

# THE VALLEY VOICE

Merrimack Valley Works  
November, 1986

## Hawthorne move to MVW complete

As an era ends with closing of the Hawthorne Works in Chicago, Illinois, new challenges are opening up for Merrimack Valley Works.

All of Hawthorne's thin film product line has been transferred to Merrimack Valley in a move that has taken nearly three years. With the move came approximately 100 employees who volunteered to work at MVW, including production workers, salary graded employees, supervisors and engineers.

This nucleus of people from Hawthorne, augmented by employees of Merrimack Valley, has brought the total work force associated with Hawthorne product to approximately 1,100 employees.

Space for production of FA HIC circuit packs, 5ESS™ HICs, Small HICs and 5ESS™ and NON 5ESS™ FICs was provided at Merrimack Valley along the north wall, the southwest corner and near the center of the building, all on the second floor.

In all, an estimated 113,520 square feet of floor space was required at Merrimack Valley to accommodate the Hawthorne transfer.

The transfer required the services of some 70 air ride vans to move Hawthorne's facilities to Merrimack Valley over the nearly three-year period.

Working on the transfer during that period has been a transfer committee headed by Warren G. Crawford, chairman and coordinator. The original committee included 21 people from Merrimack Valley, all having various responsibilities.

Hawthorne, at one time, employed more than 45,000 workers. The 81-year-old plant employed 6,000 in 1919, 14 years after it opened. Employment swelled to 43,000 in 1930 and dropped to 6,000 during the Depression years. At the time of the announced closing in 1983, Hawthorne employed 6,000. On Oct. 1, 1986, as the plant doors were shut forever, only 100 non-production direct employees remained, working on clean-up operations.

Many of Hawthorne's product lines were transferred to locations other than Merrimack Valley. Its production of mylar capacitors went to Nashville Service Center, relays to Columbus Works, piece parts to

Omaha and Kansas City Works, and reproduction to Indianapolis Service Center. The famous Rod Mill was purchased by Magma Copper Co., and its Manufacturer's Junction Railway was purchased by the Chicago, West Pullman and Southern Railroad. Hawthorne's Metal Mill was phased out.

The location's closing was announced in a letter to its employees on June 24, 1983, from General Manager V. L. Schad.

He wrote: "As your general manager, it's my responsibility to give you the sad news that the Hawthorne Works will phase out of operation over the next few years. This decision comes just five months after the announcement that the company's Kearny Works would be phased out, as would the outside plant apparatus shop at Baltimore and our pulp cable operation.

"As I've told you in the past and want to emphasize again at this time, the work and spirit of Hawthorne people have been inspiring. The decision to close the plant should not detract, in any way, from what we have accomplished.

"But excess space throughout the company and the associated expense proved too strong a force to combat."

A shopping center, which will be named the "Hawthorne Works" and contain more than 20 stores, is planned for the site.

According to Warren, the Hawthorne transfer was the largest and most complex in the history of the corporation and could not have been successful without the effort and cooperation of Joe Werth, manager of engineering and operating at Hawthorne, and his organization.

In fact, Warren added, shop manufacturing yields remained high and employees' attitudes remained outstanding throughout the closing period.

On behalf of the transfer committee, Warren asked that thanks and appreciation be extended to the many people at Merrimack Valley and Hawthorne who contributed to the successful completion of the transfer, particularly the Merrimack Valley product and factory engineering groups, the operating shops and the works service organization. ■

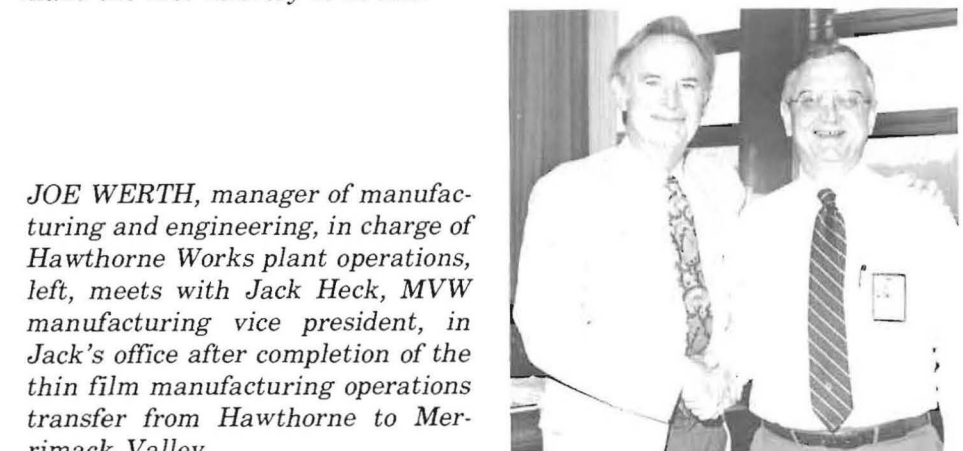


*HAWTHORNE WORKS in Cicero, Ill., is pictured here on its 163-acre site, where a large shopping mall is planned. The location's famed tower, lower center, has been a landmark for many years.*

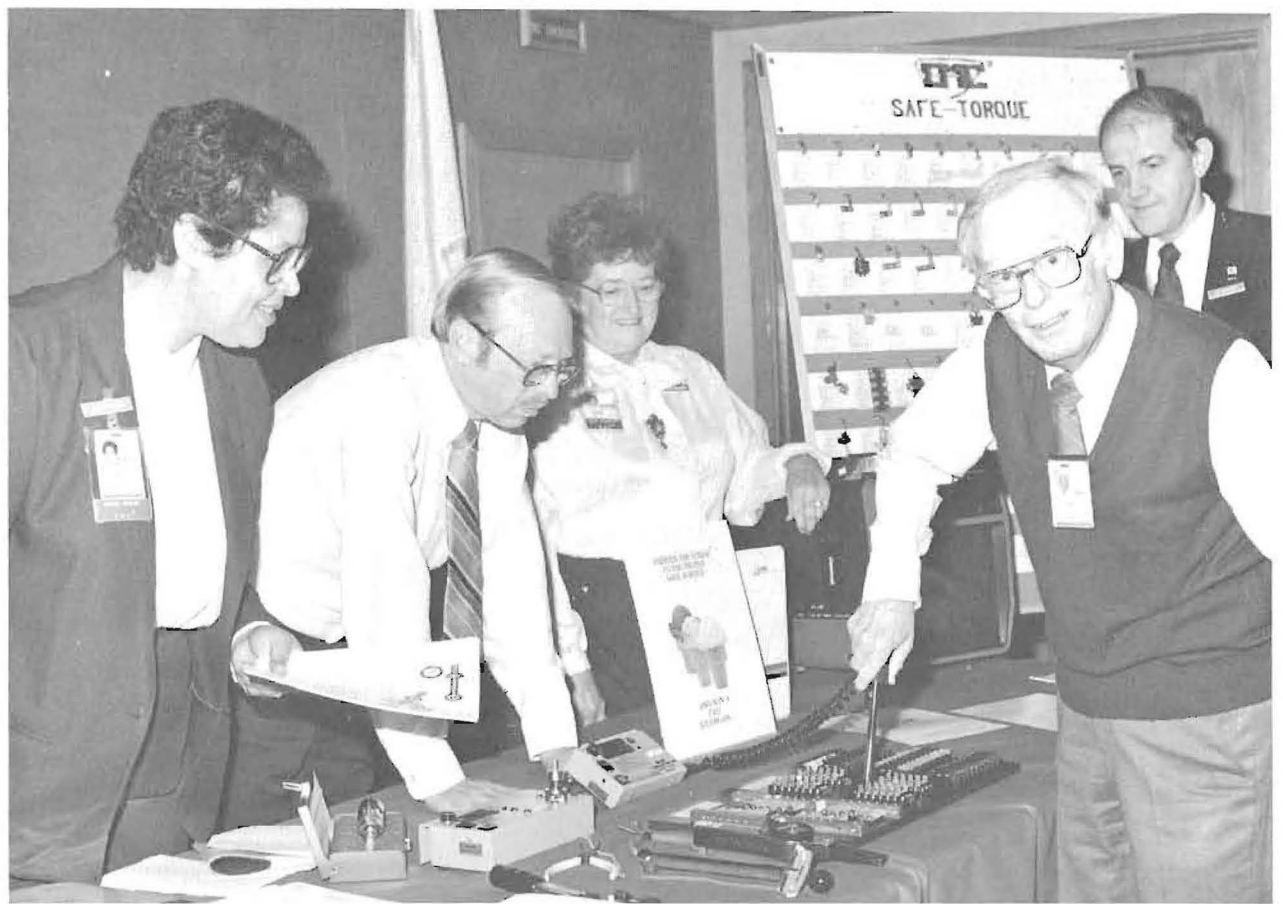
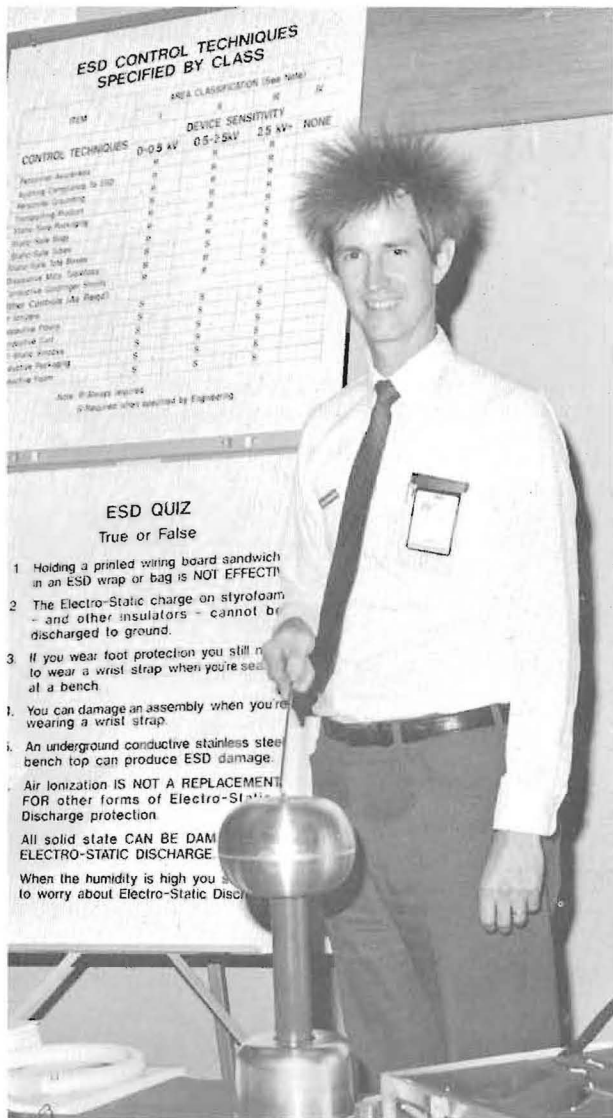


*(Staff photo—Roger Culliford)*

*ONE OF THE LAST DELIVERIES of capital equipment from Hawthorne Works arrived at Merrimack Valley Works on Thursday, Oct. 30. Receiving the delivery, at right, is Warren Crawford, chairman of the Hawthorne Works transfer committee. At left is the truck driver, Kim Kehl, an employee of Surburban United Van Lines of Downers Grove, Ill. A photo of the truck that made the last delivery is at left.*



*(Staff photo—Roger Culliford)*



(Staff photo—Roger Culliford)

**HAIR-RAISING EXHIBIT** is demonstrated by Senior Engineer Ted Dangelmayer, left photo, as he shows the effects of static electricity at a booth on Electro-Static Discharge (ESD) at a Quality Fair in the MVW auditorium on Oct. 27. In photo at right, Charles Dutton, product quality checker in the quality appraisal dept., tries his hand in proper-torque test at booth on Electro-Mechanical Connections (EMC). Booth workers are, from left, Marge Crewe, Tom Preston, Alice Belanger and Ed Hoffman, EMC committee members.

# First MVW Quality Fair well received

More than 1,500 enthusiastic employees from all three shifts attended an all-day Quality Fair in the MVW auditorium on Oct. 27, in observance of National Quality Month.

The fair was initiated to highlight and enhance quality awareness and was a joint effort of Quality Control and Engineering of Manufacturing personnel.

Eleven display booths were manned by MVW personnel to highlight various activities that are helping Merrimack Valley Works become

a leader of world class quality manufacturers.

One booth exhibited Component Verification Center functions and how this effort reduces the failure rate of incoming integrated circuits and passive devices.

The Electro-Static Discharge (ESD) booth drew large crowds in a display of how ESD can destroy components and actually raise the hair on one's head.

"White collar quality" was presented to show how non-manufacturing employees contribute in many ways toward MVW's goal of producing communications equipment unmatched in quality.

The Electro-Mechanical Connection booth also was popular as employees tried to win ice cream bars by torquing screws to a proper pressure.

The importance of just-in-time manufacturing was highlighted in a booth that showed how pull manufac-

turing reduces inventory and produces a high-quality product.

Statistics, probabilities and sampling were introduced in another booth where visitors played computer games that demonstrated inspector sampling accuracy. Prizes were won by rolling dice or guessing the number of colored beads in a box.

This display provided visitors an idea of how statistics are used in determining sampling plans and estimating population defectiveness.

A booth on Quality Appraisal reports and graphs highlighted the need for accurate quality data and information for feedback and action.

The Vision Line booth showed that the key to success in the Vision Line is material and product velocity at extremely high quality levels.

A booth on Training for the Future featured training programs offered at Merrimack Valley.

The Employee Suggestion Program (ESP) booth was set up to educate employees and motivate them to participate in the program.

The fair was the first of its kind at Merrimack Valley and was described as being well received by attendees who went away with a better knowledge of how quality programs work for all of us. ■



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**THE VALLEY VOICE**

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## On the cover . . .

Staff photographer Roger Culliford captured the essence of fall at Merrimack Valley in a recent helicopter ride over the Works. This picture of serenity and autumn hues was so beautiful we felt that we should share it with you in color. We hope you enjoy our little indulgence.

## Jets safety team gets \$100 awards

JETS SAFETY TEAM reached the end of the second phase of the MVW safety game. Selecting one of the 20 winners of \$100 awards is Rosalie Croteau, layout operator in the D4 shop.



(Staff photo—Roger Culliford)

## VISION OF THE FUTURE

# Components

"The Components factory is now receiving its rightful recognition as a major force in Network Systems and AT&T," says MVW Director of Engineering and Manufacturing—Components Alan Moline.

"Virtually **all** AT&T equipment factories are dependent on us for component operations. We **must** succeed in components or AT&T, as a whole, will suffer.

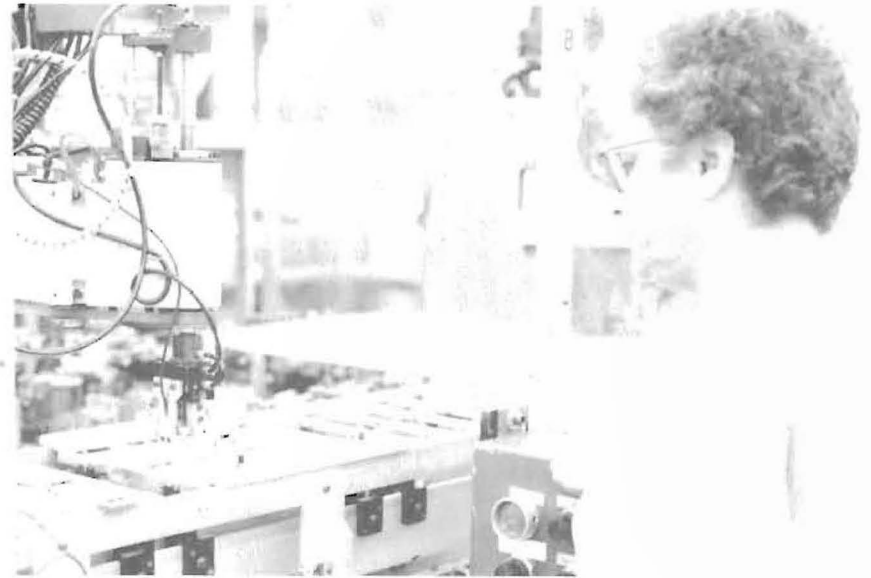
Therefore, MVW's Components factory will play an integral role in Merrimack Valley Works Vision of the Future, which capitalizes on vertical integration. MVW is in the unique and enviable position of having two separate factories (components and equipment) under one roof to facilitate that process. This vertical integration, coupled with the processes underlying VISION, will allow, for example, a mini-oscillator to be started in the morning and shipped in a circuit pack the same day.

The components product line includes hybrid integrated circuits (hybrids) for both transmission and switching equipment, as well as filters, oscillators, printed wiring boards, equalizers, and ferrites.

Mr. Moline believes that pull manufacturing is the basis of the factory of the future (see "Just-In-Time" article), and that the mini-oscillator shop has led the way in pull manufacturing techniques at MVW. "One benefit of pull manufacturing," says Mr. Moline, "is that you have to solve most of your problems before the system can be fully instituted, so the engineers worked very hard to clean up the little problems normally associated with the implementation of new procedures."

The Components factory is well on its way to realizing its vision of the future. Recent accomplishments toward this goal include:

- Pull manufacturing in several component shops.
- Completion of the transfer of product from Hawthorne.
- Reduced intervals.
- Utilization of full stream FMA (Failure Mode Analysis) in the hybrid shops.
- Implementation of computer tools to support modern material management principles.
- Physical rearrangement of the Components factory nearing completion (anticipated before mid-1987).



(Staff photo—Irene Dumas)

*GDX ROBOTIC encapsulation machine puts protective coating on GDX hybrids as machine operator Adele Tragiou looks on. The hybrids become part of the 5ESS™ which is shipped to Oklahoma City Works.*

But Mr. Moline is not ready for the Components factory to rest on its laurels. "I view the next year as a time for digesting and improving what we started a couple of years ago," he stated. These improvements will include:

- Improved quality
- Improved service to customers
- Reduced manufacturing intervals
- Improved processes
- Implementation of pull manufacturing in all component shops
- Enhanced vertical integration with equipment shops

The result? Merrimack Valley Works Components—**THE** World Class Product and Vendor of Choice. ■

## Walking for their health

(Staff photo — Bob Gablosky)

*WALKING for their health in front of the Merrimack Valley Works is this group of QWL Team 45 members led by Barbara Glover, far right, Team 45 co-chairperson.*



Feeling tired? Not much energy? Well, it's a fact that walking is a good form of exercise that can give you that extra boost of energy you need.

The QWL Team 45 recently started a walking program that takes place during breaks and lunch periods at Merrimack Valley Works.

Anyone interested in joining the program should feel free to join in during the daily walks. If you want any information on starting your own walking program, get in touch with Barbara Glover, x3716, or Nancy Raymond, x3827 during first shift hours.

Barbara, co-chairperson of Team 45, and Nancy, secretary, issue this challenge: "Get off your seats, get out into the fresh air and walk. Come on everyone. Feel better about yourself."

## Utitec, Inc. receives Vendor Quality Excellence Award



(Staff photo—Roger Culliford)

*AS PART OF THE October Quality Month activities, a Vendor Quality Excellence Award was presented to Utitec, Inc. for outstanding quality performance. Utitec, Inc. is a large supplier of jacks and plugs for Merrimack Valley. Thus far in 1986, 130 lots of Utitec product totaling 470,000 pieces were inspected and zero defects found. Seated left to right, Joe Damico, production manager of Utitec; Len Winn, quality manager. Standing, from left, Bob Porter, president of Utitec; Dave Lane, department chief, purchasing.*

## MANAGEMENT SPOTLIGHT

## An interview with R. Alan Moline

Director of  
Engineering &  
Manufacturing—  
Components

*Editor's note: Since joining Bell Laboratories in 1968, Alan Moline has had the opportunity to not only design components but also to develop new processes and component applications for nearly all AT&T systems. Through this "beginning-to-end" Bell Labs experience, Mr. Moline has gained a unique perspective which he brings to Network Systems manufacturing.*

*In an interview with The Valley Voice staff, Mr. Moline shared a few of his concerns, accomplishments and goals for the MVW Components factory.*

**Q. What do you hope to accomplish as director of Components?**

MOLINE: My goal is to make the MVW Components factory successful. And the only way we can be successful is to improve customer satisfaction. I'm here *only* because I have customers. We must continue to stress service to our customers in three key areas—quality, cost and delivery.

There is no doubt in my mind that we will be successful if we provide high quality components at a competitive price which are delivered when the customer wants them.

**Q. The importance of quality is receiving a great deal of attention at MVW. What has your organization done in this area?**

MOLINE: The quality of our components is very important because it directly affects the quality and cost of AT&T equipment.

***"I'm here only because I have customers."***

Quality has several definitions—one is "fitness for use." We are stress-



Alan Moline stresses team concept.

(Staff photo—Roger Culliford)

ing that it is not enough that components just meet our test specs; they must also meet our customers' needs. One technique we have found to be particularly effective at improving "fitness for use" is full stream Failure Mode Analysis (FMA). This is a technique used to focus on the entire process and look in detail at *all* failures at *every* step of the process. This allows us to provide a reliable product suitable for customer application as well as to maximize our total yield through process improvement.

**Q. What do you consider the most important indicator of your shops' performance?**

MOLINE: If I had a magic wand which allowed me to totally control only *one* thing in my shop, it would be the manufacturing interval.

The manufacturing interval is probably the best single indicator of how well we have solved the problems associated with production, and how effectively we are moving toward customer satisfaction.

For example, in June of 1985 the printed wiring board shop took 12 or more weeks to finish 10% of the substrate batches. Now a typical lot is finished in less than three weeks, and our goal for 1987 is one week.

***"If I had a magic wand..."***

Rush jobs can be finished in 48 hours. Service to our customers has improved tremendously over the last several years, and remember—we're here *only* because we have customers.

**Q. Don Steiner recently joined the MVW staff as manager of components manufacturing. How will this impact on the components organization?**

MOLINE: Don will focus on the management of manufacturing aspects, allowing engineering management to focus on the management of *engineering* issues. Pinpointing focus will allow us to do several things—while Don moves the shop into looking and performing like a world class shop which produces world class products, the engineering leadership can move towards world class design and processes to help manufacturing reach its goals.

The only way we can achieve our goal and full potential is as a team, and we—AS A TEAM—will focus on providing the leadership to make Merrimack Valley a world class components manufacturer. ■

# What's "just-in-time"?

There are three phrases we've been hearing a lot lately—"just-in-time," "pull manufacturing" and "team manufacturing." Have you ever wondered what it means, where it came from, or what it means to you?

Jim Pearson, a senior engineer proficient in the application of these terms, recently shed light on this subject which should help answer most of your questions.

First, the phrases are interchangeable and represent the same thing—a manufacturing philosophy which allows inventory or work in process to be delivered *only when needed* for the next step of the process.

This philosophy provides a variety of benefits. According to Jim, this is an excellent method to define, refine and improve any manufacturing process while simultaneously increasing production velocity and maintaining inventory control. The process exposes problems which forces permanent solutions.

When implemented properly, it significantly improves inventory turnover and yield and reduces week-to-week process variations. One final benefit—it forces communication and teamwork—two necessities of a successful pull manufacturing line.

Where did it come from? Henry Ford first implemented "just-in-time" in 1924 by producing Model T Fords from iron ore to finished product in 48 hours. Over the years, his philosophies were forgotten and went largely ignored. As the Japanese discovered and implemented these long forgotten philosophies, and subsequently outperformed their American competitors, industrial America began looking to Japan to learn their manufacturing secrets. SURPRISE! Japan's secret to success is American philosophy.

At MVW, the story began about two years ago. Upon returning from a "just-in-time" (JIT) seminar at Hewlett-Packard, a group of engineers, in conjunction with manufacturing personnel, started a small experiment which ended with tremendous impact on the future of MVW.

The problems they were facing with conventional manufacturing methods included high inventory, low yield and long lead times. As part of the experiment, a team of five production workers began producing mini-oscillators using pull manufacturing philosophies.

The basic philosophy is simple. Imagine a tug-of-war with 2 teams (manufacturing operations) on each end. If the team *pushes* their end of



(Staff photo—Roger Culliford)

*DONNA REED, left, and Margit Collins, team members in the mini-oscillator Shop, utilize pull manufacturing (or "just-in-time") philosophies which have contributed to reduced assembly intervals, higher yields, and reduced inventory.*

the rope (conventional manufacturing methods), the center bulges (inventory building up).

If, however, each team *pulls* on their end (pull manufacturing), the middle is taut (with no inventory buildup).

JIT manufacturing positions workers performing subsequent operations of the complete assembly side by side, creating a team. With this layout, there is no room between operations for inventory storage. The prior assembly operation is performed and material moved to the next station *only* when the next station is ready to work on it.

In the beginning there were many problems. As one problem was resolved, another would become visible. As each subsequent problem was systematically eliminated, those involved were astonished to discover new problems never before realized (like a water table receding and uncovering rocks never before seen). With patience and persistence, the brave little group continued day-by-day and problem-by-problem. Their persistence paid off.

The problems became fewer. The yield, which had been 70%, rose to 90%. The manufacturing assembly interval, which had been several weeks, was reduced to 4 hours. But this incredible improvement is only

a beginning.

Mini-oscillator yield now appears to be directly proportional to incoming vendor quality. If vendor quality is improved, mini-oscillator yield could realistically reach 100%, which would ultimately result in a significant cost reduction.

The successful mini-oscillator experiment spawned interest in other MVW shops. D4 and GDX hybrids have shown great improvements from these methods. Hybrid substrate, T1 Carrier, and the cable shops are actively pursuing implementation of JIT philosophies. So successful is this approach that pull manufacturing is one of the basic premises of MVW's Vision of the Future.

What does this mean to you? According to Jim Pearson, "JIT has increased job satisfaction by enabling team members to identify with a complete process instead of an isolated operation. Within the scope of a team, job responsibilities have been broadened, spawning a feeling of accountability and responsibility. As a result of extensive cross-training, the operator is better equipped to spot manufacturing problems and take immediate corrective action."

As one shop worker said, "The team members seem to have pride in their work—something that has been missing for a long time." ■

## United Fund contributions exceed goal

Employees of Merrimack Valley Works have exceeded their goal of \$600,000 in contributions to the 1986-87 United Fund Campaign.

Successful conclusion of the campaign was announced by Chairman Al Simon and Vice Chairperson Pam Jackson, who expressed their gratitude for the work of solicitors, coordinators and committee members.

They said that during the drive, MVW increased the current level of contributions by more than \$54,000, thereby going over its \$600,000 goal.

They added, "Employees can take pride in the knowledge that, through their giving, they have demonstrated a fraternity of citizenship with the very many people who benefit from the agencies assisted by the United Fund."

As announced in the United Fund flyer distributed prior to the drive, three sets of Bruins tickets and ten \$25 AT&T long-distance certificates were awarded in a random drawing.

Tickets or certificates will be sent to winners. They are:

**BRUINS TICKETS—Felix P. Robles, 50546; Daniel L. Casale, 50523; and Denise M. Pellerin, 30610.**

**AT&T Long-Distance Certificates—Lourdes Healy, 51554; Santo A. Gabin, 93286; William J. Mahoney, 31161; Ronald R. Panek, 88298; Weldon S. Almon, 50548; Helena S. Polizzotti, 9347H; John E. Evans, 33171; Mark A. Eaton, 51343; Edward J. LaFontaine, 51666; and Denise M. Oliver, 11162. ■**

## Retirements

Years  
of  
Service

October, 1986

35	Theresa D. Beaudry
19	Albert C. Ragust
26	Mavis J. Eaton
31	John F. Smart Jr.
30	Frederick E. Pitkin
42	Albert J. Cote

## EMPLOYEE SPOTLIGHT

## Angie Costanzo



(Staff photo—Roger Culliford)

Angie Costanzo is a process checker working in the DIF & DACS circuit pack shop. With the emphasis on improving quality throughout Merrimack Valley, Angie exemplifies those individuals who are responsible for directly checking the quality of another's work and increasing quality awareness.

Angie's supervisor, Sarah Williams, reports that Angie works with a lot of young people and has an excellent nonthreatening attitude that helps improve the quality of work life in the department.

In addition to her "job description" as a process checker, Angie is involved in policing the shop area for

safety hazards and has increased the awareness of safety in an area with limited space. She is also involved in teaching newer employees. She is an excellent communicator who puts the needs of the department first, according to her supervisor.

The DIF and DACS circuit packs that come through Angie's area have been assembled in another area and will move to yet another to become part of the DIF and DACS bays which ultimately find their way into switching offices all over the world.

Merrimack Valley Works salutes employees who care — Merrimack Valley Works salutes **Angie Costanzo.** ■

An MVW Communications committee has been formed to address issues concerning improvement of communications at MVW.

The committee, consisting of 26 people representing all employee universes, will interact with the workforce and meet on a regular basis to discuss and propose improvements in meeting employee communications needs.

If you have any "pet peeves" regarding communication vehicles or have suggestions for improvement, please contact any of the committee members listed below. These people are enthusiastic representatives who are anxious to help make MVW a better place to work. All they need is your participation. Please help them help you.

Fran Arzoonian (x3916)  
Helen Bibeau (x2487)  
Bernie Clohisy (x4378)  
Steve Chooljian (x4083)  
Steve Corcoran (x2478)  
Dianne Currier (x4452)  
Ted Dangelmayer (x5272)  
Dick Edelmann (x2416)  
Irene Farrah (x2423)  
Tom Gerrish (x3286)  
Joe Giampa (x2300)  
Chris Green (x4805)  
Carolyn Hodge (x2289)

Lynne Hunkins (x3357)  
Frank Iuele (x4756)  
Anita MacDonald (x4805)  
Gordon Melendy (x2746)  
Connie Mercier (x2473)  
Mary Montebianchi (x5079)  
Simone Mooers (x3793)  
Debbie Murphy (x5938)  
Gail Palmer (x3162)  
Ernie Reynolds (603-893-6617)  
Carlos Ruiz (x2327)  
Martha Zamoida (x5385)  
J. S. Zappala (x3035)

## Communications survey results announced

Early this fall, each of you was asked to fill out a MVW communications survey. The results of this survey have been and will continue to be used by the Public Relations Employee Communications section and the MVW Communications committee to determine the effectiveness of current communications vehicles and to make proposals for changes which may better serve the needs of MVW employees.

Over 1,300 of you (nearly 12.5%) took the time to tell us what you think, and you told us exactly what we need to know. You may have noticed some of your suggestions have already been adopted (i.e., monthly *Valley Voice*, more MVW business/employee related articles). Thank you for your participation. Your feedback helps us help you.

Now here are the results in terms of percentage of responses:

**THE VALLEY VOICE**—The majority of respondents (65%) read only some of the articles, but 32% can consider themselves "informed" employees. They read all the articles.

*The Valley Voice* is now a monthly newspaper in response to the 78% who asked for it. The respondents also want more employee stories (58%) and MVW business articles (57%). (Respondents were allowed to check more than one answer on articles preferred).

**NEWSLINE**—This was close with 50% wanting Newsline to remain a separate bi-monthly publication and 41% requesting that it be included in

*The Valley Voice*. It appears that Newsline is a communications winner with 91% of the respondents indicating that Newsline is informative and in many cases helpful.

**PA SYSTEM**—About even, 52% of the respondents can hear PA announcements and 48% cannot, and an overwhelming number (78%) do not find PA announcements distracting to their work. This high percentage, however, may be attributable to the fact that nearly half of the respondents can't hear it.

**EMPLOYEE INFORMATION EXCHANGE PANEL (EIEP)**—Not surprisingly, 83% of the respondents had not attended an EIEP, which is proportional to the number of people who had been invited before this survey. Since then, an additional 800 people have attended, with 400 more scheduled for December. The response to EIEP from those who have attended is extremely favorable.

**WEEKLY DEPARTMENTAL MEETINGS**—Unfortunately, 48% of the respondents have never attended a weekly departmental meeting, but 54% believe that they are (or would be) beneficial. The majority (51%) would like to see more than one level of supervision at these meetings on occasion.

**OTHER**—A tremendous number (82%) of the respondents think it is important to share company information that does not relate specifically to their department, and 56% have seen no improvement in management/employee communications.

## Communications committee formed



(Staff photo—Bob Gablosky)

**MEMBERS** of the MVW Communications committee review results of the Communications Survey. They are, from left, Irene Farrah, disbursements auditor; Dianne Currier, Visual I inspector; Joe Giampa, personnel and public relations manager; Frank Iuele, section chief, lightwave new design; Carolyn Hodge, section chief, public relations employee communications; and Steve Corcoran, accounting associate.



(Staff photo—Roger Culliford)

DEBBIE GILBERT and Brian Small, senior operators in the receiving, transfers and containers section of the storeroom and receiving dept., demonstrate the lifting of a box weighing more than 45 pounds. New regulations restrict the lifting of up to 45 pounds by one person alone. Note sign on box: "HEAVY—Do Not Lift Alone."

## 'Lifting Task Force' sets new guidelines

New guidelines have been established at Merrimack Valley Works concerning the lifting of objects.

A "Lifting Task Force" has been working since March to improve the lifting tasks throughout the plant and has been in the process of implementing the following plans:

- Make necessary engineering adjustments, such as providing mechanical assists, to reduce stressful lifting tasks.
- Reduce the lifting limit to 45 pounds from 60 pounds. A safety bulletin has been sent to all engineers and supervisors announcing the new lift limit. Employees are being advised not to lift more than 45 pounds ALONE.
- Distribute labels and tags which state "HEAVY—Do Not Lift Alone" throughout the plant. These must be put on items such as products, cartons and trays that weigh more than 45 pounds.
- Request suppliers to limit the

weight of all multiple item packages to 45 pounds. This requirement now appears on all purchase orders.

- Provide lifting and back training for all employees who must lift objects on a regular basis and for any person reporting to medical with a lifting-related pain or injury.

The goal of the Lifting Task Force was to take proper steps to reduce the number and severity of lifting injuries in the plant.

The plans are already resulting in reduction of lost and restricted time due to lifting injuries. The Task Force has expressed hope that the improvement will continue as further plans are implemented.

The Task Force is chaired by Roberta Carson, human factors engineer, and is comprised of engineering department chiefs and engineers representing all organizations, and Jane Ryll, RN, head nurse at Merrimack Valley Works. ■

## Andy Abrahamson named Quality Hero

Department Chief Andy Abrahamson was named Quality Hero for his involvement with quality improvement teams by Quality Manager Len Winn at the September results meeting.

In recognition of outstanding quality improvement in the 5B Echo BCM-EC32000 circuit pack department, Andy and his department received tickets redeemable for ice cream in the cafeteria.



(Staff photo — Roger Culliford)

ANDY ABRAHAMSON, Quality Hero, accepts ice cream tickets from Len Winn (who sports a Quality Dollar around his neck).



DON EARNSHAW, left, receives award from Maurice Henderson.



ART ROYER, left, accepts award from Al LaFavors.

## Outstanding service recognized

In recognition of significant improvement in achieving customer satisfaction through outstanding service, the Printed Wiring Board Shop and the Multiplex Circuit Pack Shop at Salem II were presented the Merrimack Valley Works' Outstanding Service Award at the September results meeting.

Accepting the award for the Printed Wiring Board Shop was Department Chief Don Earnshaw. The PWB shop received the honor for its

service to interworks customers (North Carolina and Columbus Works).

Accepting the award for the Multiplex Circuit Pack Shop was Department Chief Art Royer. This department was honored for having no customer backschedules.

Presenting the awards on behalf of Manufacturing Vice President Jack Heck were Material Procurement Manager Maurice Henderson and Customer Service Manager Al LaFavors.

## EIEP UPDATE

# No retirement incentives planned

October 20, 1986, meeting

## Opening Remarks—JACK HECK

Feedback that I get tells me of concerns about layoffs, concerns that Merrimack Valley is going to close in two years. I want to assure you all that we don't plan any layoff in 1986, and there are no plans to close Merrimack Valley. By 1988, we hope to be positioned to compete with the best in the world. We're going to spend a lot of money and resources in an effort to do this, and I guarantee you that this is not done in a location that is closing.

It is well accepted that Merrimack Valley is going to play a key role in the Vision of the Future in the Network Systems Transmission Manufacturing.

If you want to know how AT&T is doing, watch the stock price. Even though third quarter earnings went up, this was not reflected in the stock prices. The investment community is looking for better performance from AT&T and higher earnings. I think when we start to send the right messages, the market will be more favorable and reflected in the stock price.

I've also received feedback which indicates that people want the leadership of Merrimack Valley to be more visible. They want to be able to ask a question directly and get an immediate answer. And they want to be able to do this every day. This is sometimes difficult when we're trying to run a business, but I want to be sure we're doing all we can in this area.

You may have heard that a MIPP is being offered to non-technical Bell Labs people. This limited incentive does not include labor loans. But I want to stress again that there are no plans to offer retirement incentives to Merrimack Valley Works' employees because we do not have a surplus.

**COMMENTS FROM THE FLOOR:** I would like to comment that the method of disposing chemical rubbish has changed. All departments must put chemical bottles and containers in designated containers. If you don't have a container, call x2274 and we will supply you with one.



(Staff photo—Roger Culliford)

*EIEP PARTICIPANT raises concern during question and answer session.*

## QUESTIONS & ANSWERS

**Q. Are we hiring off the street? Why are some areas not permitting laterals?**

**JACK HECK**—Wayne Weeks, president of Network Systems, has decreed that no one will be hired off the street without his personal approval. Before hiring off the street we must coordinate our local needs with the surpluses found at ALL AT&T locations in the Greater Boston area to see if anyone fits our needs. We do intend to hire some people with special skills off the street—if we can't find them internally.

**DON HEVEHAN**—There is a hiring freeze. Each organization has an obligation to inventory jobs and justify those jobs within the organization. Open requisitions will then be posted and filled as normally done. Laterals will be permitted consistent with the needs of the business policy.

**FOLLOWUP—TOM DOYLE**—*The critical needs of the business account for the reluctance of some organizations to allow laterals. In some instances, the specific work that the individual performs requires training and understanding of various systems (i.e., AMAPS/IPCS experience), in which case the employee cannot readily be allowed to leave unless the job can be adequately covered.*

*The desire of an employee to lateral to another assignment is taken into consideration. The individual needs of these people will be*

*accommodated at a point in time when the needs of the job are covered. Supervisors will provide an indication to employees requesting laterals of when that time is expected.*

**Q. Can something be done about bays in aisles and material stored in elevators? This hampers the movement of forklift trucks throughout the plant.**

**JACK HECK**—Specifically, if I were you I would park my truck, leave it and go to my supervisor and say, "I need your help."

**Q. Message of commitment to quality from upper management seems to be sacrificed for service. Can you comment on this?**

**JACK HECK**—Training is one of the answers. We have started, but it's not happening fast enough. We must all ask ourselves, "Do I know what my job is? Do I have the tools to do it? Are the people that I'm working with working to the same objective I am so that what we do works together?" If the answer to any of these questions is "no," we will have to fix that.

**Q. What should we do when we are given poor quality material to work with?**

**JACK HECK**—If someone gives you junk to work with, tell them you won't use it unless they give you a process that uses that material to turn out high quality end product.  
**EDITORS NOTE:**—See story on award to quality suppliers.

**Q. The AMAPS system we now have doesn't carry the equipment side. Will IMPAC be used?**

**JACK DRISCOLL**—Yes, IMPAC will be used for equipment shops.

**Q. Lack of cooperation from Bell Labs resulted in loss of cost reduction savings on T1 product. Can you comment?**

**GREG HUGHES**—Priorities set among Bell Labs, PLM, and manufacturing involving mature product lines do not give as much attention to some products as those involved would like to see. In T Carrier, it was good business not to spend too much money on product development. The failure was not with the relationship with the Labs. The failure was the lack of communication of the overall objective. In

new product areas there is excellent daily communication with Bell Labs. In my opinion the working relationship between Bell Labs and Merrimack Valley Works is very good and getting better all the time.

**Q. Is there a communication problem between shifts in Transmission Thin Film?**

**ALAN MOLINE**—I am currently meeting with supervisors of all shifts to discuss communication problems. Training is a big issue. Specific cases involving poor communication will be remedied.

**Q. In the D4 area, we are out of parts and get farmed off to another group by the middle of the day where we are asked to do work we are not trained to do. That is very frustrating.**

**JACK HECK**—We are GOING to get parts. It is MY job to get you the parts.

**Q. When will Payroll give us the retroactive pay they owe us?**

**DON HEVEHAN**—This week. With the signing of the contract and ratification, programming began on retroactivity and progressions. You should see adjustments in your pay.

**EDITORS' NOTE:** Most checks were issued on Oct. 24. Inquiries on remaining checks are being investigated.

**Q. I work in New & Change. When will the office modernization be completed?**

**GREG HUGHES**—Some time in 1987.

**JACK HECK**—We are committed to office modernization. Please be patient. We have 30 years of work to be redone.

**Q. In Die and Wire Bonding we often have nothing to do.**

**ALAN MOLINE**—Uneven work flow has been a continuous problem. Joe Marcotte is working very hard on finding ways to steady the flow.

**JOE MARCOTTE**—We do have flow problems in Die and Wire Bonding. We have doubled the thruput in that area by doing better with what we have. We therefore use up the components a lot faster. We are meeting our customers' needs for these codes.



Merrimack Valley Works

# NEWSLINE

Public Relations—AT&amp;T, North Andover, MA

No. 15

**HEALTH INSURANCE OPEN ENROLLMENT Nov. 3—Nov. 28, 1986**—In early November, all employees received a Benefit Bulletin regarding the Health Insurance Open Enrollment Period.

Action is required by you between Nov. 3 and Nov. 28, 1986, **only** if you want to change medical coverage from an HMO to the Medical Expense Plan, you want to **re-enroll** a Class II dependent, you want to enroll a new Class II dependent, you want to add Sponsored children, you currently have Sponsored children who are no longer eligible, or you want to join an HMO.

If you do **nothing** during the Open Enrollment Period, your Medical coverage in 1987 will be with the same plan you have in 1986, and current Class II dependents **will not be covered** with Company-provided medical coverage after December 31, 1986.

**MANAGEMENT CHANGES**—Effective Nov. 1, **Donald D. Steiner**, engineering and manufacturing manager, Dallas Works, was promoted to manager, manufacturing—components (a new position), reporting to R. Alan Moline, director of engineering and manufacturing—components.

**Greg F. Kunysz**, department chief, 5ESS project management, Oklahoma City Works, was promoted to project engineering manager (a new position), reporting to Greg N. Hughes, director of engineering.

**W. M. (Mel) Fulp**, manager, engineering, Network Systems equipment division staff, became manager, engineering—components, reporting to R. Alan Moline.

**SAFETY GAME UPDATE**—The Jets team recently completed the second phase of the safety game. Twenty names were drawn from a barrel containing all 1,000 team members' names. Each will receive a \$100 award.  
*EDITOR'S NOTE: See photo page 2.*

**DRUG SCREENING SEMINAR**—Merrimack Valley Works Medical Director Dr. Donald C. Waugh was a featured speaker at an Oct. 15 seminar presented by the Associated Industries of Massachusetts entitled "Drug Screening at the Worksite." Dr. Waugh was responsible for the initial implementation and current supervision of the drug screening policy which has been in effect at Merrimack Valley since September 1984. The workshop addressed the medical, legal, ethical, and practical aspects of a drug screening program.

**CHORUS CHRISTMAS CONCERT**—The Merrimack Valley Chorus will present a concert of Christmas music on Monday, Dec. 8, continuously from 11 a.m. through 1 p.m., in the MVW auditorium. Chorus, solo and quartet singing of old and new Christmas songs, special pieces by the Merrimack Valley Guitar Club, and sing-alongs of traditional Christmas melodies will be presented. The concert is under the direction of Mac Emshwiller, Bell Labs technical staff member.

**DR. DENIS WAITLEY SEMINAR**—800 supervisors, tech pros and PAEs, along with Manufacturing Vice President Jack Heck and members of the large staff, attended two-day sessions of the Dr. Waitley Goal Mind workshop. Feedback was 98 percent positive. The workshop dealt with positive methods of goal setting and achievement.

**HOME RUNS FOR AT&T**—Seven sets of Red Sox play-off and World Series tickets were distributed to MVW employees in recognition of exemplary quality work.

Receiving play-off game tickets were **Mark Conley**, product engineering associate in the miniature oscillator, quartz growing and preparation dept.; **Andrew R. Slauter**, analyst in the equipment and apparatus drafting services dept.; **John R. Silvio**, carpenter in the plant construction dept.; and **David A. Camasso**, accounting specialist in the accounting systems development dept.

Receiving World Series game tickets were **Laurie Vega**, design engineer in the tool design dept.; **Bill Worrall**, senior tester in the D4 common dept.; and **Patricia Bider**, D5 controller wirer in the D5 wiring dept. at Salem I.

ESP

## Awards total \$10,920



(Staff photo — Bob Gablosky)

**CHARLES W. (CHUCK) SENTER**, seated at left, manufacturing systems technician in the machine maintenance dept., receives a check for \$2,535 for a suggestion proposing modification of the handler equipped linear bonder mechanism and coincidental software. Presenting the check is MVW Manufacturing Vice President Jack Heck. Standing is Chuck's section chief, Russ McGrath.

### Other awards

(\*Designates more than one award)

<b>\$2,610</b> Charles W. Senter*	<b>\$100</b> Pauline C. Boucher Armand Bourasa* Roger A. Chandonnet* Theresa M. Curtin	J. Blaine Orr Lynne A. Petrosino Frances W. Phaneuf Marcos Santiago Steven E. Smith Richard M. Swain Omar E. Tilton William Zinck
<b>\$1,560</b> Richard J. Marshall	<b>\$75</b> Dennis P. Anderson Kathleen M. Apar Harry Apostolides Brian F. Bogle Randall K. Brown Christopher D. Fries Albert R. Gauvin Lois E. Hubbard Donald E. Kizirian Maureen B. Pascucci Teresa Pastore Rodney L. Radcliffe Barbara E. Rogers Roger M. Serratore James K. Yokley John Zappala	<b>\$37.50</b> Rafael A. Camejo Robert A. Gibson
<b>\$547.50</b> Roland L. Gatchell Richard F. Warner	<b>\$50</b> Joseph C. Kozdra	<b>\$30</b> Ray J. Fredette
<b>\$517.50</b> Patti A. Weinhold*	<b>\$450</b> Robert G. Page	<b>\$25</b> Barbara C. Bronelle Michael G. Comeau Daniel G. Cormier James E. Hajjar Alfonso Mambro Gregory J. Raymond Mary G. Shank
<b>\$467.50</b> Barry M. Noonan	<b>\$260</b> Richard C. Davis	<b>\$16.67</b> V. Alan Bloom Roger A. Daniel John H. McNally
<b>\$450</b> Robert G. Page	<b>\$255</b> Gail K. Sanborn	<b>\$12.50</b> Dino Cornella Paul D. Provencher Barry J. Rembis Leonard Trahan
<b>\$195</b> Jane C. Kinsella	<b>\$150</b> George D. Boardman*	

### *In memoriam...*

Theresa L. Howard, retired bench hand, Aug. 10.  
William G. Noonan, retired cost and accounting clerk, Sept. 20.  
Francis Jameson, retired department chief, Sept. 22.  
Julia H. Verda, retired grinding machine operator, Sept. 26.  
Guy Nickerson, retired sprayer, Oct. 1.  
Bernice Z. Hannem, layout operator, Oct. 18.  
Miriam A. O'Brien, expeditor, Oct. 22.  
Joseph F. Adams, retired department chief, Oct. 24.



*BILL SCHEERER, Bell Laboratories executive director of transmission systems, and State Representative Susan Tucker cut the first piece of cake at the Andover open house.*

## Bell Labs opens new facility

Bell Labs new facility at 20 Shattuck Road, Andover, MA, was officially opened on October 19 with a ribbon cutting/open house ceremony.

Although the facility has been in use since January of this year, the October 19 ceremony marked the completion of construction and full occupancy.

Susan Tucker, State Representative, cut the ceremonial ribbon while approximately 600 guests including Charles H. Wesson Jr., chairman of the Andover Board of Selectmen, Pioneer clowns and Andover employees and their families watched. The open house

which followed included self-guided tours and light refreshments.

The building currently houses 230 Bell Labs employees involved with development of secure voice and data transmission terminals, magnetic apparatus, precision analog networks, microwave radio systems, signal processing technologies, digital facilities, and planning and manufacturing data systems.

The Andover facility is also the home of 135 Network Systems Product Management employees who formulate marketing and financial strategies, and profit plans for transmission products.



*(Staff photo—Roger Culliford)*

## TO YOUR HEALTH

# Prescription for good health

By Dr. Don Waugh  
... MVW Medical Director

Here is my prescription on how to "stay alive 'til age 85":

- One-half cup of dried oats added to your diet will reduce LDL cholesterol levels by as much as 25% in just 10 days. The reason is that the bran in oats is water-soluble (as opposed to wheat bran, which is mostly water-insoluble). This is the property which makes oatmeal "sticky." This "stickiness" comes from beta glucans. Once beta glucans reach the intestines, they ferment, turning into short-chain fatty acids. These fatty acids signal the liver to stop cholesterol production and instruct the bloodstream to give up much of the cholesterol circulating in it. Middle-aged men with a cholesterol level of over 250mgm% have two times the risk of experiencing a serious coronary event (an acute myocardial infarct or sudden death).
- Follow the "Rule of 36:" Your HEIGHT in INCHES minus your WAIST in INCHES should equal 36 or greater.
- Not all cholesterol is bad. Some is GOOD. An increased level of high-density lipoprotein cholesterol (HDL) is advantageous in preventing heart and blood vessel disease. EXERCISE increases the level of HDL in the blood. Exercise does not have to be strenuous to be beneficial. Exercise at 50-60% of maximum heart rate produces no less favorable results than exercise at 80% of maximum.



*Dr. Don Waugh*

- 5,000 sit-ups are not enough! Want to reduce your mid-section? How many sit-ups do you think it would take? 1,000? 2,000? 5,000? 5,000 are not enough! A UMASS study showed that after 27 days of sit-ups, there was no reduction in fat in the abdominal area.  
The way to burn fat in the mid-section is to exercise your legs (jog, bike). This burns calories, and that means fat.
- Stop smoking! In men, age 54, one study showed a threefold greater risk of dying for those men smoking 15 or more cigarettes a day compared to non-smokers. The risk of sudden death was 5 times greater in one-pack-per-day smokers compared to non-smokers.
- Control blood pressure! An individual with a diastolic blood pressure greater than 105mm Hg has a risk about three times greater than that of a person with a normal pressure of 80mm Hg.
- Choose snacks wisely! Popcorn should be the ultimate snack food. It is high in fiber and low in calories. A handful of popcorn contains 6 calories; 10 potato chips have over 100. Popcorn contains iron and B vitamins.

## MVW fire brigade trains

During the week of Oct. 20, members of the MVW volunteer fire brigade underwent intensive training given by the Massachusetts Fire Fighting Academy.

On Friday, Oct. 24, the group — numbering 26 — traveled by bus to Cape Cod where they underwent hands-on training at the Academy's training area in Barnstable, MA.

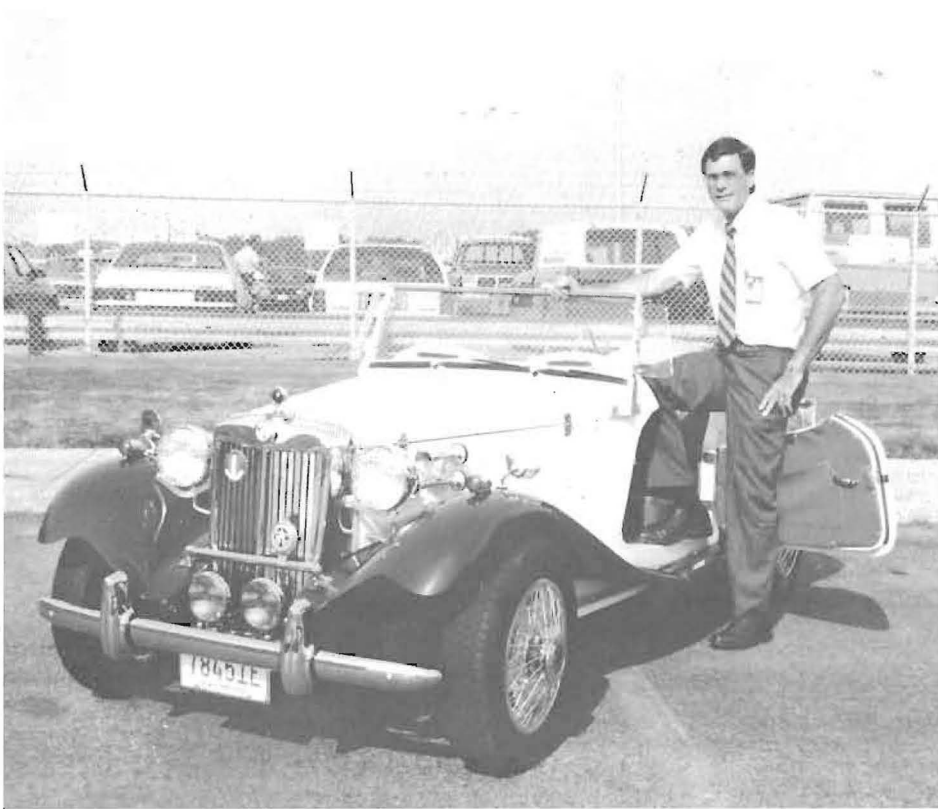
The training included attacking an actual fire in a burning building while wearing full gear, fighting a propane fire, and procedures in the use of fire ladders. ■

Brigade members attending the training were: Tim Gagnon, Shawn Flanders, Kevin York, Gary Ingham, Louis Steed, Jeff Lloyd, Louis Donegan, Kenneth Lisby, Raymond Childs Jr., George Tattan, Robert Benedetti, Robert Murphy.

Also, Steve Fairbrother, Dennis Bakies, Anh Viet Le, Clifford Wentworth, William Steele, William Brennan, Keith Martin, Bruce Roberts, Scott Cole, William Dow, Salvatore Fusco, Kenneth Roix, Bainbridge Scovotti and Rich Sweeney. ■

## AFTER HOURS

## Len Quintal builds his own car



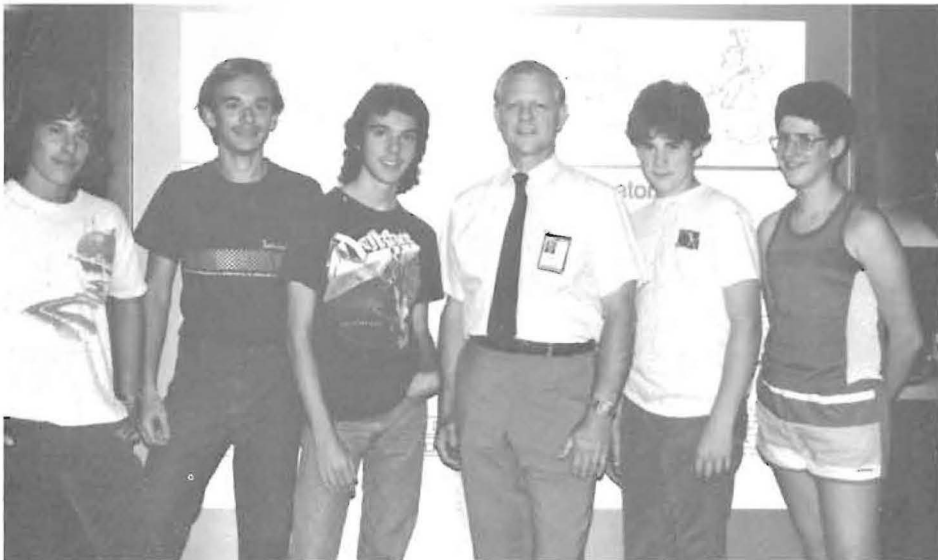
(Staff photo—Bob Gablosky)



(Staff photo—Roger Culliford)

CHAPTER 78, Telephone Pioneers of America, sponsored a program on benefits available to retirees at Pat's Beef House, Haverhill. Participants included, left, Rick Morency, national manager, Retired Employees Benefits Organization (REBO), and Larry Farrell, chapter administrator.

## Explorers meet at Clark Shop



(Clark Shop photo)

JOHN LUBERTOWICZ, Clark Shop senior electrical engineer, meets with members of Explorer Post 249, of which he is advisor. Pictured with John are, from left, Explorer Post members Tom Kowalenko, Paul Urbanski, Chris Tierney, John Pine and Greg Vaidman.

Len Quintal and his wife, Joyce, like to ride around in their new two-door MG convertible and become the center of attention, especially in their hometown of Plaistow, N.H.

There's nothing unusual about their car except that it's a replica of a 1952 model which Len built himself from a kit in about 540 hours over a period of nine months.

Len, department chief night shift administrator, drives the car to work once in a while, but most of the time it is kept in his garage and used for special occasions or for those pleasant rides with his wife.

Len has driven the car about 2,500 miles since building it. "We use it as a novelty," he said, adding: "My wife and I just enjoy riding around in an unusual car. It's an attention-getter. People wave to us, they come up to us and tell us how nice it looks, they blow their horns at us. It's just fun to have."

The car has an all-fiberglass body with leather upholstery, a mahogany dashboard, wooden steering wheel and air horns. It was built on a modified 1971 Volkswagen chassis and has a 1968 Volkswagen engine which Len completely rebuilt even before he bought the kit.

Len says he has a videotape of the entire building operation and when he views it, he can't help thinking: "I enjoyed doing it but I doubt I'd ever do that again." ■

John Lubertowicz, a senior electrical engineer at the Clark Shop, is the advisor to Explorer Post 249, sponsored by AT&T Network Systems. The Post was chartered in 1974. Explorers are not Scouts, but Exploring is a career-oriented program of the Boy Scouts for young adults from 14 to 20 years of age.

Members of the Clark Post are high school students from several towns in the area who are probing careers in electronics or computers. They meet regularly after school at the plant to work on projects in their chosen areas. In this manner, the young adults are exposed to a hands-on experience which is not available in any other environment.

In addition to the regular meetings, members go on field trips to other locations. In the past year, the group has visited an airport control tower, an electrical power generation station, and a Bell Labs facility.

## Fishing Derby winners listed

Prizes for the winners in the 28th annual WEValley Club Fishing Derby were distributed on Oct. 28 by members of the Fishing Derby committee, Frank Damiano, Stan Jancewicz and Bill Wedge.

The grand prize winner for the Salt Water Division was Cynthia Hyde, 14, daughter of Douglas Hyde, Dept. 30765. Her prize winning entry was a 26 ½-pound bluefish caught off Newburyport, Mass., on July 7. She received a Penn salt water rod and reel.

Other prize winners in the Salt Water Division were:

—Rana Ian Nichols-Kiley, 10, son of Virginia Nichols-Kiley, Dept. 54266.

—Karen Zannini, 5, daughter of Bob Zannini, Dept. 50527.

—Laureen Hyde, 16, daughter of Douglas Hyde and sister of the grand prize winner, Cynthia.

The grand prize winner in the Fresh Water Division was Joey Duchemin, 8, son of Joe Duchemin, Dept. 90456N. Joey caught a 2-pound, 9-ounce pickerel on July 15 in Maine. His prize was a Shimano rod and reel outfit.

Other prize winners in the Fresh Water Division were:

—Julie and Mark Kandrut, children of Ralph Kandrut, Dept. 33172.

—Mark Danus, 13, son of Bob Danus, Dept. 50563.

—Todd and Nacole Buyck, children of Steven Buyck, Dept. 11163.

—Melissa La Scala, 4, daughter of Ellen La Scala, Dept. 51347.

—Daryl Rice, 5, son of Scott Rice, Dept. 90231.

—Matthew Janos II, grandson of Matty Janos, Dept. 51160.

—Shannon O'Donnell, 11, daughter of Stephen O'Donnell, Dept. 30461.

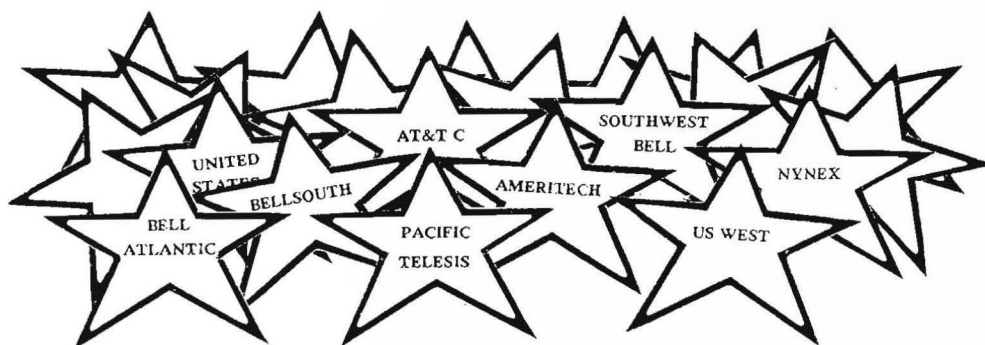


(Staff photo—Bob Gablosky)

JUDGES for the annual fishing derby sponsored by the WEValley Club pose before some of the prizes distributed to contest winners. They are, from left, Frank Damiano, Bill Wedge and Stan Jancewicz.

# THE VALLEY VOICE

Merrimack Valley Works  
November, 1986



## Know your customer

"I'm here only because I have customers." This statement by Alan Moline sums up the tremendous importance of our customers. Without them, there would be no Merrimack Valley Works or AT&T.

We have several customer visits each week at MVW. This is their chance to see our factory, product, and *you*—the people who make it all work. Because you now have more opportunity to meet the customer than ever before, and with our increased focus on improving customer satisfaction, *The Valley Voice* will

begin a series of articles entitled "Know Your Customer" in the December issue.

Each month, we will highlight a different MVW customer. Our plan is to help you become more knowledgeable in the operations, characteristics, and importance of those who provide us indirectly, but ultimately, with our daily bread.

This is your opportunity to become an "informed" representative of MVW. As Jack Heck recently said, "The workers in the shop are our best salespeople."



1600 Osgood Street  
North Andover, MA 01845