

Four Ideas Earn MVW Employees \$3,415 In Awards

A SUGGESTION AWARD totaling \$965 has been presented to Mrs. Agnes P. Lauretta, 961, for suggesting a change in an inductor adjustment procedure. The award was presented by William L. Voigt, Director of Manufacturing, as William J. Sawyer (right), Section Chief, 961, observed the presentation.



\$3,415 in suggestion awards have been presented to four Merrimack Valley Works employees by the Employees' Suggestion Committee for individual proposals relative to improving manufacturing processes.

Mrs. Barbara Vaughan, 1140, has received a suggestion award totaling \$2,115 for her suggestion proposing a change in the manufacture of the 904A Connector.

Mrs. Agnes P. Lauretta, 961, was presented a suggestion award totaling \$965 for suggesting a change in an inductor adjustment procedure. Mrs. Lauretta received a preliminary award of \$15, a supplemental award of \$590, and

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WE's Fifth Transatlantic Cable Project Now Under Way

The Innovative Climate

The following are brief excerpts from a speech by Western Electric President Paul A. Gorman, in which he discusses some of the communications advances of the past and looks ahead to the demands of the future. This article appeared recently in the 195 Management Report.

Just consider a few of the things facing us between today and 1980.

-It is estimated that 70 million phones will be added to the existing network and we'll be producing a substantial part of these for the Bell System. In addition, we expect to introduce Picturephone (r) sets. and at least 300,000 will be produced in that period.

-It will be our job to build the Bell System's switching and transmission

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MIAMI BEACH VACATION

Millie Kmiec, 1167, and Gen Kobos, 547, enjoyed their annual vacation in the Florida sun at Miami Beach.

The fifth transatlantic cable, for which the Merrimack Valley Works has manufactured bays of terminal equipment, started on its way to Europe last month.

AT&T, using its specially-designed sea plow, began burying part of the super-capacity communications facility on the ocean bottom off Green Hill, R.I. About ninety-five nautical miles of the cable will be buried two feet beneath the ocean floor to protect it from accidental damage by commercial fishing activities.

A \$99-Million System The buried segment off Green Hill is

MVW EMPLOYEE AIDS IN SEABROOK RESCUE

Dom Mazzocco, 152, assisted a lifeguard at Seabrook Beach in the rescue of two young girls during the vacation period. The girls were pulled from a heavy riptide by lifeguard Patrick Ladd. Mazzocco went into the water to give Ladd assistance. Treated at the Salisbury Beach Reservation first aid room for shock and immersion, the girls were later released. part of a \$99-million, 5,000-mile system that will link the United States with Continued Page 2



KEY TO EUROPE. Most people would consider it an honor to hold the key to a city. Merrimack Valley's Linda Tozier, 651, a WEVALLEY GIRL, goes a step further-she holds one of the keys to a continent: Europe. The panel in Linda's hands belongs to one of the terminal bays manufactured at the Merrimack Valley Works for the new transatlantic cable.

SUGGESTION AWARDS

(Continued from page 1)

an additional award of \$360.

William J. York, 1159, has received a suggestion award totaling \$230 for proposing a change in the manufacture of the 88A Apparatus Blank.

Basil DiPietro, 1147, has been presented a suggestion award of \$105 for suggesting a change in a printed wiring board manufacturing procedure.

VIEWPOINT

(Continued from page 1)

systems to carry a threefold increase in long distance calls... from five billion to 15 billion a year. By 1980, if present trends hold, the total number of telephone calls will rise from 300 million to 500 million on a typical business day. In addition, we estimate that data information transmitted in 1980 will equal that of all voice communications.

-We will be spending hundreds of millions of dollars in research and development to devise new products and new systems to handle this growth. And this involves risks. For whether these estimates mature, or not, we must be prepared to meet the communications needs of the American people.

-And one more thing. It will be our assignment to help make certain that everything that is new in the telephone network in the 1980's is compatible with everything that has gone before ...

One of the technical challenges to telephony is switching. It's a staggering problem today—at least numerically; especially when you consider that there are some 300 million calls placed on an average business day...

In 1968, the National Society of Professional Engineers selected the Bell System's Electronic Switching System as one of the 10 engineering achievements of the year. ESS is the switching system of the future-designed to handle not only anticipated growth but to provide the telephone user with an array of new services.

Basically I believe ESS is a reality because of something else—the innovative climate which pervades Bell Laboratories and Western Electric, and the unique relationship among designer, manufacturer, and telephone operating organizations.

This willingness to experiment and risk—this willingness to commit large sums to research and development that led to so many breakthroughs in amplifying and switching systems—was the same spirit that pervaded our developments in earlier systems to carry sounds, and pictures, and signals...



FISH EYE VIEW of cable. A cut-away sample of the new telephone cable Western Electric is making to link the United States and Spain is shown here. WE is making more than 2,000 miles of this cable which next spring will handle the equivalent of 720 simultaneous telephone conversations.

TRANSATLANTIC CABLE

(Continued from page 1)

Spain, Portugal, and Italy. The system includes two underwater cables and two connecting radio relay ties.

The 3,500-mile transatlantic cable will extend from Green Hill to San Fernando, Spain, where it will link by radio relay to Portugal, and by radio relay and a new Mediterranean cable to Italy. Land lines will connect the system with communications networks in more than thirty other nations in Europe, the Middle East, and Africa.

Completion of the system is scheduled for the first quarter of 1970.

The Bell System's cable ship, the Long Lines, will begin laying the deep-water section of the transatlantic cable in October.

AT&T's Special Sea Plow

During the late summer, the AT&T sea plow will be used to bury the Spanish shore end section of the cable and Spanish and Italian shore end portions of the Mediterranean cable. Towed by the Canadian icebreaker, the John Cabot, the plow cuts a trench about four inches wide and up to two feet deep as it lays the cable.

Capable of carrying 720 simultaneous conversations, or five times the volume now possible on the highest capacity transatlantic cable, the new cable will provide additional circuits to handle the fast-growing volume of communications between the U.S. and Europe.

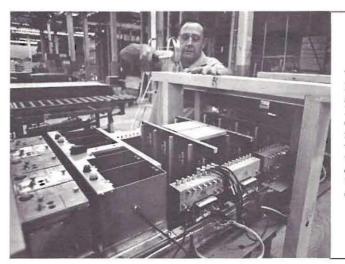
Western Electric is an old hand at submarine cable systems. Its employees played important roles in four previous transatlantic cable systems, starting in 1956, and other cable systems in the Atlantic, Caribbean, and Pacific Oceans.

Five Plants Involved

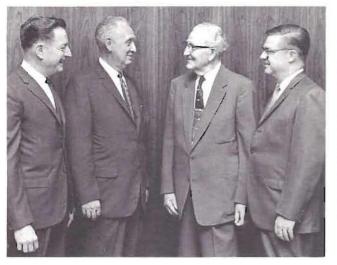
Five of the company's plants have worked on the new cable-first of its kind for intercontinental use. These include Merrimack Valley; Clark and Kearny, N.J.; Reading Pa., and Baltimore, Md.

The eighteen bays of transmission equipment manufactured at the Merrimack Valley Works each weigh about 1,000 pounds. They contain built-in backup systems so that a reserve bank of equipment can be automatically substituted should one, for any reason, go out of service.

Western Electric is also supplying select teams of installers to make the thousands of wire connections necessary to hook up the terminal equipment. More than 100,000 feet of cabling is used just for this purpose. Western Electric is supplying the manpower for operations in Spain. New England Telephone and Telegraph Company is handling installation at Green Hill.



WRAPPING UP. Henry Libby, 494, secures a bay of MVW-made terminal equipment in preparation for its shipment to Spain, where it will be part of the system that will operate the new U.S.-Spain transatlantic cable.



Choir Seeks Male Singers

Members of the Andover Male Choir who are employed at the Merrimack Valley Works are inviting fellow workers to become members of the group during its current membership drive. The invitation is open to men of all ages who like to sing, with music reading ability an asset but not a necessity. The repertoire of the Choir, which is directed by J. Everett Collins, ranges from current Broadway show tunes to familiar religious choral works. Rehearsals begin September 9 at 7:45 p.m. at the Bancroft School in Andover.

Arthur Gray, 1163, is vice president of the group. Also members are Walter F. Wroble, 1158, Nelson E. Bridges, 191, and retirees Sixon Penick, Arthur Kerwein, and Max Hobkirk.

MUSING

Middle age is youth gone to waist.

ANOTHER MVW FIRST-The first switching frame for No. 1 Crossbar equipment made at the Merrimack Valley Works was shipped recently to St. Louis, Mo. Similar switching frames are currently in limited production here. It is anticipated that maximum production of the Crossbar equipment will get underway late this year. Shown viewing the switching frame are Bill Herzog, Senior Engineer, 141; Walt Willis, Section Chief, 1169, and Al Alonzi, Section Chief, 1169.



BEST WISHES!

Jesse Ault, second from right, former manager of the Haverhill-Lawrence Shops, forerunner of MVW, was guest of honor at a recent luncheon marking his 80th birthday. Here he is congratulated by Western Electric Vice President Harry N. Snook and MVW Directors William L. Voigt and Lee R. McClary.

ENJOY EUROPE TRIP

Jane Taylor, 752; Nancy Cloutier, 960; Mrs. Angel Allen, 1145, and Wilfred Allen enjoyed a tour of England, France, and Switzerland during the summer vacation period.

MVW Increases Tract Size

Western Electric has purchased twelve acres of land adjacent to the North Andover Plant of the Merrimack Valley Works. The parcel of land, which fronts on Osgood Street and Holt Road, will increase the total size of the North Andover tract to 169 acres.

The new property will provide the capability of constructing a new access road to the plant. It is anticipated that this road will provide for more effective separation of trucking and pedestrian traffic and add to traffic safety and employee convenience in the vicinity of the North Andover Plant.

1,500 Join Savings Plan

Over 1,500 Merrimack Valley Works employees have enrolled in the new Bell System Savings Plan for Salaried Employees which went into effect July 1, 1969.

Participating employees are presently investing \$80,000 per month in the basic allotment. An additional \$6,000 is being invested in supplemental allotments. Company contributions total \$40,000 each month under the present enrollment.

Currently, 39.5% of those participating are investing in a Diversified Equity Portfolio of common stocks and other equity investments; 36.1% are investing in shares of American Telephone and Telegraph Company, and 20.9% are investing equally in AT&T stock and the Diversified Equity Portfolio. The remainder are investing in Government Obligations and combination investment plans.

In Memoriam

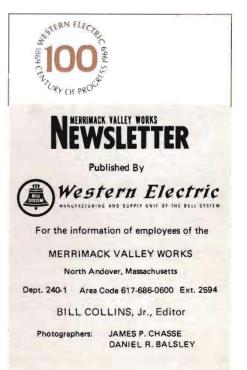
John W. Metelski, retired, died on July 6, 1969.

Carleton D. Gassett, 415, died on July 12, 1969.

Joseph G. Morin, 143, died on July 16, 1969.

James S. Hurley, 542, died on July 18, 1969.

Roland A. Brunault, 562, died on July 24, 1969.



Kaleidoscope

New Products Program At MVW

beginning in 1970. L5 will go into production at MVW early enough to meet service commitments in the mid-1970's . . . T2, a 96-channel T carrier repeatered line is under development, with production plans progressing . . . D2 Channel Bank, a 96-channel, intermediate speed digital carrier system, is scheduled for production in October; MVW is slated to make 80 in '69 . . . Picturephone—the analog portion— is due to begin production in late December, with shipment of miscellaneous codes of cable equalizers and central office bays set for February of '70; production of digital transmission equipment (for transmission of Picturephone over TD2 Radio) is set for second half of '70.

Products Report: L5 Carrier, which increases the capacity of a 20-coax transmission

cable from 32,400 channels as used with L4 carrier to 81,000 channels, is currently in the "very preliminary" engineering development stage; will undergo field trials

Thin Film Devices will be the subject under discussion at MVW this fall. A Thin Film Technology course specifically for Engineering Associates and Section Chiefs on a volunteer basis is now being scheduled. Course will be 8 weeks, 4 hours a week-2 sessions on separate days; will include class and home work. It's also open to other levels of supervision who want to boost thin film device know-how.

Confronting Bulls and Bears: WE installers and NY Telco are engaged in a concentrated effort to provide the necessary equipment for handling record volumes of telephone calls in NYC. Probably the busiest sector of the city is the Wall Street area where every second of the business day an average of 86 telephones are picked up to begin calls. One phone call is made for every seven shares of stock traded on the New York and American stock exchanges. Switching capacity of central offices serving Wall Street, currently listed at 147,000 main telephones, is expected to almost double by 1972.

Men of Medicine, Menus, and Quality <u>MVW People:</u> Dr. Joseph L. Mancini, formerly of the Department of Preventive Medicine at Tufts University School of Medicine, has joined the staff of MVW's Medical Organization . . . Lou Gatti, known to cafeteria patrons at the North Andover Plant from a previous assignment, is again managing the local cafeteria, replacing <u>J</u>. Kennard Sheppard, who has been transferred to Cincinnati.

New officers of Merrimack Valley Section, American Society of Quality Control include: Mrs. Pauline Danley, secretary; John Pizar, NRQC Council Representative; R. H. Hatem, Examining Chairman, and A. J. Bergeron, Sadoris Chairman.

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Special 8-Week

Scheduling

Thin Film Course

86 Telephone Pickups Per Second By Bulls, Bears