# The Packard Electric GLOBE

The divisional magazine covering Packard's worldwide operations



Ten years of partnership and progress







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### Ten years of partnership and progress

by Ryndee Carney

Packard Electric Europe's Hans Weiser reflects on the decade since Reinshagen and Packard first put their heads — and businesses — together.

### A joint venture grows up

by Tina List

Scott Graham, managing director of Packard's Korean affiliate, speaks on the changes Shinsung Packard has experienced since its inception.

#### **Precious resource**

by Michael Hissam

Packard's Mexico West Operations is among the GM sites in Texas and Mexico providing support for local high school students to test water quality along the Rio Grande River.

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Patricia K. Hawkins Public Relations Director

> Ryndee S. Carney Executive Editor

> > Tina List Editor

Phone: (216) 373-3401

GM Network: 8+531-3401

Others contributing to this issue: Michael Hissam Nelson Spencer

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#### On the cover:

Rick Muccio's illustration depicts the relationship Packard Electric and Reinshagen have shared over the past decade.



# 1981 - 1991

Ten years partnership and progress

Ten years ago Kabelwerke Reinshagen joined the Packard Electric family, an acquisition which helped launch the division's global expansion.

Reinshagen, which today is part of Packard Electric Europe, and Packard have established a successful partnership during the past decade: Packard Electric Europe's business grew 37 percent last year, and it now represents 35 percent of the division's worldwide sales.

ans-Jurgen Weiser, managing director of Packard Electric Europe, shared his thoughts on the Reinshagen/Packard connection during an interview with the Globe.

Globe: What impact did becoming a partner with Packard Electric have on Reinshagen?

Weiser: Reinshagen's traditional business strategy was to produce and sell all types of cable and wire to a broad range of customers, including the mining, shipbuilding, aviation and construction industries, power companies, machine makers and the postal and railway services. Automotive wiring harnesses were just one part of our business, representing less than half of our sales. As Packard Electric's partner, we developed a new business strategy to clearly focus on the automotive industry.

What major changes have you witnessed in your business during the past 10 years?

Weiser: In addition to this new focus, Reinshagen expanded beyond its national business borders. We developed from a local German cable maker

to a pan-European operating group which supplies all European car makers with power and signal distribution systems.

Our product and process technology has also changed. Power and signal distribution systems have become much more complex. The growing

content of wiring systems requires more space in the vehicle and increases its weight trends the auto manufacturers do not welcome.

To address this problem, we have developed thin-wall cable, smaller connection systems and modular electrical centers. Multiplexing simultaneously

sending multiple messages over the same wire or optical fiber - is another stage in this development.

Our plants today also look very different from the past. Synchronous manufacturing techniques and new supply concepts with our customers have changed our traditional processes.

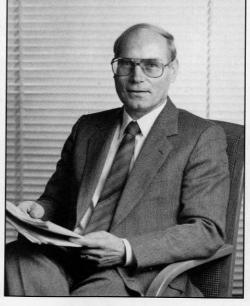
How has your competition changed?

Weiser: It's become more international as trade barriers between nations dissolve. Besides our many European competitors, American and Japanese companies such as United Technologies, Yazaki, Sumitomo and Nippondenso have entered the European market and are fighting for market share.

Technology is changing our competition as well. As the use of automotive electronics grows, companies

> with electronics expertise, such as Siemens and AEG, are increasing their focus on the automotive market.

Automakers' need for highperformance systems, such as power and steering, chassis management, seats, or other technical systems, is creating a demand for systems suppliers. Bosch, Siemens, Veleo, Magneti Marelli, and Lucas have become



(Continued on next page)

"systems houses" which design, manufacture and sell these systems as partners with the car makers. The General Motors Automotive Components Group (ACG) also follows this systems approach.

Another change among our competitors is the growing importance of acquisitions and joint ventures. For example, Siemens bought Bendix and formed a joint venture with Volkswagen to produce automotive wiring.

Packard Electric Europe has experienced tremendous growth — why have you been so successful?

Weiser: Our growth is based on our strategy to be the leader in the European automotive power and signal distribution system business. We strive to meet our customers' requirements in the areas of cost, competitiveness, reliability and flexibility. This has enabled us to take part in the growth of wiring systems content in vehicles. We have also increased our market share by becoming development partners with our customers, operating as a just-in-time supplier and offering other up-front services.

What are the biggest challenges facing the European vehicle industry?

**Weiser:** Europe's vehicle industry and its suppliers must restructure to meet the competitive challenges that EC '92 and the onslaught of Japanese competitors present.

We face increased pressures to reduce our costs and selling prices, which means we must learn to operate with "leaner" organizations. At the same time, we must obtain the capital needed to fund our growing engineering and manufacturing needs.

As our business becomes more complex, we must develop our people's skills. From a technical perspective, our business is becoming more sophisticated; from a marketing aspect, it's becoming more international.

Beyond our business requirements, we must respond to the needs of our employes, our society and our environment. The challenges we face will require all our efforts and creativity.

How have the Reinshagen and Packard Electric corporate cultures influenced each other?

Weiser: Our partnership with

Packard Electric, as well as the growth of the European auto industry, has made Reinshagen more open to cultural differences and enabled us to think and manage more internationally. I think the same effect is visible throughout Packard.

How has being associated with Packard benefitted Reinshagen?

Weiser: Packard's support has proved very beneficial to us. The transfer of technology, especially in areas such as connection components and systems and synchronous manufacturing, has proven invaluable. Another advantage is the global business approach we can achieve by teaming with Packard operations around the world. As part of this network, Packard Electric Europe is a global supplier linked to the world's vehicle manufacturers.

From the beginning of our association, Packard has helped Reinshagen enter and share a new corporate life. Without that support, our partnership would have failed. I think trust and respect between the people in our organizations are the backbone of our success.



Dec. 16, 1980: the signing of the partnership agreement between Packard Electric and Kabelwerke Reinshagen. (Left to right, standing): Wallett Rogers, GM Legal Staff; Russell Fairbanks Jr., GM Legal Staff: Anton Asselman, NKF GROEP Legal Dept.; Raymond Connolly, Packard Divisional Comptroller; (Seated, from left): J.F.A. van der Linden, NKF GROEP Finance Director; C.B. van de Panne, NKF **GROEP President: Martin** Caserio, GM Vice President & **Group Executive, Electrical** Components Group; James Rinehart, Packard General Manager.

### Opening the European market

# Former comptroller reflects on partnership

ackard started thinking about expanding our presence in Europe around 1977, and formed a team to study the European market. In the spring of 1978, I went to Europe to review the

team's findings.

We were confident we could expand in Europe, but we really didn't want to expand the wiring harness market beyond its capacity. We also knew we could not do business in Europe from the United States. To remain the world leader, we had to have a presence in at least two of the three automotive design centers of the world — North America, Europe and Japan. When we looked at it, we decided

it would be far easier to establish a presence in Europe than in Japan at that time. The only alternatives were to have Packard start its own operation in Europe or to acquire an existing company.

Packard had tracked European wiring harness business and growth for a long time. Of course, con-

tent in the harness is what makes up the growth — and as you add power windows, an air conditioner and other options, the wiring harness grows. Europe had lagged the U.S. in content for a number of years. As we saw growth in the United States, we knew that same growth would occur in Europe five or 10 years later.

Using that knowledge, we predicted what would happen in the first 10 years of our partnership; I would guess that we probably underestimated the growth.

Another consideration we had was Packard's competition. We wanted to expand our presence in the European market ahead of Yazaki to maintain our number one position worldwide. Yazaki entered Europe about five years after Packard — they got there a few steps behind us and haven't caught us yet.

Why Reinshagen?

Packard wanted a strong, top quality partner — and we felt Reinshagen was the only company in Europe that met our expectations. In addition, Reinshagen sold to Opel, so we were well aware of their capabilities and production response to changes in the marketplace. Their customer base went beyond GM automobiles. Reinshagen also has a vast amount of non-GM business — Mercedes, Porsche, Audi — so all of their customers could benefit from that type of expansion.

And Reinshagen was a well-managed company. They produced top quality harnesses and cable. Basically, Reinshagen started as a cable producer, then got into the wiring harness business as a means of selling cable. At the time, they were not into component production — they didn't produce terminals or connectors — so we felt they could use our expertise in producing terminals, plastic parts and ignition

cable.

One of our original plans was to establish a Reinshagen-Packard technology transfer operation. There was much thinking around the division that we could transfer Packard technology to Reinshagen, principally in the areas of terminals, connectors and other plastic parts. But I foresaw that Reinshagen,

being a premier cable manufacturer, would be ahead of Packard in certain areas and could transfer their technology to the United States.

So for the first two years, we worked very hard at making sure the technology went to both sides of the ocean.

Obviously, I'm very proud to have been involved with this part of Packard's story. Nowhere else in General Motors at that time did such an acquisition take place. Getting through all the committees at the corporate level was a very long, tedious process. We had to go through the corporation on many occasions to present this idea — which was considered unique at the time — and convince the corporate people that we knew what we were talking about and we could handle this organization.

Looking back at the past 10 years of our partnership, it's been a clear success.

— Raymond E. Connolly (Raymond E. Connolly, who retired in 1987, was Packard's divisional comptroller at the time the Reinshagen/Packard partnership was formed.)

# In the beginning..

In August 1982, Don Dedow, then Packard's General Manufacturing Manager, said, "We have found that the acquisition [of Reinshagen] is providing many opportunities for technology transfers in both directions." It was just over a year since Reinshagen and Packard's partnership began—and those involved would have no idea how true that prophecy was to become.

Today, barely 10 years after the two companies joined forces, Reinshagen holds a commanding list of accomplishments: sales have more than quadrupled, market share is up more than 7 percent, they have facilities in 13 countries — where it was three countries before, and 12,000 employes have been added to their ranks.

It's a partnership that could have sprung from "twin sons of different mothers." Reviewing Reinshagen's history, the similarities between its humble beginnings are eerily close to Packard's.

Established on April 1, 1874, by Karl Reinshagen and Heinrich Huettenhoff as a manufacturer of textiles, Reinshagen's focus switched a few years later to braided wire. It was a large change for the textile company, and interestingly mirrored the Packard brothers' initial light bulb and burglar alarm business. Founded to produce household products, both soon after diversified into electrical wiring.

Reinshagen continued its growth into electrical products with telephone cords and, later, with the booming German mining and shipbuilding industries. When the automotive industry grew in Germany, Reinshagen was there to wire the vehicles.

Today, Reinshagen and Packard together lead the worldwide power and signal distribution system industry. And to think it all began from a few light bulbs and some textiles.



### A joint venture grows up

t's been four years since Packard International's Korean affiliate began operations.

The following interview with Scott Graham, managing director of Shinsung Packard, delineates the changes during those years.

Globe: Shinsung Packard (SSP) has been in operation for about four years. How has this joint venture changed and matured?

Graham: SSP has gone through an evolution over the past four years which has brought it from an enterprise narrowly focused on one basic customer platform — the LeMans — to a multi-plant operation building products for five different vehicles for the Daewoo group. Currently, much emphasis is also being placed on diversification into products for other major original equipment manufacturers (OEMs) in Korea — including Hyundai, Kia and Ssangyong.

Through contacts with other potential customers in Korea, SSP has concluded that full support engineering services have become a prerequisite for doing business in this market. This realization will bring about our biggest

change to date: we must change from a simple build-to-print supplier to a fullservice engineering company, similar to Packard Electric.

This change will not be easy in terms of cost or human resources, but we are already taking the first steps. These include plans for sending several of our best engineers to Warren, Ohio, for training, reorganizing our Engineering Department to increase focus on applications and customer support engineering, and continued teaming with Ohio-based Packard engineers.

What products do you currently make? Who are your major customers?

Graham: SSP's current product line includes a full range of harness applications from instrument panels to antilock brakes (ABS). In addition, sales and distribution of Packard components to the Korean market are taking a more significant place in our sales strategy. Although we do not manufacture Packard components at Shinsung, we have established agreements with several local firms to manufacture Packard-designed connectors locally for internal consumption.

Our major customers are Daewoo Motors and Daewoo Shipbuilding, which will be responsible for producing the Tico, a mini-car based on Suzuki's S-car platforms. SSP recently added Kia to its client list, producing ABS harnesses for the Concorde vehicle. We hope this will be the beginning of a growing relationship with Kia.

Shinsung Packard is growing up along with the Korean auto industry. To what extent are Korean OEMs, such as Daewoo, following the same developmental pattern that the Japanese OEMs established in the 1980s? How does this affect component suppliers such as SSP?

Graham: Well, certainly the Korean manufacturers have followed the Japanese growth pattern to some extent. The Hyundai plant in Bromont, Canada, is an example of a Korean OEM producing vehicles in the North American market based on the examples of successful Japanese "transplants." Export sales have been the key to growth until now, and this strategy has "made in Japan" written all over it.

I believe, though, that Korea will chart its own growth formula from this point forward. The domestic Korean market is assuming a more important role for the future. Last year, exports actually decreased, but overall production increased due to tremendous growth in the domestic market.

As the Korean OEMs become more international, domestic suppliers like SSP that have worldwide affiliations — such as Packard Electric Europe and Packard North America — will be in the best position to grow along with their major customers.

What major competitive challenges face SSP today?

Graham: The major competi-





PACKARD INTERNATIONAL



Soon Ja Kim inspects Shinsung Packard wiring. She has worked for Shinsung Packard for four years.

tive challenge facing us today is cost, especially steeply escalating labor costs. Double-digit wage increases over the past three years have severely pressured the entire Korean automotive industry, and SSP is no exception. If this situation continues, Korea will definitely lose export market share.

SSP's second major competitive challenge is developing full-service engineering capability. The Korean automotive market is demanding its suppliers assume much more of the responsibility for design and validation. The entire Korean harness-building industry is feeling this pressure; those companies who respond quickly will win.

How many people does Shinsung Packard employ? Compare managing a U.S. workforce with managing a Korean workforce.

**Graham:** The workforce is made up of 123 salaried and 532 hourly employes, totaling 655 located in two manufacturing facilities, Yang-Ju and Yong-In.

Managing the Korean Grand workforce presents some unique challenges when compared to the U.S. The decision-making process can sometimes be elusive; just when you feel everyone has agreed, you later discover that what you had understood as consensus was only an agreement to keep considering the matter.

The Korean workforce will often take a job instruction or direction literally. The majority of the time, this is exactly what is desired, but in other cases it can result in negative effects.

The work ethic is very positive and the workforce takes great pride in achieving team results. On a more personal level, what have you and your family learned after living in Korea for nearly a year now? What do you like most about living in Korea? What do you miss from the U.S.?

**Graham:** The Graham family has always had a "gypsy spirit," so the opportunity for assignment in Korea was a real reward. After eight months' experience, it has exceeded all our expectations. I think the opportunity to learn about and live in yet another new culture has been the greatest satisfaction.

One thing the whole family particularly enjoys is Korean food. We had felt that after eight years on the border in El Paso and Laredo, Texas, no cuisine could top Mexico's; but now we have found true competition for top honors.

There isn't any particular item or service that we left behind that we have not

found a substitute for or learned to live without, but if I had to single out one area that we most miss, it would be the ease of getting from one place to another by car. Korea has paid a high price for its explosive growth in terms of traffic congestion. I think Americans take their marvelous road system for granted; believe me: it is the exception, not the rule.

My most rewarding experience so far has been forming good working relationships with so many of my fellow employes at SSP. These relationships have paid great dividends in terms of my own learning curve.

Graham

### Putting it together

Soon Ja Kim, an inspector in the Production Department, has worked for Shinsung Packard since July 1987. Sun Whee Cho, a terminal press operator, has been with SSP for almost five years.

Q: What aspect of your job gives you the most satisfaction?

**Kim:** When a wiring harness assembly passes my inspection and is delivered to our customer, I feel the most satisfaction.

Cho: Frankly speaking, my job is tedious. It requires performing a simple operation repeatedly. But I find worth when SSP's products — wiring harness assemblies — are equipped for many kinds of automobiles, after they have passed through my small hands.

Q: What have you learned from working at Shinsung Packard?

Kim: This company was my first step after graduating high school. I can somewhat taste the world through the company life. And learning the concept of Excellence has been very helpful to me.

I heard about Excellence through quality control training. I learned that Excellence is very important in my life as well as in my job. I think the concept will continue to be applicable in my future.

Cho: The period of four years and nine months with this company is not long, but is not short. Since joining the company in 1986, I have been able to gain many things, especially personal relationships with others. I think that harmony with others is very important.

My experience with SSP will be helpful in my future.

## Precious resource

GM sites in Texas and Mexico are helping students 'wet' their appetites for environmental concerns

o one disputes the value of water.

Many disputes, however, flow during lively discussions about water quality and water pollution. When the emotions surface, it doesn't take much thought to personalize the fact that clean water means life.

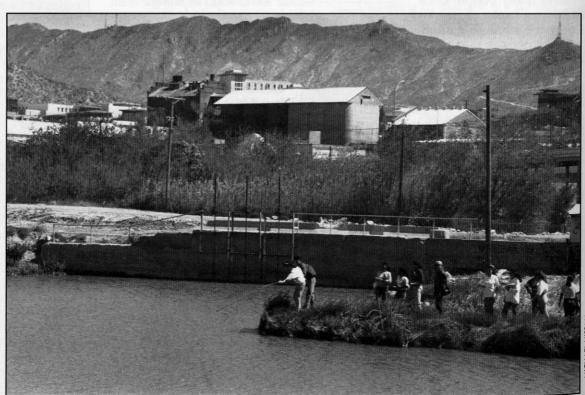
El Paso, Texas, U.S.A., and Ciudad Juarez, Chihuahua, Mexico, are two of the most arid metropolitan areas in North America. And in the desert, clean water for 2 million people is not taken for granted.

During April, nearly 400 high school students from both cities and nearby New Mexico worked together to monitor the quality of the Rio Grande River. Their involvement came as part of Project del Rio, which is sponsored in part by Packard Electric and General Motors.

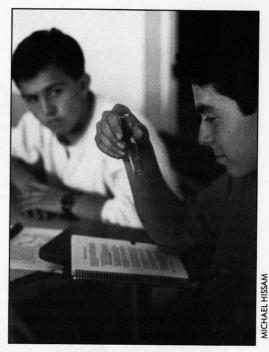
"Project del Rio goes beyond making students aware of water quality and water pollution," said Lisa LaRocque, project director from New Mexico State University. "They are learning that, as individuals, they can make a difference." For nearly three weeks, students from the 12 participating schools took water samples from various locations along the river. "They analyzed their data with an eye toward solutions that can be used to improve the water quality of this river," LaRocque pointed out.

"It's a lot different when we can actually see it for ourselves and perform the tests and understand what is going on through an actual experiment," reported Albert Ortiz, a student from Jefferson High School in El Paso. Ortiz and other Jefferson High students

Looking toward
El Paso, Texas,
from the
Mexican banks
of the Rio
Grande River,
Juarez-area
high school
students gather
water samples
for testing.







Students from the Instituto Tecnologico e de Estudios Superiores de Monterrey examine water samples taken from the Rio Grande River for Project del Rio.

worked up-river, not far from the New Mexico state line.

Just a few miles downstream — where the U.S.-Mexico border intersects the river — students from a Ciudad Juarez high school took water samples adjacent to a Mexican neighborhood and within a few yards of a U.S. manufacturing site.

Students at this location demonstrated their concern, skills and initial findings to representatives from SEDUE, Mexico's equivalent of the U.S. Environmental Protection Agency. SEDUE officials journeyed from Mexico City especially to view Project del Rio.

"We know the project is supported by GM, which is a company recognized in Mexico as one that participates in the solution of environmental problems," explained Alejandro Diaz Camacho, a SEDUE director. He continued, "The important thing about this project is that the students are learning to manage their natural resources. Young people in Mexico and the United States are joining forces to make a better life."

Another group from Ciudad Juarez collected their samples along the

concrete channelized section of the Rio Grande — known as Rio Bravo in the downtown area. Edna Ceballas commented, "General Motors and Packard Electric are showing they care about the city. They want to make it better for the people."

Students from other schools took their tools and marched from buses to key points along the river to record their test data. Ten days later, more than 130 young people from both countries met to share their findings. "They also learned ways to take their message of environmental awareness to their communities," LaRocque explained.

Where did the students and advisors point the finger of blame? The answer is surprising: "We're all polluters. Every one of us in some way pollutes this river," noted Robert Sepulveda, a student at Jefferson High. "What is more important is what we can do to assure that this river will be clean for our children."

-Michael Hissam

### 'More than money'

Project del Rio is one example of how General Motors is working with young people to support the environment, as well as the study of science and mathematics.

GREEN — Global Rivers Environmental Education Network — is designed to give students from elementary through high school the essential knowledge and skills they will need to test, maintain and improve the water quality of rivers near their homes. Project del Rio marks the first expansion of the GREEN program outside of Michigan and Ohio. General Motors, in cooperation with the University of Michigan, helped to launch the GREEN effort.

GREEN has earned several environmental awards, including one from the National Wildlife Federation.

Lisa LaRocque, Project del Rio director, commended General Motors: "GM is doing more than contributing money. GM is here with us as we conduct this project. They are very interested in what we are learning."

# A year in



Tournai, Belgium. First capital of the West and City of Kings. Eighteen centuries of history await you there: Childeric, Clovis, Philip Augustus, St. Louis IX, Henry VIII, Emperor Charles V, Louis XIV — all have left traces of their glorious or fleeting reigns in Tournai's institutions and on its stones.

The history of Reinshagen Tournai, which today is part of Packard Electric Europe, is much more recent.

## the life



Reinshagen Tournai's main facility daily ships product to Belgian and French customers.

reated in 1972 as a part of the Renault group, its original products were diverse: car door panels, fiber optics, wheel sets. Since 1982, Reinshagen Tournai's production has focused on making cable and fiber optics.

When Reinshagen Tournai joined Packard Electric Europe on September 25, 1990, yet another history began.

Of course, not all has changed during that year. Reinshagen Tournai continues to manufacture fiber optics for Renault vehicles, expanding Packard's global network in Europe.

Reinshagen Tournai also continues to serve as a customer-focused supply center. In other words, customers still know only one supplier — Reinshagen Tournai. In addition to products manufactured in Belgium, Reinshagen Tournai supplies products from other Reinshagen facilities.

Reinshagen Tournai makes daily deliveries to three principal Renault sites: Vilvorde in Belgium, and Douai and Maubeuge in northern France. Deliveries are frequent: four shipments a day to Douai and twice daily to Vilvorde.

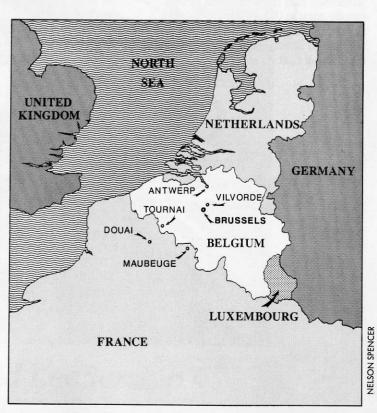
According to Personnel Director Christian de Ketele, Reinshagen Tournai reviewed the organization in the early 1980s to focus more intently on the needs of its customers. As a result, the Belgian operations have worked for several years with a just-in-time delivery system and also implemented a kanban system.

Both are examples of the Packard Production System's ability to cross international borders. Just-in-time delivery requires low inventories, properly functioning equipment and visual controls — kanban cards, in Belgium's case. Reinshagen Tournai uses these systems to maintain high quality standards.

The installation of the kanban system took some time, de Ketele stated. Since 1985, employe groups have reorganized various services throughout the Belgian operations, examining the smallest details of the system. Although not easy, he explained that the reorganization was possible only because of the participation of all personnel.

Today, Reinshagen Tournai faces another challenge: to integrate its operations and Packard's while adapting the Packard philosophy, including the pursuit of Excellence. Reinshagen Tournai's principal objective for the future is continuous improvement along those lines — continuing to offer customers the best product possible.

Belgium, located in northwestern Europe, is the 67th largest country in the world. Major Belgian exports include industrial machinery, transportation equipment and chemicals.



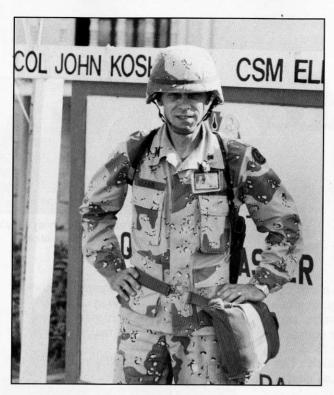
ost people saw the Persian Gulf War's Scud missile attacks from the safety of their living rooms.

John Koshan, Packard's superintendent of Materials Management/Operations Support in Warren, Ohio, U.S.A., experienced just such a missile attack first hand.

Koshan is a colonel in the U.S. Army Reserve's 475th Quartermaster Group; during his assignment, he was stationed in Dhahran, Saudi Arabia, commanding the unit that distributed 2 million gallons of water and 1.5 billion gallons of petroleum to U.S., French, British and Saudi forces.

When the Iraqi Scud missile hit a warehouse serving as temporary housing for soldiers on Feb. 25, a group of soldiers was injured. Although none were members of the 475th, 28 soldiers assigned to Koshan were killed and 98 others injured.

Koshan said the fear of Scud attacks was "something you learned to live with." He added that some soldiers had difficulty dealing with the carnage they witnessed and the aftermath of the missile attack; the military provided psychological counseling for those soldiers in Saudi Arabia and is continuing that counseling for soldiers



Superintendent John Koshan, Materials Management/Operations Support, served in the U.S. Army during the Persian Gulf War. He was one of 31 North American employes stationed in Saudi Arabia.

requesting it here in the States.

When the ceasefire was announced on Feb. 27, "it was a sense of relief," Koshan related. "It was a great feeling to know we had done a complete job. But it also brought on questions like, 'So what are we doing now? And when do we go home?'"

Koshan, who departed for the Gulf on Oct. 2, 1990, will return to work at Packard on July 1. [Editor's note: Koshan was one of 17 Packard Ohio employes who served in the Gulf War; Mississippi employes deployed to the Gulf number 12. Two employes from Packard's Laredo, Texas, facilities also served in the military.]

### On the front line

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