Honda Taps Associates' Creativity to Become a World-Class Customer

How the "good guys" practice what they preach.

Patricia E. Moody

Toronto: 1993 Supplier Conference

All doors leading into the auditorium were locked as suppliers and Honda of America Manufacturing, Inc. (HAM) hosts waited in the hall for the start of the Annual Supplier Conference. For fifty-nine suppliers, this would be an exciting time as their quality achievements would be recognized with a plaque, thanks from HAM top management, a photo, and applause from competitors and fellow-suppliers alike. As the doors opened and guests filed in, massive wall-mounted speakers blasted out "Life is a Highway," Rod Stewart's "Forever Young," and other "people-moving" hits. Strobes flashed on a product and supplier slide show. By the time we took our seats, everybody had loosened up a bit.

What followed was a real "mixed message," happy congratulations on superior performance preceded by tough straight talk on Honda's current market position, down from its previous top family sedan ranking. The company has succeeded in increasing local purchases, and expanding North American vehicle exports. For many, Honda products and production operations are *the* benchmark; unfortunately, the market continues to get tougher as competitors struggle to maintain their positions. Honda no longer enjoys the top spot in every quality or customer satisfaction ranking, and some competitors are beating them on selling price, but ten-year growth statistics are impressive:

- from twenty-seven to 250 suppliers in 1992
- purchases from outside suppliers increased from less than $1 million to over $3 billion dollars
- Increased local design and development — the Accord Wagon and Civic Coupe are complete North American products
- Exports expanded from 5000 vehicles to two countries in 1987, to more than 80,000 vehicles to twenty countries. Export production now accounts for more than five weeks of production for Honda and its suppliers
- Local parts content exceeds 85 percent.

The annual supplier conference is an opportunity for customer and suppliers both to review product development and introduction strategy, and to meet informally. The highlight of the event, the awards presentation, featured fifty-nine awards this year. Not all suppliers win awards — NOK, for example, with two previous wins, went home empty-handed. Says Dave Nelson, Honda of America Manufacturing, Inc. (HAM) vice president of purchasing, "that hurt. They'll be back."

HAM President Tom Yashiki credits purchasing and suppliers with much of manufacturing's success. "We draw strength by sharing the unique capabilities of our suppliers. Despite 1992 successes — in March, 1992, Honda North American-built cars became the number one import vehicle sold in Japan, surpassing traditional leaders BMW and Mercedes-Benz — 1992 was a tough year." The first half of 1993 was equally tough with strong competition from Chrysler LH, Ford Taurus, Toyota Camry, and GM Saturn. In 1992 Honda improved its Initial Quality Survey (IQS) ranking from sixth to fourth;

The Quality Award —

To be evaluated, an OEM supplier must have less than 60 ppm for quality and better than average delivery performance.

Acro Products, Fort Wayne, IN	— breather tube assembly
Ambrake Corporation, Elizabethtown, KY	— brake caliper assembly
A.R.S. Manufacturing, Virginia Beach, VA	— valve stem seals, piston o-rings
Atlantic Tool & Die Co., Cleveland, OH	— stamped parts
Bridgestone/Firestone, LaVergne, TN	— tires
Central Spring, Edison, NJ	— mesh rings
The Excello Specialty Co., Cleveland, OH	— door liner, step garnish, bumper protectors
Freudenberg- NOK General Partnership, Ligonier, IN/Cleveland, GA	— engine and driveshaft seals
Goetze Corporation of America, Wausau, WI	— intake and exhaust valve seats
Kaneka America Corporation, Marion, OH	— bumper absorbers
L & W Engineering, Belleville, MI	— stamped parts
Long Manufacturing, Mississuaga, Ontario	— Gold Wing radiator
MBL (USA) Corporation, Ottawa, IL	— engine belts
Midwest Stamping, Bowling Green, OH	— stamped parts
Minnesota Rubber, Minneapolis, MN	— Gold Wing fuel tank mounts
Morton International - Automotive Safety Products, Brigham City, UT	— inflator for driver and passenger air bags (SRS)
Motorola, Seguin, TX	— radiator fan timer
Multimatic Manufacturing, Markham, Ontario	— door hinges
NEC Technologies, McDonough, GA	— SRS control units, ABS control units
NTN Bearing Corp. of America, Elgin, IL	— hub bearing assembly
Piolax Corporation, Canton, GA	— fasteners
Polycon Industries, Guelph, Ontario	— bumper absorber
Rockwell International - Plastic Products Businesses, Lenoir, NC	— bumper beams, battery trays
Schrader Automotive, Monroe, NC	— tire valve stems
Topy Precision Mfg., Elk Grove, IL	— fasteners
U.S. Engine Valve Corporation, Southfield, MI	— intake and exhaust valves
United Technologies - Automotive Division, Tampa, FL	— door lock control unit

The Delivery Award —

To be evaluated, an OEM supplier must have perfect delivery — zero early, zero late — and better than average quality.

Acro Products, Fort Wayne, IN	— breather tube assembly
AFC Stamping & Production, Dayton, OH	— ATV frame and hitch
Allied Ring Corporation, Manchester, MO	— piston ring set
Associated Fuel Pump Systems, Anderson, SC	— fuel pump assembly
Bearse Manufacturing Company, New Windsor, NY	— Gold Wing trunk and saddle bag liner
Blanchester FCM, Blanchester, OH	— power steering gear box
Borg Instruments, Delavan, WI	— clock
Crown Manufacturing, Brantford, Ontario	— spare tire lid
Delco Remy - A Division of General Motors Canada, Oshawa, Ontario	— battery
Enkei America, Columbus, IN	— aluminum wheels
The Excello Specialty Company, Cleveland, OH	— door liner, step garnish bumper protectors
Goodyear Canada, Valleyfield, Quebec	— tires
Indiana Precision Technology, Greenfield, IN	— intake manifold
Johnson Rubber Co. - A Division of Duramax, North Baltimore, OH	— cover striker
Long Manufacturing, Mississuaga, Ontario	— Gold Wing radiator
Manchester Stamping, Manchester, MI	— spindle ring
Hilite Industries - Mapco Division, Carrollton, TX	— compressor bracket
McCord Payen, Athens, AL	— engine gaskets
Minnesota Rubber, Minneapolis, MN	— Gold Wing fuel tank mounts
Motorola, Seguin, TX	— radiator fan timer
Multimatic Manufacturing, Markham, Ontario	— door hinges
NEC Technologies, McDonough, GA	— SRS control units, ABS control units
Nelson Division, Neillsville, WI	— muffler
Plydex Manufacturing - A Division of Decoma International, Aurora, Ontario	— front bumper facia
Polycon Industries, Guelph, Ontario	— bumper absorber
Rockwell International - Suspension Systems Company, Chatham, Ontario	— front and rear stabilizer bars
Showa Aluminum Corporation of America, Mt. Sterling, OH	— condenser/cooling unit
Tri-Con Industries, Lincoln, NE	— Gold Wing seats
TRW Technar - Transportation Electronics Division, San Dimas, CA	— SRS dash sensor
U-Co Industries, Marysville, OH	— tie-rods
U.S. Engine Valve Corporation, Southfield, MI	— intake and exhaust valves
United Technologies - Automotive Division, Tampa, FL	— door lock control unit
Yeasel, Lewistown, OH	— mudguard assemblies

Honda Winning Suppliers

The Plant Manager Award *— Presented to suppliers who performed a single accomplishment in extreme excess of normal high expectations.*

American Yazaki Corp., Casa Grandes, Mexico	— wire harness
Atlas Industrial Contractors, Columbus, OH	— construction services
Belletech Corporation, Bellefontaine, OH	— glass/sub assemblies
Buckeye Welder Services, Hilliard, OH	— welding supplies
Cambridge Metals & Plastics, Cambridge, MI	— fabricated tubular components
Claude Sintz, Incorporated, Deshler, OH	— springs, wire forms
Grede Foundries, Wichita, KS	— machined castings
K Wm. Beach Manufacturing, Springfield, OH	— sub assemblies
Lincoln Electric Co., Columbus, OH	— welding supplies
Millat Ind. Corp., Dayton, OH	— machining
Motorola, Seguin, TX	— electric components
OMNI Source Corp., Lima, OH	— aluminum and ferrous scrap
PPG Industries, Cleveland, OH	— paint manufacturing
PSB Company, Columbus, OH	— painted parts
Rocknel Fastener, Rockford, IL	— fasteners
The Ross-Willoughby Co., Columbus, OH	— industrial supplies
Safetywear, Bellefontaine, OH	— safety equipment
Sims Bros., Marion, OH	— waste disposal, recycling, scrap
Sumitomo Electric Wiring Systems, Edmonton, KY	— wire harness
Yeasel, Lewistown, OH	— plastic injection molding
Yusa Corp., Washington Court House, OH	— hoses, molded rubber

The Productivity Improvement Award *— Presented to suppliers who initiate significant productivity or cost improvement activities.*

Central Spring, Edison, NJ	— mesh rings
Intac Automotive Products, Lemont, IL	— automotive fluids
Stevens Auto Products, Greenville, SC	— floor mat
L & W Engineering, Belleville, MI	— stamped parts
Midwest Stamping, Bowling Green, OH	— stamped parts
Parker Hannifin - Automotive Group, Batesville, TN	— air conditioning pipes, hoses
Sumitomo Electric Wiring Systems, Morgantown, KY	— wiring harness and fuse box

The Production Support Award *— Recognizes raw material suppliers who have exhibited superior performance for both quality and delivery.*

D & S Plastics International, Prairie, TX	— bumpers
LTV Steel Company, East Chicago, IN	— coiled steel
New Huron Industries, New Boston, MI	— clutch pistons
Republic Engineered Steel, Canton, OH	— bar steel
Wabash Alloys, Wabash, IN	— aluminum alloy bars

however, the CSI (Customer Satisfaction Index) fell from number three in 1991 to number nine in 1992.

"Our Products Must Cost Less," Says President Yashiki

Suppliers heard that despite volume gains, the company lost market position on its last few models. In a recent survey of more than 29,000 1992 model customers, "sales price being too high" was frequently mentioned as something they would like to see improved, or as a reason they would not buy another Honda. Buyers also want more responsiveness, and quicker delivery of service parts.

Suppliers hold the key to all three issues — quality, satisfaction, and costs. Mr. Yashiki offered this strategic response to increased competitive challenges: "Accelerate manufacturing where the market is, and purchasing where manufacturing is. Develop exclusive North American market models and continue to work the QCDD (Quality, Cost, Delivery, and Development) program."

The QCDD Program is Honda's integrated approach to improvement on many fronts. The company knows consumers expect quality as a given, price and features to be competitive, and the design package to be newer and flashier than last year's models, an area for which Honda has drawn criticism. Conference attendees heard Dave Nelson describe a reevaluation and strengthening of quality management systems designed to help Honda and its suppliers network. To meet this objective — strengthened fundamental capabilities and quantum improvements — HAM is offering suppliers assistance through BP (Best Position, Best Productivity, Best Product, Best Price, and Best Partners) teams, a new supplier development concept that has resulted in significant productivity and cost improvements for fifty-two suppliers.

The QCDD Program

Q — Quality

The conference message to all suppliers and internal HAM producers was to build quality into the process. Continued parts localization will also help build quality, speed, and lower costs. Benefits accrue to suppliers as well because with increased parts quality, suppliers become world-class competitors, thereby gaining more export opportunities.

Dave Nelson echoed the QCDD message, citing "the biggest opportunity to be number one in quality." By the end of September 1993, thirty-seven suppliers had reached zero parts per million (ppm) in quality.

Parts Quality Performance	
1986	1900 rejected
1991	500
1992	500
Through September, 1993	286
Goals:	
1994	fewer than 150
1995	fewer than 100
ASAP	zero

World-Class Customer Survey

Your Name & Company (optional) _____

_____

You are asked to complete a survey on the performance as a customer of:

Customer company unit: _____ Return it to: _____

_____ _____

Instructions: Please circle responses and add comments.

Coding of responses:
1. Unacceptable
2. Needs improvement
3. Meets expectation
4. Exceeds expectation
5. Exceptional (best you have seen)

For functions or activities shown:
Prch. = Purchasing
Acct. = Accounting
Engr. = Engineering
xxxx = Cross out if inapplicable
____ = Write in

1. Do you trust the following contact points of this company?

Prch.	Acct.	Engr.	____	____	____	____
1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Comments:

2. Is communication in general clear and timely?

Prch.	Acct.	Engr.	____	____	____	____
1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Comments:

3. How well are quality expectations communicated?

Prch.	Acct.	Engr.	____	____	____	____
1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Comments:

4. How well does the company collaborate in continuous improvement?

Prch.	Acct.	Engr.	____	____	____	____
1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Comments:

5. How well are agreed payment terms met?

Prch.	Acct.	Engr.	____	____	____	____
1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Comments:

6. How well do prices and terms reflect total costs to the customer, services provided, mutual improvement goals, and sharing of prosperity?

Prch.	Acct.	Engr.	____	____	____	____
1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Comments:

7. How well does the company collaborate on advanced product or process technology?

Prch.	Acct.	Engr.	____	____	____	____
1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Comments:

8. How does the company compare overall with all other customers?

Prch.	Acct.	Engr.	____	____	____	____
1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Comments:

9. Please comment on your overall experience with this customer in the past year or two. Are they improving? At what rate?

10. What one or two changes would you most like to see this customer make that would enable increased benefits to the two of you? In what areas would the greatest benefits be achieved (such as quality, cost, technical progress, dedicating of capacity to them, etc.)?

Figure 1. *This survey can be structured to evaluate each of a customer's various plants or divisions as to how it partners with a supplier.*

A second major contributor to improved quality is the VA (value added) Project, which has generated over 700 improvement ideas for the 1994 models. One Civic model year, for example, housed over 300 associate ideas, contributing $400 in savings per unit. Suggestions include part count reduction, changes in manufacturing methods, and introduction of more common parts. The trunk lining system, for example, was redesigned from six pieces down to one, yielding twenty percent savings per system.

Quality Communications — The World-Class Customer Survey

Honda recognizes that world-class suppliers need world-class customers; a good supplier audit and development program are only part of the picture. HAM has added the World-class Customer Survey (see Figure 1) to its partnering tool kit. Starting with a questionnaire developed by an AME team nicknamed CUSSUPS (for Customer Supplier Partnership), HAM surveyed all 246 of its suppliers to learn whether HAM was consistently behaving as a good customer, and where they could improve.

Eighty-five suppliers achieved zero ppm delivery quality in 1992, and 117 reached zero ppm through September 1993.

Each supplier survey questionnaire response was reviewed by Vice President of Purchasing Dave Nelson and purchasing administrator Dave Curry, who looked for patterns in the responses as well as individual recommendations. Two comments were assigned to continuous improvement teams for action:

- suppliers want one "window person," rather than several different contacts
- Honda's policy of growing the people and the company includes job rotations. Less rotation makes suppliers' jobs easier.

Three other AME member organizations also use the survey — Harley-Davidson, McNeil Consumer Laboratories, and Becton Dickinson. Each company emphasizes that suppliers must be assured that positive follow-up actions will be taken as a result of the feedback. Without that commitment, customer credibility drops and the survey has the opposite impact on the partnership. Two of McNeil's suppliers, National Label and Mallinckrodt Specialty Chemical, urged that customers pay attention to financial terms, as well as design and delivery issues. For smaller suppliers, late payments really hurt. World-class customers recommend repeated, regular administration of the survey to help spot trends, especially during high-growth or restructuring, when feedback data becomes a baseline, as well as a communications tool.

C - Cost

Because costs are set very early in the game by various design and manufacturing process decisions, the next frontier in cost reduction is the front end, where innovative material and manufacturing process decisions can shave pennies off cost to produce. Suppliers and customer Honda must work together earlier to design-in improvements and to meet the ten percent cost improvement goal for each full model change.

President Yashiki urges suppliers to expand and strengthen their BP activities. Although supplier development programs originate with the customer, Mr. Yashiki emphasizes self-reliance for the suppliers, "You should develop your own programs. Set a minimum target of two percent improvement each year."

D - Delivery

Here Mr. Yashiki noted that big improvements — reduction of waste, excess inventory, defects, changeover time, along with improved computer systems, and lean production systems — will improve the ranking. Eighty-five suppliers achieved zero ppm in 1992, and 117 reached zero ppm through September 1993. Delivery quality is measured in ppm delivered on-time (on-time means not early or late, with windows as small as, in the case of body-on-sequence suppliers, 15 minutes).

Delivery Quality Performance	
1991	8000 ppm mis-delivered
1992	2100
Through September, 1993	1229
Goals	
1994	500
1995	350
ASAP	zero

D - Development

Keys to improved market share are development speed, prototyping capabilities, and competitive development costs as HAM releases more North American models. Typical current development time for new U. S. vehicles runs 30-36 months, better than Chrysler's 39 for the LH, but still too long. Moreover, because HAM is gradually still picking up more design responsibilities, comparisons are difficult. Here again, supplier involvement is critical to strengthening HAM's development capabilities, and creating more exciting models in North America.

Management will continue to push for design-in of

supplier partners early on; four suppliers participated in the 1990 Accord design, 20 participated in the 1992 Civic, and 42 have started on the 1994 Accord. Development speed, the second of four design-in critical issues (early involvement, speed, common parts, and value/added ideas), will require quantum improvements.

Internal Excellence — Spotlight on the Anna Plant

World-class customers prepare themselves to partner well with suppliers by developing internal excellence — they pioneer communications systems like Honda's new production planning system called Target, and supplier surveys. They give associates freedom and the opportunity to develop. "I'm a teacher," says Anna engine plant executive Susan Insley, who left a high school history classroom for law school, followed by a stint as a Congressional aide in Washington, "That's what I really am."

Insley took over Honda's engine plant ("the heart of the beast") following Al Kinzer's departure to head up BMW North American operations. At its founding, Mr. Honda's company excelled at making engines; internal Honda customers, like Marysville and East Liberty, naturally have high expectations of quality and delivery for the Anna plant.

For many of us the word foundry calls up images of strong odors, slippery floors, hot and difficult work, more an art than a science. But the Anna plant, like other Honda facilities, resembles a laboratory more than a metal working shop. For starters, there is no odor — not in the parking lot, and not inside. The factory is immaculate, staffed by associates whose work environment is people-friendly.

Like other Honda "people-friendly" systems — compensation and stock ownership, recognition, training, job rotation, and physical plant — this system reflects what Insley calls a "belief in the human being. It's not Japanese ... *it's American*. Respect for the individual — we must live it every day. You can't say it and then create an unsafe working environment, or not treat suppliers well."

The Anna plant employs 2000 associates who annually manufacture more than 500,000 Accord and Civic auto and GL motorcycle engines, one million auto suspension sets, and 2.3 million auto brake discs and drums. Investment in the plant exceeds $600 million.

Insley attributes much of the plant's success to communications. "It's pretty basic — not too mystical — there's a team spirit." The NH (New Honda circles), Town Meetings (also attended by suppliers) and suggestion programs encourage information sharing. Planning for engine production looks out one model year; with more refined production schedules issued quarterly and more often as needed to maintain flexibility. This type of information sharing "takes a long time," says Insley, "working at it every day. It's continual, not top down. A primary responsibility for senior management is to set the tone."

Teams build excellence

Ergonomic improvements, for example, often come from the teams, after which they are fed back to other Honda operations, such as R&D. Reiterates Insley, "We need that associate's judgment." For example, "MOD Squad" team members did a first rate job of analyzing material handling costs. As a result, carts were redesigned with bigger wheels and different casters that require less maintenance and physical effort in moving; they make the associates work easier and safer while improving cost competitiveness.

The "Hot and Heavy" team in Ferrous Casting wanted to improve casting flows as well as the associate work environment. Associates worked for two years developing an air propellant and tubing system to transfer inoculants. As a result of their efforts, hand-carrying of 572 pounds of inoculants per shift was reduced to 52 pounds per shift. The automation of this process has eliminated the possibility of errors in mixing inoculants and improved safety and morale of associates. Their first proposal, an air propellant and tubing, got sent back the first time — too costly. The second try passed, and the team proceeded with its own budget to revise the process.

Helping Suppliers With BP and "The Challenging Spirit"

GM has Picos, Ford has Q1, Solectron has its Customer Satisfaction Index — the list of corporate quality improvement programs grows. Honda's approach, the BP program, includes five strategic improvement target areas:

1. Best Position — improve global competitiveness.
2. Best Productivity — improve productivity.
3. Best Product — improve quality and delivery.
4. Best Price — decrease cost.
5. Best Partners — improve Honda/supplier relationship.

In 1989 Honda in Japan began this supplier development program, but Ohio champions state that the original program served merely as a guideline for U. S. plans. By spring 1993, fifty-two suppliers had experienced

"Respect for the individual ... you can't say it and ... not treat suppliers well."
Susan Insley,
Senior Vice President,
Anna Engine Plant,
Honda of America
Manufacturing, Inc.

BP Program Associates' Suggestion

What is your IDEA?

Name of team or employee: BP

Date: 11-19-92

At workstation 4, change the manual press to a pneumatic one, and add foam tape

How will it help us?

To work faster.

Impact (Genshi)

Supplier:	TRW
Description:	Switch the manual press to a pneumatic one
Name of part:	Hazard Switch
Line:	Honda 63750
Date of implementation:	January 25, 1993

Impact: 1. Cycle time reduced 4.9 seconds.
2. Easier to grab the screwdriver handle.

Figure 2. *Hundreds of Reynosa Associate suggestions like this one added up to big productivity gains.*

this focused thirteen-week program on sixty-three projects, almost all of which have achieved the desired ten percent cost improvement. Total results include:

- forty-eight percent productivity increase
- manpower reduction of 187 associates re-deployed to other parts of the company
- true annual cost savings of $14 million at supplier sites.

Honda needs world-class U. S. suppliers. Management recognizes the company's dependence on a network of special partners, many of whom have located within two days of Marysville. It's not enough for a supplier to have *periodically* demonstrated superior quality and delivery, with reasonable costs. Consistency, says Nelson, takes commitment. Honda looks to the BP program to help suppliers build internal excellence, and participate in the company's fight to regain the number one position.

Goals for the program include immediate cost and quality improvements, as well as long-term self-sufficiency. Focus is extended to hard and soft practices, usually starting with "soft" improvements. Hard BP activities would include purchase or update of equipment, automation, flexible manufacturing systems, and new model development work. BP teams anchored by HAM manufacturing pros work with suppliers on both hard and soft issues, starting with basic housekeeping and work flows. Nothing complex here — most BP activities use the classic Plan/Do/Check/Act cycle.

Suppliers like Larry Hopcraft, of Parker Hannifin and Andre Gold of TRW testify to the success of the BP strategy ("BP works!") that focuses on elimination of seven categories of waste by increased associate involvement. "The object,"says Nelson, "is to have associates energized with the joy of making product, of creating new solutions." Parker Hannifin applied BP to a model line that manufactured air conditioner hose assemblies. Before BP, workers made 1600 assemblies on two shifts with ten associates. During BP, the production process was systematically analyzed, fully involving Parker associates. The supplier was able to reduce to one shift and five associates, for a 100 percent productivity improvement! Hopcraft extended BP to nine plants and now has thirty-one BP teams trained and working on their own.

TRW's Reynosa plant, a maquiladora success story

Andre Gold, TRW director for TRW Transportation Electronics Division, credits the suggestions and creativity of manufacturing associates at the division's Reynosa, Mexico facility for dramatic improvements in plant quality.

Success in this plant helped BP gain credibility in other division plants, he says. "The Reynosa facility was our most challenging plant," he explains. "We were faced with a language barrier in addition to the need for substantial quality improvements. We knew if we could effect major change under these conditions that BP would work well in any of our facilities. And we succeeded."

For thirteen weeks, two Honda employees worked full time with a TRW BP team, consisting of representatives from several division plants, to implement BP on five manufacturing lines in Reynosa. *Within three months, productivity on the pilot line increased fifty-four percent.*

Since the start of BP a year ago, Reynosa manufacturing associates have generated 432 suggestions and have seen 340 of them adopted. To encourage associate involvement and establish program credibility in the plant, BP team members initially looked for ideas that could be implemented quickly. These ideas — called quick successes — eliminated the management-doesn't-listen syndrome.

The team and associates also saw how many little improvements can add up to significant results. "We listened very carefully to the ideas of associates, who know the problems on the lines, and we implemented numer-

ous suggestions," explains Gold. "Many of these ideas yielded only very small benefits, but when taken together, the small changes resulted in dramatic improvements. This approach of completely involving associates in the process improved not only the quality but employee morale as well."

In the past year, TRW Transportation Electronics Division has completed eight BP lines at seven of its eight manufacturing facilities, and another seven projects are under way. The goal is to implement BP on most of the division's lines by the end of 1994.

The Challenging Spirit

Explains Dave Nelson, "We have a method to change feelings of frustration into feelings of accomplishment. If I were to say that BP is *not* about continuous improvement, BP is *not* about better quality, BP is *not* about eliminating the seven wastes, and it's *not* about being more efficient, and it's *not* about being more productive, and it's *not* about better parts, and it's *not* about better flow, what do you suppose I would be saying it *is* about? Well, five years ago when I came to work here Honda Motor President and CEO Tadashi Kume gave a speech called 'The Challenging Spirit,' the source of creativity."

Continued Nelson, "The Challenging Spirit means never to be satisfied with traditional answers or solutions, giving permission to explore new paths, open new doors, try things that have not been tried before, even knowing that you will make mistakes because mistakes are valuable, even essential to success. So when I suggest that BP is not all of those things which it obviously is, I am suggesting that the main thing we do with these programs, whatever they're called, is touch the associates."

Nelson tells a story from his days on an Indiana farm to describe the contagiousness of associate involvement:

> *In the river bottoms we had something that seemed wonderful, lovely and green, called Johnson grass. Johnson grass is in fact a weed that kills corn and soybean crops as it spreads. One time we had a visitor from California who had never seen this grass and who, like people before us, thought it was wonderful. The visitor sent a letter back to his Indiana friend asking "How do I get this Johnson grass started on my farm?" To which his friend replied, "In this envelope is one seed. Take it out in the middle of the largest field you have, drop it, and run like hell!"*

TRW Recognition Certificate

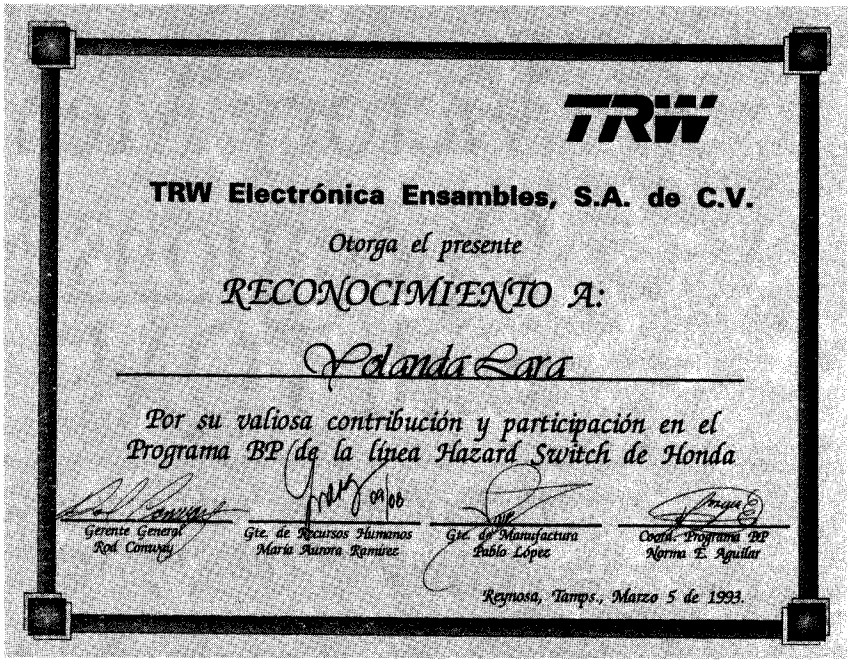

Figure 3. *TRW's Reynosa Plant rewards associate involvement in numerous cost and production improvements with recognition certificates like this one.*

Nelson's message is that when the associates become excited and motivated, you have created something that will grow if you water, fertilize, and care for them.

Supplier partnership for companies like Honda, TRW and Parker Hannifin means superior communications, information sharing of the good and bad news — straight-up — and working with supplier associates to help *them* find the solutions.

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The main thing we do with these programs, whatever they're called, is touch the associates.

Dave Nelson,
Vice President of
Purchasing,
Honda of America
Manufacturing, Inc.

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Susan Insley, Senior Vice President, Anna Engine Plant, Honda of America Manufacturing, Inc., keynoted the 1993 AME Annual Conference.