Western Electric

THE VALLEY VOICE

Merrimack Valley Works
November/December, 1983

Contents

November/December

THE VALLEY VOICE

Published for employees and retired employees of Western Electric's Merrimack Valley Works
1600 Osgood Street
N. Andover, Massachusetts 01845
(617) 681-2307

Bernie Mooers, editor

Correspondents:

Colleen Collins	x4287
Charlie Cote	x3852
Bob David	x2905
Mike Deloge	x2748
Claire Faucher	x4311
Bonnie Haley	x4898
Jim Hajjar	x5212
Steve Jaskelevicus	x3616
Kathy Petersen	x6778
Bob Zingali	x3629

Pioneer correspondent:
Pauline Sullivan x5241

Artists:
Denise Stewart
Andrew Gaunt

Western Electric

MVW Engineer's Son Awarded Scholarship

Michael Equi, second from left, son of Bob Equi, Information Systems Senior Staff Member, 36310, accepts the annual Engineering Excellence Society Scholarship Award from Dave Rudd, society president. At left is Joe Messina, society vice president, and at right, Bob Zingali, secretary-treasurer. Each year the society awards the scholarship to the son or daughter of a Works engineer, based on his or her scholastic achievement. Michael plans to study electrical engineering at Cornell University.

BSSP and SSP Results

BSSP

	Unit Value	Unites Credited Per Dollar
August		
AT&T	3.5432	.2822
Government obligations	3.2199	.3105
Equity portfolio	2.6191	.3817
Guaranteed interest	1.5188	.6584
September		
AT&T	3.5824	.2791
Government obligations	3.2797	.3048
Equity portfolio	2.6610	.3757
Guaranteed interest	1.5350	.6514
October		
AT&T	3.4223	.2921
Government obligations	3.3044	.3026
Equity portfolio	2.6249	.3809
Guaranteed interest	1.5517	.6444

SSP

August		
AT&T	1.6510	.6056
Guaranteed interest	1.6176	.6181
September		
AT&T	1.6692	.5990
Guaranteed interest	1.6337	.6120
October		
AT&T	1.5945	.6271
Guaranteed interest	1.6506	.6058

Western Electric's Board of Directors Meet at Merrimack Valley

For the first time since 1974, the Merrimack Valley Works on November 11 hosted a meeting of the Board of Directors of Western Electric.

The board members, who usually meet in New York City, held their meeting during the morning. They then visited the manufacturing area, where they viewed some of our products and processes, listened to explanations of them, and met some of our employees along the way.

Carlo Bracci (foreground), Department Chief, Automated In-line Manufacturing, explains the D5 Automated Circuit Pack Shop to board members (from left) Don Procknow, President, Western Electric, James Olson, Chairman of the Board, Roger Morley, and Joseph Williams.

Western Electric President Don Procknow chats with Mary Susi, layout operator in the Lightwave circuit pack and regenerator area, and Ron Lindquist, Manager, Manufacturing - Transmission Systems.

Board members Roger Morley and Randall Tobias, Chairman of the Board James Olson and board member John Morgan listen to explanation of Lightwave operations by Art Carter, Department Chief, Product Engineering - Lightwave Systems [FT2, FT3C].

Board of Directors Western Electric

GEORGE V. COOK
Vice President and General Counsel, Western Electric
JOHN L. GUSHMAN
Former Chairman of the Board, Anchor Hocking Corporation
PHILIP E. HOGIN
Executive Vice President, Components and Power Systems, Western Electric
JOHN C. KENEFICK
Chairman of the Board, Union Pacific Railroad Company and Missouri Pacific Railroad Company
JOHN A. MORGAN
Former Chairman of the Board, Butler Manufacturing Company
ROGER H. MORLEY
Former President, American Express Company
JAMES E. OLSON
Vice Chairman of the Board, American Telephone and Telegraph Company and Chairman of the Board, Western Electric
DONALD E. PROCKNOW
President, Western Electric
JOHN T. RETTALIATA
Chairman of the Board, Banco di Roma (Chicago)
MICHAEL I. SOVERN
President, Columbia University
THOMAS R. THOMSEN
President, Technology Systems Group, Western Electric
RANDALL L. TOBIAS
President, AT&T Consumer Products Group, Western Electric
E. WAYNE WEEKS, Jr.
President, Network Systems Group, Western Electric
JOSEPH D. WILLIAMS
President, Warner-Lambert Company

Toward The

by Wayne Curtis in

Wayne Curtis

Have you ever had the urge to go to the European point of land closest to the North Pole?

How about an urge to travel on a cargo ship?

No? Well, one Merrimack Valley Works employee had both urges, and satisfied them not long ago.

His name is Wayne Curtis, of Department 70131. With his brother Charles, Wayne booked passage on the Norwegian cargo ship *Polarys,* bound for Honningsvag, Norway, out of the old Viking city of Bergen. The round trip was 2500 miles.

Our first question was, "Why?" Wayne's answer: "I'd always thought it would be exciting to go there, and especially exciting to travel on a cargo ship."

Was it exciting? Listen to Wayne's own account, and judge for yourself:

On the deck of the Polarys

The *Polarys* is a coastal steamer, carrying mail, cargo and some passengers from Bergen northward over the North Cape (Nordkapp) to Kirkenes on the Soviet border, then back to Bergen, with stops at many ports along the way.

Beginning our northward journey, we left Bergen in a rainstorm. We soon found that just about everything in Norway can be seen from a coastal steamer. Since fishing is the country's main industry, life is active along the coast and waterways. The waters along the coast are so deep that ships can stay close to land all the way. In fact, there are passages where they can travel just a few yards from the cliffs and rock formations. Farms, people and livestock are plainly visible from offshore.

Several of the passengers our ship picked up were accompanied by large German shepherd dogs. (We never saw a *small* dog in Norway. We were told that the increasing wolf population was becoming a serious problem; some school children had already been attacked. Hence the large dogs.)

Many others were young Norwegian hikers, traveling long distances with their back-packs. Sometimes, to get to the fantail of the ship, we had to step over sleeping hikers. One morning, two hikers were cooking breakfast over what appeared to be a can of Sterno. Unfortunately for us, the aroma of their cooking was a lot more pleasing to our nostrils than the odors coming from the ship's galley!

Our diet consisted of fish and boiled potatoes. (If you don't like boiled potatoes, don't go to Norway. Of the many ways to prepare potatoes, the Norwegians have chosen the boiling method, and the only meal at which they're not served is breakfast.) Raw salmon was served frequently, and I developed a taste for it, along with the boiled spuds.

At 66 degrees, 33 minutes north, we crossed the Arctic Circle, and were treated to a polar party. This consisted of having ice cubes thrust down our necks, with a glass of wine and a towel as chasers.

At the Troll Fjord, the ship steamed quietly through the 100-meter entrance. On either side, the cliffs rose straight up and out of sight like skyscrapers in the rain and fog. Strangely, in the fjord the ship's whistles and horns were noticeably silent. It was a very eerie experience.

At the Troll Fjord

North Pole

collaboration with Pauline Sullivan

Perhaps the most fascinating part of the entire trip was our observation of the "Maelstrom" in the Norwegian Sea. This is the giant whirlpool made famous in the writings of Jules Verne and Edgar Allen Poe. The mass turbulence can be readily seen. Understandably, there were no ships in that area. Although the Maelstrom has claimed many men and ships, it does not have quite the chilling attributes described by the adventure authors. Nonetheless, it is still a marvelous natural phenomenon to see.

Striking a pose at the Nordkapp globe

As the ship neared the North Cape, we could see herds of reindeer grazing on the mountain slopes.

Debarking at Honningsvag, we motored to Nordkapp, the northernmost point of land in Europe. The North Cape is in the Land of the Midnight Sun, where the sun is above the horizon all twenty-four hours of the day.

At the end point, near the edge of the cliffs, is mounted a large globe symbolic of the Earth. Beyond this point, nineteen hundred miles across the Arctic waters with its ice packs, lies the North Pole.

"Guard duty" at the Norwegian-Soviet border

Laplander woman (note long knife at left hip)

In this area I saw my first Laplander, the equivalent of the Alaskan Eskimo. These people are permitted to cross the Swedish, Finnish and Soviet borders at will. A Laplander woman gave me a broken-toothed smile, which I might have returned had it not been for a vicious-looking scimitar hanging at her waist.

The final lap of the journey was a visit to the Norwegian-Soviet frontier checkpoint in Kirkenes, Norway. Because of its extreme northern location, this border point is relatively quiet. Pictures of the sign posts were permitted, but we could take no photographs of the Russian troops or their guard post. One member of our party had his film confiscated when a Soviet guard observed him sweeping the countryside with his video camera.

I was a bit luckier. The border was posted on the outer side of a curve in the dirt road, where there were piles of rock from the constant road grading. On one of these rock piles I lost my balance and accidentally touched the shutter release on my camera. Later, when I had the film developed, I found one photo of the border gate and the Russian guard tower.

So ends Wayne Curtis' story. As far as we're concerned, the only thing that might have made it more exciting would have been the sighting of Santa and his reindeer soaring overhead.

Introducing the Central Services Organization

by Al Marzioli and Charlie Cote

A new organization is being formed that will be resident at Merrimack Valley. Its name is the Central Services Organization (CSO).

The CSO was developed to help our customers, the regional Bell operating companies (RBOC's) keep our national telecommunications network the best in the world. The new organization will provide technical support to the new RBOC's, focusing primarily on services in the exchange area and any other services which can be efficiently centralized.

The CSO's responsibilities will include research and systems engineering that supports the efforts of operating companies in the telecommunications marketplace. The majority of the work force will be working in the technical services area, making sure that the RBOC's have the right technology available to them at the right time.

Approximately one-half of the work force will be involved in information systems, which are computer-based. Their responsibilities will include inventory, billing, record keeping and software.

The other half of the CSO will focus on providing research, systems engineering, network planning, quality assurance, and operating methods, to support the application of technology in the RBOC's.

Paula Pare, Assistant District Manager, CSO Designate, discusses a point with two of her Quality Representatives, Frank Bukowski, left, and Harry Cravino.

Here at Merrimack Valley, personnel from the CSO will function in a quality assurance capacity.

Paula Pare, Assistant District Manager, CSO Designate, has formed a group of twelve Quality Representatives, with the charter of "assuring the integrity of the supplier's quality system."

Paula and her employees, although stationed in-house, are not employees of AT&T; they work for and are responsible to the RBOC's.

Paula says, "The twelve Quality Representatives, who will be the Quality Assurance Operations (QAO) section of the CSO, will be conducting continuous on-site surveillance of products that the new regional companies will be purchasing from Merrimack Valley.

"Other functions of the QAO representatives will be to perform periodic quality program analyses and engineering evaluations of test and inspection methods.

"The new assignment," she continues, "will be a challenging experience, and I'm looking forward to the coming year at Merrimack Valley. 1984 will present a challenge to all of us to develop new working relationships in the new environment."

Quality Corner

In the September/October edition of *The Valley Voice,* we asked for techniques or programs that have been used successfully to improve product quality.

We were almost immediately informed (by several sources) of the efforts of Ed Twombly, business methods associate in Dept. 88220.

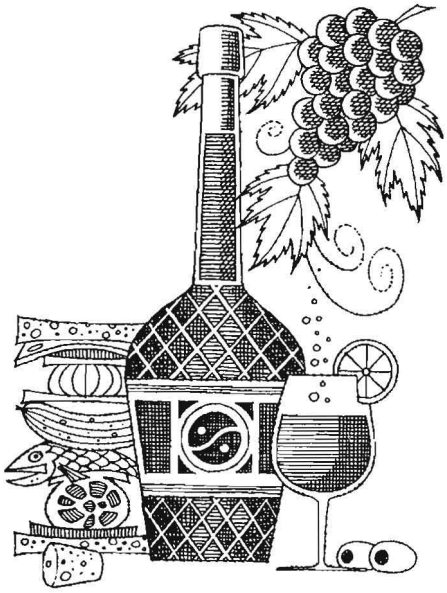
Ed Twombly

Ed has been working on a report to track and measure change orders, TIM's, change supplements, PIM's, rerates, new design equipment, apparatus and other items requiring measurements.

The first area Ed aimed at was the change order organization. Utilizing the RAMIS and UNIX information systems, he has been able to reach an 80 percent level of mechanization, permitting the elimination of the old Wheeldex file of change order information which was used for decades. The reports he has generated make it possible for a worker to track his work and find answers to production schedules, change order information on any product, and much more that he could not do in the past.

Ed has just instituted a New Design Shortage Analysis Report, which allows a product's production schedule and main panel as well as plug-in unit shortages to be reviewed, so that weaknesses in production can be recognized.

"We're trying to bring about expediency in recognizing information to improve quality," Ed says. "We can no longer afford to shoot in the dark."



Of Wines and Vines

Choose the right wine for a special holiday treat

More Americans than ever before are drinking wine, and this will be especially true during the next few weeks, what with holiday dinners and welcoming the New Year. Yet many initiates to wine drinking haven't progressed beyond a few simple choices. So here are some holiday suggestions for wines to accompany that special meal or for a genteel celebration of the debut of 1984.

Most of us are familiar with Chianti, a red "drinkable" wine that can be downed with a meal in gulps rather than in sips. Chianti is a blend of three or four grapes, with the San Gioveto type as the dominant variety (this grape is believed to be the source of the grapes from which California's abundantly produced red wine, Zinfandel, is fermented). While most people recognize a Chianti bottle by its woven straw cover, aged Chianti is marketed in a regular bottle, and has a seal with a black rooster. This is called Chianti Classico, and is produced by many companies.

If you want a full-bodied red wine to accompany your Christmas dinner, why not try Barolo, which has two distinctively different tastes — one when it's young and another after it has been aged for about eight years. Barolo is comparable to the French wines produced in the famous Rhone Valley.

Verona sends not only two gentlemen, but also two light red wines which may better accompany a traditional holiday banquet: Bardolino and Valpolicella. There are many other good red wines available, including Lambrusco, which is often lightly sparkling. If you're at all pleased with California or French red wines, you might try one of these.

White wine for the holidays? Why not? After all, many fine restaurants serve Soave or Verdicchio. Both of these have been compared to German white wines, Sauternes, or Chablis.

Soave is quite dry but full-bodied. If you're accustomed to sweet wines and are inclined to wrinkle your face and exclaim, "Sour!" perhaps Soave is not for you. Verdicchio is a spicy wine produced from a comparatively rare grape. It's advertised as having been the favorite wine of the Caesars. Unfortunately, none of them has come back to verify the claim, but the taste of the wine speaks for itself.

Ah, yes — you who prefer a sweet wine. Est! Est!! Est!!! is for you. Yes, that's its real name, exclamation points included. It's a yellowish and very fruity wine, and if you enjoy sweet light wines from New York state, it should appeal to you.

Finally, on New Year's eve someone will probably bring out a bottle of Asti Spumante and say, "Here's the Italian champagne!" Humor him, but keep in mind that it's actually a sweet sparkling dessert wine, not a champagne.

Obviously, in this article we've barely scratched the surface of the list of wines available. If we've omitted someone's favorite brand or type, we apologize, but it would be impossible to name them all.

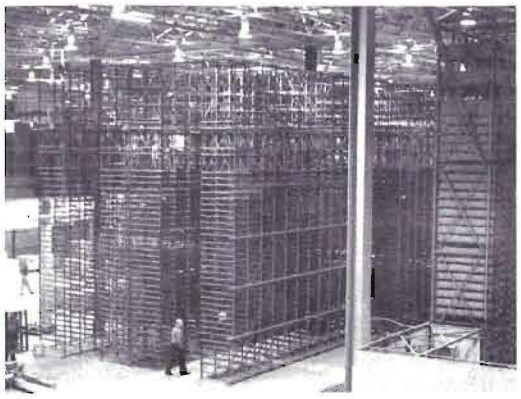
One more thing — many of us enjoy wine; it's one of life's subtle pleasures. But it's still an alcoholic beverage. So treat it with respect, especially if you have to drive later. And never force it upon anyone.

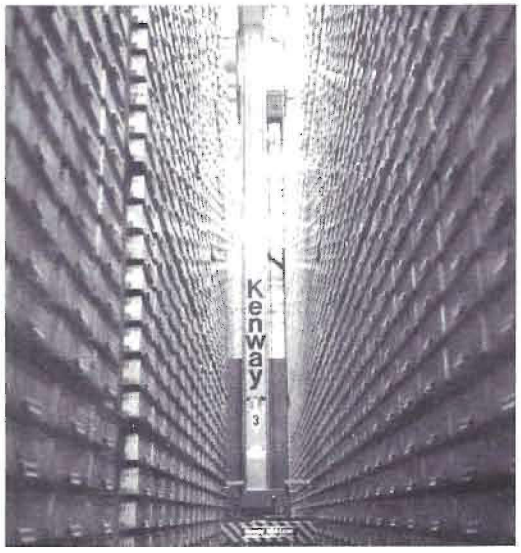
The Automation

Remember "The Orange Giant of Merrimack Valley: (*The Valley Voice,* Fall, 1982)? The title derived from the size of the Kenway Automatic Storage/Retrieval System (AS/RS) which was installed in the warehouse building in 1981.

In that story we reported that other such systems were due to be placed alongside the first one. This has been done: six "giants" are now operating side by side in a computerized storeroom of vast capabilities.

This system is a technological blend of computer control and mechanical storage/retrieval functions, giving access to thousands of parts with little physical effort and eliminating non-productive tasks. The facility now contains nearly twenty thousand bins, each of which can be subdivided into as many as thirty-two compartments.





Thirty-one-foot-high racks (at left in upper photo) had to be installed on both sides of each Kenway machine, one of which is shown in lower photo.

We still need people, of course, but no longer must they scurry up and down aisles, searching for the right bin, having to reach for bins often above their heads, and keeping manual count of the remaining inventory.

Let's follow the selecting of parts for select jobs under the new system.

First, the select sheets are generated by the Integrated Production Control System (IPCS) and the On-line Access to Storeroom Inventory System (OASIS). At the same time, the information on the select sheets is produced on computer tape, which is read into a computer adjacent to the Kenway machines. The computer stores this information on a disc memory system.

A coordinator in the storeroom then assigns ten to fifteen select jobs (each containing numerous selects) to a specific truck.

Next, the truck is brought to a Kenway machine operator, who simply enters the truck number on an end-of-aisle terminal. The computer then directs the machine to deliver to the operator the bins containing all the parts for the selects assigned to the truck. If several of the parts are contained in the same bin, the computer automatically instructs the machine to perform all these "picks" at the same time. The truck then goes to other aisles until all the parts for the selects have been delivered.

Since all bin retrievals and stores are recorded, inventory records for all storage locations are much more accurate, and far easier to maintain.

# of a Storeroom

Obviously, a system like this did not come together without the cooperative efforts of a great many people: Department Chief Shiva Sheel and Senior Engineers John Ziady, Jim Christopher and Bill Mooney of

Ed Gallant with a truck holding portions of a select.

the Materials Engineering Organization; Bob Dube, Department Chief, Consolidated Stores (Apparatus/Equipment), and Section Chiefs Harold Hersey, Don Dunbar, Jack Melia, Walt Donovan, Ron Panek, Al Zaccardi, Bernie Clohisy and Bob Lord, whose people kept things going while adjusting to the new system; Don Bohnwagner, Scott Troutman and Sue Wright of Information Systems; the factory engineers and construction crews, who completed on schedule the relocation of a massive storeroom (50,000 parts valued at $60 million and contained in approximately 80,000 trays); and the maintenance crews of Russ McGrath and Don Daggett, whose excellent performance accounts for the high machine uptime.

The efforts of these people have brought to successful completion the multi-phase project of creating a consolidated Receiving/Storeroom complex in the warehouse building. Through the AS/RS inherent HI-Rise/Hi-Density storage (utilizing the cube), which occupies only 10,000 square feet, the relocation of the storeroom has released approximately 75,000 square feet of much-needed floor space for manufacturing in building 30.

Ray Connors, in foreground in upper photo, operates one of the Kenway machines, using an end-of-aisle terminal like the one shown in lower photo.

Sweet Treats for the Holidays

(For those whose diets begin on January 1st)

by Denise Stewart

Chicago chicken liver pâté

Chicken liver pates are among the most popular canapé spreads, and there are dozens of recipes for them, from the very simple to the more complex. They keep for at least a week in the refrigerator and take kindly to freezing. The following recipe is a cinch to make.

2 pounds chicken livers, chopped
3 sticks butter at room temperature
2 medium-sized onions, chopped
1 teaspoon paprika
1 teaspoon curry powder
¼ teaspoon salt
¼ teaspoon black pepper
¼ cup cognac

In a large saucepan combine chicken livers, one stick butter, onions, paprika, curry powder, salt and pepper. Cook over moderate heat for about ten minutes, stirring frequently. Empty into blender container and blend on high speed until mixture is smooth, stopping occasionally to stir down. Empty into a bowl and beat in the remaining butter, bit by bit, and finally the cognac. Pack in a bowl or crock with a cover and chill until firm, or freeze in the container. Makes 8 - 10 servings.

Shortbread cookies

2 cups sifted all-purpose flour
¼ teaspoon baking powder
1 cup butter or margarine
½ cup sifted powdered sugar
½ cup finely chopped walnut
Walnut halves or large pieces for decorating

Resift flour with baking powder. Cream butter with sugar until light and fluffy. Gradually blend in flour mixture. Stir in chopped walnuts. Cover and chill. Roll out on lightly floured board to ¼-inch thickness. Cut into desired shapes. Place on ungreased cookie sheet. Press a walnut half or a few pieces onto each cookie. Bake at 300° for about 20 minutes until edges are very lightly browned. Cool on wire rack. Makes 2 to 2½ dozen cookies.

Raisin-nut fudge clusters

½ cup evaporated milk
½ cup water
½ teaspoon salt
2 cups sugar
¼ cup butter (½ stick)
1 teaspoon vanilla
1 cup nuts
1 cup seedless raisins

Combine milk, water, salt and sugar and cook to soft-ball stage (236°).* Put butter in a heavy skillet and heat to a light brown; add to sugar mixture. Do not stir until cooled. Add vanilla and beat until creamy. Add nuts and raisins and drop from a spoon onto waxed paper. Makes 2 lbs.

*Cold water test

Use a fresh cup of cold water for each test. Drop about ½ teaspoon of the syrup into the water. Pick up the syrup in the fingers if possible and roll it into a ball.
Soft ball: the syrup will roll into a soft ball that quickly loses its shape when removed from the water.

Stuffed dates

5 prunes
5 figs
⅓ cup seedless raisins
½ teaspoon cinnamon
1 teaspoon vanilla
1 teaspoon honey
34 pitted dates
fine fruit sugar (confectioners sugar)

Wash the prunes and figs and steam them for 10 minutes. Remove pits from prunes and put prunes, figs, nuts and raisins through coarse blade of a food chopper.

Combine the fruit mixture with the cinnamon, vanilla and honey. Stuff dates with mixture and roll in sugar.

Cranberry conserve

Pulp and grated peel of 2 oranges
2 cups water
4 cups cranberries
3 cups sugar
1 cup raisins
¼ teaspoon salt
½ cup chopped nutmeats

Cook the orange peel and pulp in the water for 20 minutes. Add cranberries, sugar, raisins and salt and boil rapidly until the jellying point. Add nutmeats and cook for 5 minutes longer. Pour into hot jars and seal.

Caramel fudge balls

1 cup walnuts
¼ cup butter
1 cup brown sugar, packed
1 cup granulated sugar
¼ teaspoon salt
¾ cup dairy sour cream
1 teaspoon vanilla

Chop ½ cup of the walnuts to medium sized pieces. Chop remaining walnuts into fine pieces for coating fudge balls.

Melt butter in heavy 2-quart saucepan. Add sugar, salt and sour cream. Cook over low heat, stirring until sugar dissolves. Cover, boil slowly 5 minutes; uncover, cook rapidly without stirring to 236°F (soft ball stage). Remove from heat; cool to lukewarm. Add vanilla; beat until mixture is creamy and begins to hold its shape. Stir in medium sized walnut pieces. Drop by rounded teaspoonfuls onto waxed paper. Quickly shape into balls. Roll in finely chopped walnuts. Let stand until firm. Makes about 24 balls.

Date bread

1 lb. pitted dates
1 cup chopped walnuts
1 cup boiling water
⅓ cup butter (not margarine)
5 tablespoons cold water
1 teaspoon baking soda
¾ cup brown sugar
1 teaspoon vanilla
1 egg
2 cups all-purpose flour
1 teaspoon baking powder
½ teaspoon salt

In a large mixing bowl combine dates, nuts, boiling water and butter. Beat until butter is broken into small pieces. Add cold water; stir in baking soda, brown sugar, vanilla, egg and flour. Add baking powder and salt and beat until well-blended.

Spoon batter into an oiled 8½ x 4½-inch loaf pan and bake in a 350° oven for about 1 hour, or until loaf tests done. Remove loaf from pan and cool on wire rack.

This bread keeps moist for several weeks if wrapped in foil and stored in the refrigerator. It also freezes well.

VOICEover

Following the business fortunes of many of the other Works, we at Merrimack Valley must conclude that we have a great deal to be thankful for. We face a solid work program for the foreseeable future; indeed, some of our co-workers who were laid off last year are returning to their jobs. We are among the busiest Western Electric plants.

Certainly this will make shopping for Christmas a lot less painful to our pocketbooks. But as the Yuletide season approaches, we should reserve some quiet moments for reflection upon the real significance of the holiday we're about to celebrate.

The editor and staff of *The Valley Voice* hope that, as we do this, we will all give priority to the phrase, "good will toward men." Admittedly, it should be in our minds all year long, but if it is not, this season is a wonderful time to bring it forth and put it to work.

With that thought, we wish everyone the happiest of holiday seasons, and good health and fortune during the coming year.

Dr. W. Edwards Deming, world-renowned statistician and proponent of quality and productivity improvement, sits beside surprise guest Holly Mayer, Miss Massachusetts, at a party in honor of his 83rd birthday during the fourth seminar attended by Western Electric personnel, at the Sea Crest Hotel in Falmouth. Dr. Deming was presented with a large framed birthday card signed by each of the attendees.

1983 Plant Golf Champs

Don Veltsos and Andy LaPierre

and Plant Softball Champs

The J's, who were plant champs in 1982, breezed to the 1983 championship with 24 wins and no losses. From left — Kneeling: Joe Thompson and player-coach Milt Taylor. Seated: Rick Pipitone, Gerry Pineault, Julio Bueno, Jim "Lucky" Luciano, and John DeZazzo. Standing: Gary Prescott, Eddie Silva, Mike Rice, Jim Billis, Mike Green and Bob Conley. Missing from photo: Bob Buxton.

Transfer of Thin Film Production From Hawthorne Begins

First work-assist shipments made on schedule

As most of us know by now, we are in the process of transferring to Merrimack Valley the thin film product from the company's Hawthorne Works, which is being phased out.

To effect an orderly transition of operations, a transfer committee, comprised of employees from both locations, has developed plans for the transfer to be made in six phases between October, 1983, and December, 1985. The Hawthorne Thin Film product will require about 88,000 square feet of space, doubling our current thin film operation.

Warren Crawford, chairman of the committee at Merrimack Valley, says that, starting in October, Merrimack Valley assumed some production of the FA772/FA773 hybrid integrated circuits (HICS) on a work-assist basis. This means that while the work is being moved here, Hawthorne will continue to provide the necessary materials and engineering support. Crawford explains that this work-assist approach will be used for each of the products to be transferred. Merrimack Valley will produce increased quantities of the various circuits until we are making the entire schedule and become source. In the case of the FA HICs, 525 772's and 225 773's were shipped on schedule by Merrimack Valley during the last fiscal week of October.

Tester Brenda Conkel checks over an FA772 circuit pack as Dick Lewis, left, Department Chief, Thin Film HIC Manufacture, and Section Chief Jim Adams observe.

Many of the products involved in the transfer are associated with the 5ESS™ Electronic Switching System, and, according to Crawford, the demand for 5ESS™ products is increasing at a tremendous rate.

"But we're confident," he says, "that this transfer will be accomplished on time, and without any loss of service to the customer." The transfer will eventually require between 900 and 1,000 people at Merrimack Valley.

Cranium Crackers

pneumonoultramicroscopicsilicovolcanoconiosis

The lexicographical leviathan printed above is the answer to the question posed in the last edition: What is the longest word in the English language? With 45 letters and 19 syllables, it's far and away the winner over the previous champ, antidisestablishmentarianism, which has only 28 letters and 11 syllables. Naturally, you'll want to use it in your next conversation, so here's its meaning: a disease of the lungs caused by the breathing of extremely fine siliceous dust particles.

Now, if you will, gather your mental strength and come up with the longest *one-syllable* word in the language.

Health Column to Begin

Beginning with the January/February edition, a regular addition to *The Valley Voice* will be a column by newly appointed Works Medical Director Dr. Don Waugh, entitled, "It's Your Health."

Dr. Waugh comes to us from a tour of duty as Medical Director at the Garrett Turbine Engine Company, Phoenix, Arizona. We look forward to hearing from him through his new column, which will offer valuable advice on items of safety as well as health, to aid us in our pursuit of longevity.

Employees Suggestion program $10,585.00 in awards

Top Award $1,385.00

Dick Lamprey, center, Dept. 81421, who has submitted several award-winning suggestions in the past, discusses his latest one with Jack Driscoll, left, Director of Manufacturing, who presented the $1,385.00 award, and Jack Brennan, section chief. Dick proposed an improvement in the Bellpac assembly operation by eliminating the waxing of spacers and affixing them to the panels and boards by standing the panel on end, so that the spacers do not fall off during assembly.

Three Share $1,245.00 Award

Mark Stack, left, Bill Boddy, second left, and Hollis Anderson, right, each received an award of $415.00 from Director of Manufacturing Jack Driscoll for proposing a change in the method of tuning 695C and D HICs for use in 2A and 2C Downconverters, resulting in a 30% improvement in test yields. At rear is section chief Armand Lamontagne.

Other Awards

Antonio J. Talarico	$210
Stephen T. Dulgarian	$195
Gertrude C. Pelletier	$160
Cynthia L. Beaulieu	$100
William L. Boddy	$100
Ronald L. Bouchard	$100
Sheila A. Ghika	$100
Gordon H. Hamilton	$100
Kenneth P. Witham	$100
John M. Karanas	$80
Nicholas A. Abate	$75
Donald J. Antonuuci	$75
Patricia A. Boody	$75
Patricia A. Boody	$75
Charles W. Campbell	$75
Pauline A. Dandurant	$75
Gerald J. Daniel	$75
Samuel K. Dizer	$75
William E. Eldredge	$75
Anthony B. Felice	$75
James B. Gatchell	$75
Steven R. Goodreault	$75
Grace D. Grady	$75
Joan B. Gray	$75
Daniel B. Greeley	$75
Juan A. Guevara	$75
Andrew S. Hamel	$75
Gordon H. Hamilton	$75
Gordon H. Hamilton	$75
Gordon H. Hamilton	$75
Paul W. Hannagan	$75
Milagro L. Hayden	$75
Richard M. Hayes	$75
Edward J. Howard, Jr.	$75
Kenneth A. Johnson	$75
James M. Krawec	$75
Carol A. Krylow	$75
Richard S. Lacroix	$75
Thomas A. Lacroix	$75
William L. McKay	$75
Stephen H. Menard	$75
George Miller	$75
Sylvain P. Nadeau	$75
Janice L. Nolette	$75
Bruce B. O'Keefe	$75
Gail E. Powell	$75
Michael L. Savastano	$75
Lorna M. Scione	$75
Antonio J. Talarico	$75
Steven C. Bell	$70
Robert R. Davidson	$65
Phyllis L. Desmet	$65
Anthony J. DiFloures	$65
Edmond C. Ouellet	$65
Anthony J. Alaimo	$50
Roberta J. Bedard	$50
Stephen R. Bennett	$50
Armand Bourassa, Jr.	$50
Rita D. Braley	$50
Richard A. Brooks	$50
Carol J. Butler	$50
Arthur S. Card	$50
Luanne H. Carleton	$50
Mary A. Cebula	$50
Michael P. Costas	$50
Michael A. Deloge	$50
Wilfred J. Desjardins	$50
Ronald E. Dupont	$50
Robert F. Faust, Jr.	$50
Betty A. Fournier	$50
Dennis W. Gauvin	$50
Danny C. Gregoire	$50
Juan A. Guevara	$50
Rufus F. Hastings	$50
Raymond C. Hoegen	$50
Charles J. Jeffries	$50
Patricia M. Jett	$50
Antoine G. Joseph	$50
Richard G. Kane	$50
Joseph L. Marsan	$50
Richard L. Marsolais	$50
Clif R. McIntire	$50
Gloria Morin	$50
Lawrence R. Morse	$50
Lawrence R. Morse	$50
David P. Naylor	$50
Bruce B. O'Keefe	$50
Ronald E. Plourde	$50
Richard A. Rapazza	$50
Elaine S. Regis	$50
Tong W. So	$50
Debra A. Webster	$50
Guy R. Williams	$50
Michael Wrobel	$50
Michael Wrobel	$50
Thomas W. Young	$50
Stuart Manikas	$40
Gilbert N. Atkins	$37.50
Joseph F. Casey	$37.50
Frank P. George	$37.50
Edward L. Hayes	$37.50
Barbara L. Kennedy	$37.50
Mike L. Owen	$37.50
Steven C. Perron	$37.50
Gloria G. Rizzo	$37.50
Diana R. Savinelli	$37.50
Patricia A. Williams	$37.50
Robert C. Gulezia	$35
James M. Krawec	$35
Norman A. Leblanc	$30
Scott D. Arena	$25
Raymond Arsenault	$25
Raymond Arsenault	$25
Irene F. Baublis	$25
Edward M. Benson, Jr.	$25
Gloria P. Colizzi	$25
Joseph A. Consentino	$25
Margaret F. Dawidowicz	$25
Michael J. Distefano	$25
William J. Gaudet	$25
Raymond A. Germain	$25
Mary E. Gioia	$25
Joseph L. Girard	$25
Danny C. Gregoire	$25
June E. Kennedy	$25
Wayne D. Lamphier	$25
Linda A. Leveille	$25
Robert A. Mitchell	$25
Joseph P. Montibello	$25
William E. Owen	$25
William E. Owen	$25
Ernest Pellerin	$25
Dorothea J. Phillips	$25
Irving D. Reval, Jr.	$25
Michele S. Roberge	$25
John H. Robinson	$25
Joseph N.L. Routhier	$25
Mark P. Stack	$25
Ronald W. Teal	$25
Ronald W. Teal	$25
Stephen D. White	$12.50
Mary H. Belanger	$12.50
Phillip F. Cangemi	$12.50
Joseph G. LaCroix	$12.50
William L. McKay	$12.50
Charles F. Murphy	$12.50
David F. Verville	

Solderless Wrap and Crimp Control = Quality

On the first floor of the plant, a small, unpretentious room houses a group of people whose efforts toward quality excellence are unheralded and, for the most part, unknown to most of the Works populace.

They comprise the Solderless Wrap and Crimp Control Inspection Section, and, though small in number (seven at this writing), they're a vital safeguard against insecure connections, both solderless wrapped and crimped.

Under the direction of section chief Dan Sullivan, this group inspects every wire wrapping bit used by operators or on automatic and semi-automatic wiring machines throughout the plant, as well as every crimping tool used to attach lugs or connectors to wire ends.

"Basically, what we're doing," says Sullivan, "is insuring that every operator or machine using wire wrapping bits or crimping tools is using the proper one for the particular gauge of wire, the terminal(s) involved, and the job requirements."

Dianne Weeks administers pull test to solderless wrapped connection.

No bit or crimping tool is issued to any shop until it has been thoroughly checked in this section. Once in use, they are periodically inspected for wear and correct dimensions. Often, a bit or crimping tool is replaced.

Sound simple? Well, consider first of all that there are at least 35 different types of bits used in the plant, plus a great variety of types and sizes of crimping tools. Then consider that in a given week, this small group checks out upwards of 2,800 bits.

Each inspector first "logs in" the particular part so that he or she may keep an accurate record of the various ensuing tests. The operator or wiring machine is identified at this point, of course.

A bit is first cleaned, then checked out using test wires and test terminals. An "unwrap" test is performed to verify the secureness of the connection. Also performed is a "pull" test, using a gauge. These tests are necessary because, even though a connection may look secure, in the field a wire may break under the touch of a repairman. Finally, microscopes are used to check the bit for wear.

While only the bit is inspected in the case of operators using wire wrapping guns, for automatic and semi-automatic wiring machines a sample unit is brought to the inspection room and the tests are performed on the wraps on the product itself.

The section also orders new bits for use throughout the plant, then verifies each bit upon receipt. This is called "qualifying" the bit.

In addition to checking the bits that operators use, this inspection section deals with the operators themselves. Because each operating section has its own unique problems, employees involved in solderless wraps must be familiar with the usage of various types and sizes of bits. For this reason, such employees are sent to solderless wrap classes in the training department. Following this training, they must be qualified by the solderless wrap inspection section. This applies as well to any operator whose quality is out of control for reasons associated with his or her wrapped connections.

Mike Levinger, right, checks a crimped connection with layout operator Ray Hannon. On the desk can be seen two types of crimping tools.

In the case of crimping tools, records are kept in the inspection section as to exactly where each tool is being used. Daily checks are made on each crimping tool and cinch machine. A pull test is applied to the crimped connection, and a micrometer is used to check the height of the crimp. The inspector, who performs these tests right in the operating shops, also makes certain that the correct crimping tool is being used, since this is vital to good quality.

And that last word —quality— is the watchword of this little group called the Solderless Wrap and Crimp Control Inspection Section.

Retirements

September

Anthony A. Abati, 31 yrs.
Nancy J. Batchelder, 30 yrs.
Marion L. Giguere, 16 yrs.
Patrick B. Jennings, 20 yrs.
George F. O'Keefe, 25 yrs.
Wilfred Parent, 31 yrs.
Adrienne G. Serwatka, 21 yrs.
Mildred L. Urbanek, 20 yrs.
Eugenia L. Viens, 27 yrs.

October

Virginia Costarides, 31 yrs.
Rose M. DiPietro, 16 yrs.
Jeannette B. Frechette, 22 yrs.
Marie M. Malone, 15 yrs.
Claire C. Martin, 22 yrs.
Wilfred H. McAvoy, 29 yrs.
Agnes L. McEvoy, 21 yrs.
Irene L. Merrick, 28 yrs.
Gertrude C. Pelletier, 30 yrs.

In Memoriam

Edward L. McCarrick, retired claims adjuster, August 12
Joseph L. Gamelin, retired machine operator, September 12
Jeannette D. Page, retired punch press operator, October 12
William H. Leavitt, Jr., senior planning enginner, October 15
Yvette L. Varezeele, retired wireman, October 29
Katherine M. Buguey, retired inspector, November 1

FIRST LT2 UNITS were shipped in October. Among those involved in the accomplishment were, from left: Rich Maltaman, test engineer; Bill McNally, test engineer; Dick Bouchard, section chief; Scott Cavalear, tester; Dana Comeau, test engineer; Scott Lawrence, tester; and Jim Grieco, test engineer.

A Smile

Author unknown

A smile costs nothing, but gives much. It enriches the person who gives it. It takes but a moment, but the memory of it sometimes lasts forever.

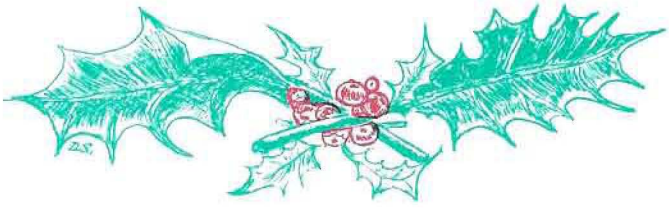
No one is so rich or mighty that he can get along without it, and no one is so poor that he cannot be made richer by it.

A smile creates happiness in the home, promotes good will in business and is the cornerstone of friendship.

It can perk up the weary, bring cheer to the discouraged, sunshine to the sad, and is nature's best antidote for trouble.

Yet it cannot be bought, begged, borrowed or stolen, for it is something that is of no value to anyone until it is given away.

When people are too tired to give you a smile, give them one of yours. No one needs a smile so much as he who has none to give.



The Santa Claus Legend

It was in the little town of Patara in the province of Lycia in Asia Minor that the legend of Santa Claus began more than sixteen centuries ago. There, in 280 A.D., was born a child who was to be named Nicholas.

While Nicholas was still a young man, his parents died in an epidemic, leaving him a sizable fortune. Shortly thereafter, he moved to Myra, the chief city of his province, where he was later elected a bishop of the Christian church.

Early in life, Nicholas became known for his generosity. In disguise, he would circulate among the people, distributing gifts to the poor, especially the children. Legend tells of how, in one instance, he helped the three daughters of a destitute nobleman by secretly supplying each with a bag of gold for her dowry. He supposedly did this by throwing the bags through a window in the dark of night. It is further related that when he threw a bag of gold through the window for the third daughter, it landed in a stocking she had hung by the fireplace to dry. This is said to be the basis for the Christian custom of hanging stockings by the fireplace.

When it became known, inadvertently, that Nicholas was the donor of these gifts, it came about that whenever unexpected gifts were received by anyone, he was given credit for it.

After his death in 341 A.D., the church canonized Nicholas. Thus he became Saint Nicholas, known far and wide for his giving of gifts.

Legend has it that Saint Nicholas' robe — his "tabard" — enabled him to travel instantly from place to place. In Holland, he is said to have a horse for his night journey over the roofs of houses. In Belgium as well as Holland, life-sized figures of Nicholas are frequently placed in front of shop windows, and in some places, a man dressed like the saint goes about the streets on a white horse with presents.

The Dutch who settled New Amsterdam brought the legend of Saint Nicholas to the New World. In 1822, Dr. Clement Moore, who taught in a theological seminary in New York, wrote a poem for his children entitled, "A Visit From St. Nicholas." His description of Saint Nicholas inspired the famed cartoonist Thomas Nast to picture the saint in Harper's Illustrated Weekly in 1863 as dressed in a red, fur-trimmed suit. The title "Santa Claus" is derived from the early Latin *Sanctus Nicolaus.*