the result of striving to attain the previous five objectives. Growing companies are the ones who have well-formed plans, and good track records when it comes to implementing those plans. For Packard Electric to grow, the division needs a solid business plan, and the cooperation of its people in making it work.

"The factors we have to deal with change from year to year, and so does the business plan," said Elaine Musick, business planning administrator. "It's really a 'living business plan.' Of course, the closer we come to any given year, the more finite and accurate our plans tend to be."

Having a realistic business plan has become a "must" as the North American auto industry undergoes rapid changes. Foreign competition is threatening to encroach on GM's market share. Packard Electric's business plan must reflect GM's response to its competitive challenges, such as the drive toward world-class quality. Information relating to GM's future car programs has a great effect on the thrust of the division's business plans.

Financial targets, types of vehicles and options, types of engines, facilities, car volumes — these are all details upon which the business plan is built. These things directly affect Packard's people. Business packages move, employees transfer to branch plants, old ways of doing things are changed. It affects operations greatly enough to be subject to review several times a year.

"The business plan isn't a task that we complete and then set aside until we have to look at it again next year," Musick pointed out. "It's a working tool we should use and refer back to when we've got hard choices to make. The business plan can help us make the right choices."

Individuals at the base of the business planning structure — those in the

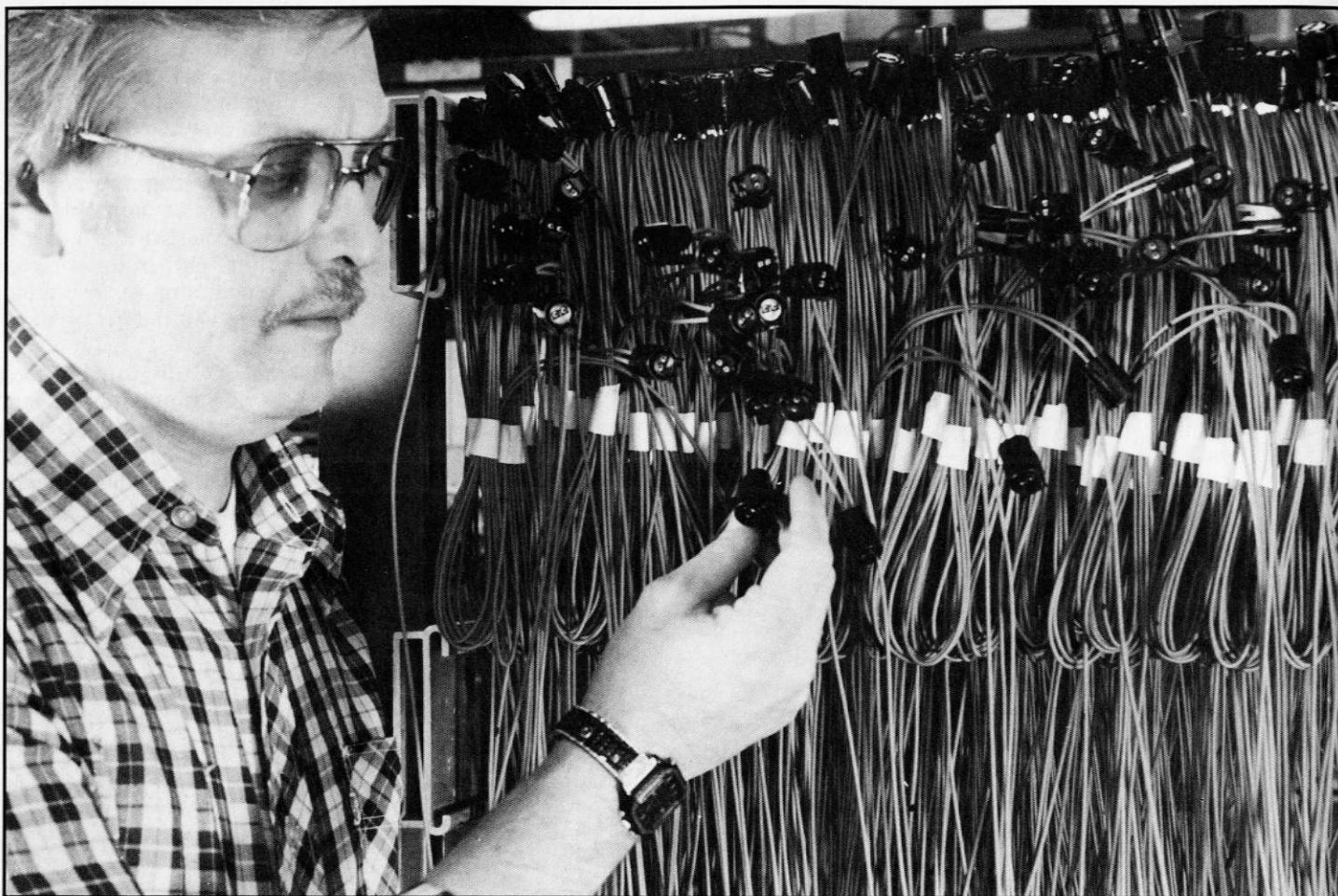
plants and offices working most closely with the product — may at first feel their input is unimportant. On the contrary, Florence has an analogy which points to how vitally important they are to the plan's overall success.

"Sound business planning is like a program which trains an athlete to compete against the world's best," he said. "If even one part of the athlete's body isn't functioning as it should, then that athlete will not be performing at his peak."

"The same is true for business planning. Just as a running back can't carry the ball very well with a broken toe, Packard Electric cannot compete very effectively without the cooperation and will to win of each of its people."



Successfully dealing with a problem or challenge results from the Strategic Planning Process. The division's overall business plan starts with the Mission, Objectives and Strategies developed by the Executive Committee. The four SBUs take over at this point and develop specific objectives and strategies for each business unit. The business strategies are then supported with specific action plans by the functional areas. Throughout the process there is constant communicating and input from each group involved. Once complete, the process repeats itself.



Bob Talkington, Dept. 4131, examines two-way Pull-to-Seat connector seal assemblies at the Thomas Road plant in Warren.

The Quality Edge

Knowing what the customer expects helps nine Packard plants earn quality awards

It's no secret that superior product quality is a high priority for Packard Electric. What's not as well known is that certain Packard plants in Ohio and Mexico have successfully done something extra about it.

The quality results are in, and they look good. Nine plants earned highest honors for product quality in the 1986 model year. They received Packard's 1986 Model Year Quality Award.

Packard plants intend to convince the division's customers that their products are better than those of the competition. According to General Manufacturing Manager Donald R. Dedow, who presented the awards, the 1986 Model Year Quality Award applies only to assembly operations at this time. However, "our component

and lead prep operations are key to making our assembly operations outstanding. It's part of our quest for perfect quality."

Winning the award is a step toward Excellence. "These plants are anxious to solve problems and prevent them from recurring," declared Joe Trevis, superintendent, Reliability. "The results also show that the plants have a positive attitude on quality. You'll see this in their housekeeping and in everything else they do."

Dedow added that meeting such high quality standards is another part of the Packard Production System — the division's effort to provide perfect quality. "You cannot be Excellent if you provide the customer with bad material," he emphasized. "We intend

to make this year's outstanding performance next year's standard performance! We must become better and better, always striving for perfect quality."

1986 model year results showed nine plants rating perfect or superior on quality for 10 months. To achieve a perfect rating, each plant attained the maximum 145 on Quality Index, in addition to no customer complaints. The plants needed at least a 141 rating on the Quality Index and fewer than five customer complaints to achieve superior status for a given month.

Non-allied plants were measured through the Quality Control organization in Mexico. These included plants supplying Chrysler, New United Motor and Volkswagen.

"All the plants have worked hard to satisfy the customer as they strive for Excellence. It has taken awareness and dedication on their part," Trevis said. "As more and more plants improve, we will make the criteria for winning an award more stringent. We must meet the customer's increasing expectations."

Future awards may be expanded to incorporate the Excellence concept. This year's awards served to recognize the plants that achieved superior product quality. They included two plants in Packard's Ohio Operations — Plant 41 at Thomas Rd. in Warren and Plant 46 at Fowler St. in Cortland. Mexican plants selected for the award include: Villa Ahumada (Dept. 3124), Rio Bravo Electricos III (Plant 34), RBE IV (Plant 37), RBE V (Plant 38), Chihuahua I (Plant 52), Delicias (Plant 55) and Cuauhtemoc (Plant 57).

Trevis noted that a combination of factors led to the plants' success. He cited training, communications, process certification, and a desire to ex-

ceed the customer's expectations as contributing most to the plants' efforts to improve product quality.

"Working to achieve superior quality at Packard Electric can be a lot like raising your kids — we tend to focus more attention on the bad things that need to be corrected, rather than rewarding the good things," Trevis admitted. "With this award we're trying to change that habit. We intend to recognize those plants with superior quality in the hope of motivating other areas to join them in striving for customer satisfaction."

Hourly involvement

At Thomas Road's Plant 41, Superintendent Tom Flak points to a plantwide effort to improve quality and deal with the needs of the customer. He said systems changes have greatly reduced incidents of misidentification. Hourly employee involvement in the plant's Quality Task Group have helped Plant 41 to maintain its good record.

The Quality Task Group helped cre-

ate a training program for the 1987 model year to improve conditions still further over the accomplishments in 1986. Also, monthly departmental meetings reviewed quality information so that everyone in the plant was familiar with it.

"To be quite honest, the 1985 model year was not a good one for us in terms of quality. I'm proud to say we've worked hard to turn that around in 1986," Flak said. "We tried to make sure we had the same people working the same areas consistently, and we focused on communications with our people as well as our customers."

Flak acknowledged that an occasional customer complaint helped indicate where there were loopholes to be closed in Plant 41's system. Quality studies at customer locations in Janesville and Lordstown helped the plant get a better idea of customer problems and expectations.

Currently the Thomas Rd. plant is performing capability studies on its conveyors to determine where the plant is now, and how it can improve its performance. In January people from Janesville and Lordstown visited Plant 41 to study its operation and to review mutual concerns.

"Providing for and listening to the customer is the only way we're going to survive," Flak declared. "We have to meet their quality expectations. Presenting this quality award to our people recognizes them for the outstanding job they did in meeting those expectations. We've come a long way, but we have a lot more to do."

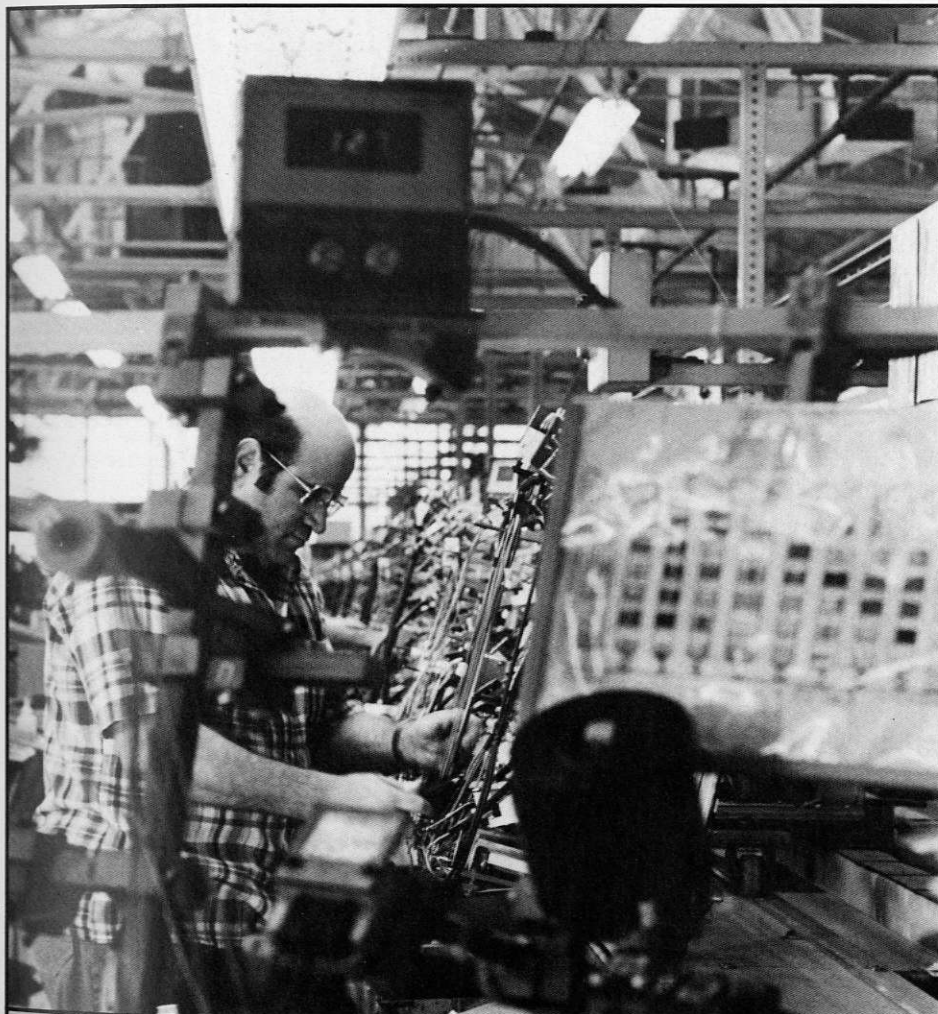
Jim Albrecht, manager, Reliability, Mexican Operations, noted that their plants' performance depended on their people.

Attention to detail, respect for material, conformance to specifications and a willingness to go beyond what was asked — these factors provided them with the positive results now being recognized by the customer.

"Our people know that the customer is king, and that we need to make a great effort to do things the way the customer wants them done," Albrecht said. "To remain in business, we cannot fail to meet our customers' needs on quality, delivery and cost."

Seven of the Mexican Operations' 10 eligible plants received awards for the 1986 model year.

Albrecht added, "Our quality performance was due in part to the quality improvements made by our cut lead and component suppliers both in Ohio and Mississippi."



Ernie Kratsas, Dept. 4131, assembles J-car harnesses at Thomas Road. Plant 41 was one of nine Packard plants to earn the division's 1986 model year quality award.

'Clean Room' Conditions

At Packard Electric-Reinshagen, gaining new business is an opportunity for a learning experience. Manufacturing IBM's voice coil product requires demanding high-precision assembly.

IBM recently selected Kabelwerke Reinshagen to supply it with a voice coil component for use in certain IBM direct access storage devices (DASD). Supplying the voice coil component may serve as a window of opportunity for Reinshagen to gain additional business from IBM (International Business Machines).

"The Reinshagen know-how was very important in gaining this business for us," said Kurt Otten, Kabelwerke Reinshagen's Sales director for the Wire and Cable Product Group. "Succeeding in this business takes a supplier with complete know-how and experience in the fields of wiring technology and assembly systems."

The voice coil product is part of a linear motor, used in IBM DASDs to run the "read and write" unit. With a length of 15 centimeters, this product is a round coil manufactured in a high-precision manner, according to Otten.

IBM formerly completed the work in house, but recently decided to source voice coil. This high-technology manufacturing is conducted under clean room conditions.

"Everyone involved with this high-precision assembly must wear special clothing, as they operate under clean room conditions," Otten explained. "In addition to particular care about

cleanliness, we trained our people to handle special machines and to perform visual control work."

Currently Otten anticipates no further extension of the voice coil product itself into other component business for Reinshagen. Manufacturing the product does, however, provide valuable experience from a high-tech production standpoint.

Otten pointed out that Reinshagen expects to be gaining more high technology-oriented business in the future, from both IBM and other firms.

"IBM is a very important customer because it has a favorable position in a growing market," he added. "It's important for us to learn more about high-precision production which requires special conditions for manufacturing, such as a clean room environment."

Otten termed Reinshagen's pursuit of new business aggressive, as shown by its relationship with IBM.

"We at Reinshagen think we have a wonderful opportunity to extend and increase our business with IBM. Producing the voice coil product is just the first step for us in developing what we hope will become a stronger relationship in the future," Otten said.