MERRIMACK VALLEY WORKS EWSLETTER

/ol. 3, No. 8



A Western Electric Publication

September, 1970

Cobblestones, antique shops, tiny twisty roads; all are Beacon Hill. On its summit stands the State House golden dome. And in the shadow of that venerable but often controversial world of living history stands the metropolitan campus of Suffolk University.

Suffolk, adjacent to the Statehouse, is one of the many universities that daily reaffirm Boston's claim to the title "Athens of North America," Yet for many-here at Merrimack Valley the few miles to the urban center of education are almost insurmountable obstacles.

Many people who wish to pursue undergraduate or graduate work in Boston have found that the hours spent in transit add just enough inconvenience to make part-time study overburdening.

Education, however, does not need cobblestones, or State House Domes. While these things help, atmosphere can be sacrificed for expediency. What one needs for education are students, teachers, and a place for them to meet.

Dean Robert C. Weahler, Suffolk University School of Business Administration, and Dr. Theodore Marshall, Chairman of the Suffolk University Physics Department, agreed that they have the teachers. The Works' Training Organization agreed that we have the students, and the Company agreed that the Merrimack Valley Works has a place for them to work together.

The result is that this month, Works' employees joined in September's traditional "back to school" as initial classes began at Merrimack Valley.

Four degree programs will be in operation by January of 1971: B. S. in Business Administration; Masters of Business Administration; B. S. in Physics; and an M. S. in Physics. The degrees will be issued by Suffolk University, as the courses, books, and requirements are identical to those in the part-time programs the University presents on its own campus. Some employees have enrolled and are now hard at study. We wish them well.

Suffolk University Campus

"Back To School" Made Possible By Western Electric Tuition Dollars

Western Electric continues to sponsor education for its employees and families as it announces an additional Tuition Refund Plan and another year's National Merit Scholarships.

An out-of-hours tuition refund program for employees who wish to enroll in technological courses of study began its two-year trial on September 1.

Technical Education Compensation (TEC) will provide financial assistance for full-time employees who voluntarily take courses, on their own time, which are part of an Engineers' Council for Professional Development (DCDP) approved curriculum at any technical institute, junior college or community college. Non-ECDP schools will be reviewed by the Corporate College Relations Manager for acceptance under the program.

This program parallels the Tuition Refund Plan already in effect for employees enrolled in academic studies at the college level. Reimbursement for half the amount of tuition will be made at the outset of the course, and the other half when evidence of successful completion of the course is submitted.

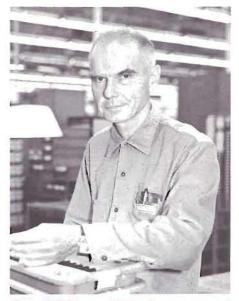
Employees' children who will be entering college in 1972 are eligible for one of ten Western Electric sponsored-National Merit Scholarships.

The National Merit Scholarship Corporation has announced next February 13 and 16 as the dates for the qualifying test for the 1971-72 Merit Scholarship Program. Eligible students should contact their high school principals or guidance counselors to register in October. Students are eligible for scholarships regardless of class standings. Eligibility requirements are simply that the student be a child of an employee, active or retired, of Western Electric or one of its subsidiaries; and meet the standards required in the competitive examination.

When a certain level of competition is reached, employees' children will be automatically sought out by the National Merit Corporation. Special application for WE-sponsored Merit Scholarships is not required.

Scholarship winners will be announced in the spring of 1972.

A QUARTER CENTURY OF PERFECT ATTENDANCE



"Ziggy" Podlozny, 974-7, whom many people will recognize as the man who jogs back and forth to work from his High Street home in Haverhill, is looking forward to 25 years of perfect attendance on October 9 of this year.

... roll 'em!

Promotions

Effective June 22

Normand E. Barbin, from Results Investigator, 845, to Section Chief, D1 Carrier, Bank, Shelf, and Miscellaneous Panel Assembly and Wiring, 1163-4N.

David M. Flanagan, from Product Quality Checker, 842-4, to Section Chief, N2, N3, D1 Cable Forming and Process Inspection, 1167-7N.

James V. Salvo, from Utility Operator, 1167-3, to Section Chief, N2, N3, T1, and D2 Prewire and Preparation, 1167-5N.

Effective August 17 Dennis A. Josephson, from Engineering Associate, 542, to Section Chief, Plant Services, 538-1.



Albert "Spike" Lapinskas, (background) 561-1, is filmed by the crew shooting a new Western Electric commercial, as he places quartz nutrient in a basket to be lowered into one of the autoclaves where the crystals are synthetically grown.

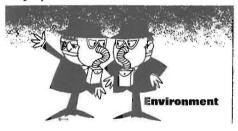
Is it a rumor? CALL NEWSLINE **4161** and be sure

L-5 at MVW

Preparations continue here at Merrimack Valley and at Western Electric's Baltimore Works for the people at both locations to begin manufacturing the components for use in L-5.

L-5, for those who are not familiar, is the new coaxial cable system which has been designed to carry 90,000 calls simultaneously. L-5's 90,000 calls better the L-4 system's capacity by about $2\frac{1}{2}$ times. Units of the L-4 system, currently used by the Bell System Telephone Companies and Long Lines, are manufactured here at Merrimack Valley.

Members of the Bell Labs Transmission Laboratory, located here at the Works, designed the new L-5 system. Employees here have been introduced to



In keeping with the continuing committment of the people of Western Electric to save our environment, your NEWS-LETTER presents this list of agencies which can be of help in controlling practices leading to pollution.

AIR

General (Smoke, odors, burning dumps and trash) Massachusetts Department of Public Health, Room 511, State House, Boston 02133 telephone 1-727-2692. From Motor Vehicles Registry of Motor Vehicles, Joseph Hourihan, Motor Vehicle Inspection, 160 N. Washington St. Boston - - written complaints only - state license number, color and make of vehicle.

WATER

General (sewage, industrial wastes, oil, etc.) in streams, rivers, and ponds. Massachusetts Dept. of Natural Resources, Division of Water Pollution Control, North east Regional Office, Merrimack College, Donald S. Pottle telephone 683-2436. Filling of wetlands (putting fill in wet or marshy areas, ponds, streams of swamps) Massachusetts Department of Natural Resources Division of Conservation Services, the system and have actually manufactured the equipment which is being used in a field trial in New Jersey.

The people at the Merrimack Valley Works will manufacture the repeaters and bays for L-5, while their fellow employees in Baltimore will produce the 22tube telephone cables which are needed for the new system.

Pam Czerepak, WEVALLEY GIRL, 1970, holds one of the L-5 repeaters, made at Merrimack Valley Works, to be used in the New Jersey field trials.



Works Engineers Lower Costs

Plant General Manager Dave Hilder recently presented cost reduction certificates to engineering personnel at Merrimack Valley to further Works efforts to reduce product and manufacturing costs.

Boston, George R. Sprague, telephone 1-727-3170.

Fish Kills (number of dead or dying fish in ponds or rivers) Massachusetts Dept. of Natural Resources, John Bartolomeo, 15 Pierson Street, Beverly, Mass. 01915 or contact complaint office in Boston telephone 1-727-3189.

NOISE

From Airplanes - - Massachusetts Port Authority, Thomas P. Callaghan, Boston telephone 1-482-2930.

From Motor Vehicles Registry of Motor Vehicles, J. L. Hourihan, Vehicles Inspection, 160 N. Washington Street, Boston - - written only.

PESTICIDES

Pollution and contamination from pesticides - - Massachusetts Department of Public Health, 37 Shattuck Street, Lawrence telephone 682-5237, or in Boston, Lewis F. Wells, telephone 1-727-2670. All forms of pollution may also be reported in writing to Environmental Problems Committee, Citizens for Participation Politics, 11 South Street, Boston, Massachusetts 02111. Recipients of the certificates were: Herm McGauley, 1221; Del Bracci, 713; Joe Ducharme, 711; Ed Zalewski, 172; Mel Randall, 145; Steve Jaskelevicus, 145; Brad Roppe, 172; Warren Godfrey, 136; Bob Thornton, 711; Dick Groves, 712; Jim Nimmo, 1221; Harry Abozetian, 716; Bill Cote, 743; Bill Bassett, 716; John Dulgarian, 1221; Konny Safka, 1221; Gus Francis, 713; Paul Hessber, 1215; and Charlie O'Connor, 1225.





Emile J. Blanchet, a machine and equipment mechanic in Department 534, will retire on October 31, 1970. Mr. Blanchet, who resides at 32 Hillside Street, Haverhill, will be completing over 25 years of company service.

Who Invented The



Sandwich Coin?

Bell System scientists occasionally work in unusual fields. Over the years they have developed such diverse things as air-to-ground communications for aircraft and sound tracks for movies.

But one of the most interesting accomplishments is the development of the "sandwich" coins that every American now carries in his pocket.

Six years ago Uncle Sam was worried about the shortage of silver, fearing the silver in U. S. coins might become so valuable the public would begin melting them down to sell.

When Bell Labs engineers learned that a substitute coinage might be adopted, they found themselves with a problem of their own. They had just finished designing the new single-slot public telephones so they would reject everything but nickles and silver dimes and quarters.

Bell Labs began to study other materials to see whether any would be compatible with the new single slot phone as well as with vending machines.

The project was assigned to engineers Rembert Stokes, Roger Kimber, and William Pherd.

"We had to develop coins that would behave like coin silver alloy," explains Stokes.

Pherd adds: "We also had to consider the requirements of the United States Mint."

Of the various concepts for making new coins, the lamination or "sandwich" method seemed most attractive. The engineers concentrated on a three-layer process that included a copper core and two outer layers, some of them alloys.

Using their own equations, Stokes and

Kimber plotted the thicknesses and content of each of the layers to come up with four different combinations of silver, nickel, and copper with the electrical properties needed for coin handling devices.

Bell Labs turned over its findings and proposals to Battelle Memorial Institute of Columbus, Ohio, which had a contract with the Federal Government to make new coinage recommendations.

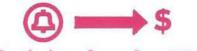
The institute submitted to the government a Bell Labs "sandwich" proposal which later became a part of the Coinage Act of 1965.

Since then the government has saved millions of dollars by making quarters, for example, at a cost of only two cents apiece - - a 21 cent savings over prior costs. The substitute coinage has proven satisfactory to all - - the government, the vending machine industry, and the Bell System.

WE Grows Another Branch

A newly leased branch plant, consisting of two new buildings, has been added to Western Electric's Oklahoma City Works.

Nearly 1,500 WE employees are already at work in the 150,000 squarefoot addition. The leased branch plant will accommodate relay and resistor manufacture, data set assembly, and cable forming.



Activity for the 70's

To improve and expand service and prepare for an expected surge of demand for communications in the seventies, the Bell System so far this year has spent more than at any time in its history. No other corporation has ever spent this much during a comparable period. During the first six months of 1970, the System has also made and installed a record amount of new equipment, and hired a record number of new people.

From January through June of this year, Bell has spent \$3.3 billion on switching mechanisms, cable, telephones, and other modern communications equipment.

And it has added some 75,000 new employees, pushing its total employment over the one million mark. As of June 30 there were 1,031,000 Bell System employees, more than in any other corporate work force.

According to AT&T Board Chairman H. I. Romnes, the reasons for this extraordinary activity and growth during a time of general economic slowdown are the Bell System's basic commitment to provide quality communications service and its anticipation of a swell of demand for communications in this decade.

Our Phones By Any Other Names Will Work As Well

For those decor-conscious customers who want to encase their telephone's innards in a French antique or Mediterranean Modern housing, Bell System Marketing and Commercial people are going all out to accommodate them.

A new brochure is being provided to outside manufacturers of Bell System approved housings to include with the antique-decorator housing package they sell to customers. It contains complete details on Bell System policy about such housings and covers the cost of installation. A pre-paid postcard is also included for mailing by the customer to a Commercial headquarters office in each state, instructing the phone company to call or write the customer to arrange for an installation appointment. A specially trained Service Representative in each business office then negotiates the order directly with the customer. The one-time installation charge is \$10 (slightly higher in Canada.) The telephone company maintains the working parts. Maintenance of the housing is the customer's responsibility.

Customer interest in decorator housings goes back to the mid-60s, when manufacturers began promoting the sale and use of this equipment. Currently, there are about 100,000 approved antique decorator housing, in use by Bell System customers.



During the first half of this year the Bell System added about 25 million miles of conductor cable, enough to loop around the earth and moon 50 times. The System now has 540 million miles in use which carry 375 million conversations every day.

Bell System Family Theatre

On Saturday, September 12, the Bell System launched its 1970 - 1971 Television season with a special production of the hit Broadway musical, "George M!" The broadcast was the first presentation of the "Bell System Family Theater," a series of shows selected for general television viewing. The shows chosen are directed specifically toward the family, neither underrating its taste, nor forgetting its many and varied interests.

To mark its new venture in television programming, the Bell System is offering the original cast album of "George M!" to employees at a special reduced price (see page 7).

The Bell System Family Theater will present the following programs during the 1970 - 1971 Television season:

"Highlights of Ice Capades - - 1971", November 4 - - A fascinating glimpse of one of America's most glamorous and popular entertainments and the people who are part of it.

Bing Crosby Christmas Special, Week of December 13 - - A holiday package of song, dance, and seasonal cheer with Bing Crosby and guests.

Circus, January 29 - - The world of the big top explored for youngsters of all ages, their families and friends.

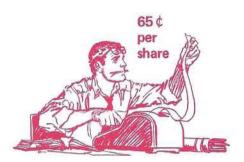
"The Santa Maria", February 19 - -An hour-long special filmed off the coast of Haiti during attempts to raise what is believed to be the historic flagship of Christopher Columbus.

"Jane Eyre", March 24 - - Special twohour television production of the Bronte classic starring George C. Scott and Susannah York.

Long Lines Entertainment Special, April 2 – Superlative achievements in individual human endeavor as reported in the Guiness "Book of World Records."

Jascha Heifetz, April 23 - - A rare, behind-the-scenes look into the life and music of the man and the violinist.

Summer Special-Details to be announced.



A quarterly dividend of 65 cents per share has been declared by the directors of AT & T. The dividend will be payable Thursday, October 1 to share owners of record on Monday, August 31. The dividend will go to some 3.1 million share owners.

Mr. Bell! Did You Ever Consider . . . ?

Every year an inventive public sends the Bell System thousands of suggestions for improving telephone service.

Some of the ideas are pretty extreme. Like the one for providing communications with the moon-launch a rocket, carrying one end of a telephone wire that would unwind from a huge reel; or the suggestion for sea-going telephone boothsput pay phones on floats in the middle of the Atlantic and Pacific Oceans.

Far-fetched or not, every idea gets a hearing, for no one can be absolutely certain when something new and usable will come to the surface.

Clearing house for the Bell System on ideas, suggestions, and inventions submitted by "outsiders" is AT&T's Suggestions Studies Group at 195 Broadway in New York. Many of the hopeful inventors submitting suggestions really don't come up with original ideas that will improve service, and one of the main jobs of the group is to tell the writers, graciously and convincingly, that the idea is not new or practical.

Among some of the more unusual proposals that have been submitted:

A counterclockwise telephone dial for lefthanded people.

A telephone which could double as an adding machine.

A "Prince" telephone, in the shape of a smoking pipe to present a masculine appearance, as a companion to the Princess telephone.

Telephones designed in checks, stripes, and polka dots.

Installation of a windmill-and-bell device to frighten woodpeckers from telephone poles.

Every suggestion gets a reply as promptly as possible, reflecting the views of the Company's specialists on the subject and providing a capsule history of it.

The writer who suggested the use of a rocket to carry a telephone wire to the moon, for example, was told that to date a wire had not been manufactured that could withstand the stresses of a 239,000 mile span. Even if such a wire existed and were sent to the moon, it was pointed out that the wire would soon twist around the planet and snap because the moon revolves around the earth and the earth rotates on its axis.

The 11-year-old boy who suggested mid-ocean phones was gently told it wasn't likely there would be enough business to cover the cost of putting pay phones there. In addition to the difficulty and expense of building man-made islands to house the phones, it was pointed out that it would be too costly to tie up a big ship while someone made a call. It was explained to the youngster that it's far better, and less costly, to put radio telephones on board the ships; something that's been done since 1929.

Why do so many people send in suggested improvements? Most expect some kind of financial reward, even if they don't mention it. Some, however, are truly interested in trying to be helpful.

Perhaps the prime reason for the centralized handling of suggestions is to protect the Bell System against litigation in the event someone may claim that an idea of his has been expropriated.

(Continued on page 7)

						Barker, Sadie M.	1161	22	
Anniversari			es			Belmont, Robert M.	494	22	
		ourr				Dion, Roland L.	541	22	
L						Gill, Merlon P.	1145	22	
						Gorton, Robert R.	1166	22	
THIRTY YI	EARS		Hogg, Ruth E.	974	4	Graham, Sonia B.	563	22	
NAME	DEPT.	OCT.	Karalunos, Sally Z.	1154	4	Kilcoyne, Richard M.	1167	22	
Stiebitz, Walter P.	21	14	Kay, Rose T.	1145	4	Koerner, Beatrice B.	564	22	
Backard, Mario Joe	751	21	Plourde, Shirley G.	960	4	Kulig, Walter E.	1154	22	
Jameson, Chester W.	171	21	Rivard, Marie L.	1152	4	Mattheson, Russell I.	1145	22	
Gallagher, Peter D.	961	29	Rodier, Philip E.	538	4	McCarthy, Charles E.	1140	22	
		Smart, John F., Jr.	973	4	Merrick, Irene L.	973	22		
TWENTY-FIVE YEARS		Tracy, Donald S.	1169	4	Ouellette, Louis R.	842	22		
Burrill, Leonard R.	231	8	Vinci, Irene C.	961	4	Sargent, Francis W.	1150	22	
Flynn, Victoria A.	973	9	Arnold, Clinton J.	453	5	Shisko, Charlotte F.	974	22	
Helm, William J.	195	15	Pouliot, Leo J.	1161	5	Adams Nahum J., Jr.	537	23	
Bonin, Napoleon A.	713	18	Hall, Merle N.	1163	7	Becotte, Joseph A.	533	23	
Fitts, Kermit R.	534	21	Stone, Francis R.	546	7	Berube, Joseph T.	545	23	
Onyon, Robert	545	23	Sakash, George	845	8	Smith, Robert C.	423	23	
Wolf, Karl	1226	26	Berube, Joseph A. H.	533	9	Chase, Frank W.	742	24	
won, wan	1220	20	DeSantis, Albert	494	9	Daigle, Jean M.	494	24	
TWENTY Y	FARS		Durgin, Harold S.	546	9	Donovan, Richard H.	1224	24	
Grieco, Frank F.	534	14	Jalbert, George A.	152	9	MacCannell, Augustine W.,Jr		24	
	1158	27	Nicosia, Richard J.	493	9	Marsan, Lucien A., Jr.	71 4	24	
Motta, Lucy C.						Moron, Stanley J.	133	24	
Stemke, Robert C.	171	30	Parenti, Florence F.	960	9	Munday, James V., Jr.	1140	24	
FIFTEEN YEARS			Sanzica, Joseph	422	9	 Max. 200 	1152	24	
		4	LaPlante, Joseph E.	452	10	Pace, Guy, F.	923	24	
Hayden, George E.	537	1	Paulinca, Thomas E.	495	10	Schiavoni, Philip A.	1152	24	
DeRoche, George J.	1158	2	Robinson, David H.	1140	10	Dubois, Yvonne P.	541	25	
Hodge, Warren J.	210	3	Therrian, Kenneth J.	15	10	Gowans, Francis J.	616	25	
Niconchuk, Paul W.	1221	3	Vermeulen, Florimonde J.	531	10	Lipka, Chester W.	545	29	
Paulauskas, Albert P.	424	3	Cronin, Eileen M.	973	11	Beaulieu, Joseph H.		29	
Wing, Richard A.	751 534	3 4	DeFrancisco, Lillian T.	973	11	Bedrosian, Michael	452 961	29	
Bennett, George H. Braada Brating C	923	4	Ladd, Gordon C.	921	12	Bilodeau, Muriel G.		29	
Brooks, Beatrice C.	1157	4	Buyck, Charles A.	563	15	Cormier, Armand F.	534	29 29	
DesRoches, Geraldine	1157	4	Donohue, Joseph E.	1159	15	Dion, Paul J.	546		
Enaire, Laura S. Eastura, Plancha K			Ducharme, Joseph C.	711	15	Gablosky, O. Richard	425	29	
Fortuna, Blanche K. Godfrey, Phyllis D.	1161	4 4	Evans, Marion M.	974	15	Hanna, Henry A.	541	29	
Godfrey, Phyllis D.	960	4	Fraize, Mildred D.	1157	15	Hatem, Edward A.	494	29	
			Kelley, William J. II Kimball, Minsinia F	842	15	Kenyon, Frieds A.	1213	29	
MERRIMACK VALLEY	WORKS		Kimball, Virginia E.	562	15	Kus, Leslie C.	842	29	
NFWSIF'	TTFR		Lacroix, Joseph G.	961	15	Mikolyski, Catherine M.	961	29	
INFAMORE			Miranowicz, Walter J.	495	15	Moll, Clement C.	1169	29	
Published B	Y		Pothier, Arthur L.	1152	15	Storey, Arthur E., Jr.	1140	29	
(A) Western	Electric	~	Vallante, Anna	925	15	LaPlante, Bernadette M.	1158	30	
Western	LICCUM		Belair, Rose M.	925	16	Snyder, Francis	563	30	
For the information of e	mployees of t	the	Kimball, Harry S.	374	16	Andrade, Everett	925	31	
MERRIMACK VAL	and the second second second		Christie, Mary K.	1158	17	Caron, Ernest B.	1145	31	
North Andover, Massachusetts			Fritzsche, Donald W.	1159	17	Flanagan, Philip S.	456	31	
Dept. 240			Kelly,J. Paul	173	17	Stella, Bob	1167	31	
Area Code 617-686-0600 Ext. 2594			Lorigan, Michael J., Jr.	453	17	Tobey, Sumner A.	541	31	
BILL COLLINS, JR, Editor Associate Editor		Putnam, Eugene M.	542	17					
ASSOCIATE EDITOR			Quimby, Richard A.	155	17	In Memoria	m		
Photographers			Poy, Lena B.	1150	17				
JAMES P. CHASSE			Fontaine, Pauline G.	961	18	Robert I Riveral Denastr	Robert I. Bluemel Department 1725		
DANIEL R. BA	LSLEY		Willett, Eileen B.	221	20	Robert J. Bluemel, Department 173-5, August 17, 1970.			
			a contraction of the second seco	and the second second					



Suggestions - (Continued from page 5)

To appreciate that an original idea inthe mail is indeed a rarity, one only has to look through the index compiled by the studies group. It covers hundreds of categories which consistently recur. Pick a topic between "acoustic hoods" and "wire broadcasting" and one may be sure someone has written in his suggestion about it.

Although original and usable ideas from "outsiders" are few and far between in the communications industry, the door must be kept open to them. The next person who writes "I've got the answer," may well have.

What's Obscene At 13?

A thirteen-year-old boy in Minneapolis slammed down the phone receiver. His mother asked what the problem was and the boy answered "It was one of those obscene phone calls . . . some kid who said I liked girls!"

Don't Let Your Hook Foul Another's Lines

Keeping a telephone receiver "off the hook" does more than block incoming calls.

Off-hook phones reduce the number of lines available during peak calling periods.

\$865 FOR ART EVANS

Arthur Evans, 422-1, accepts a check for \$865 from Plant General Manager Dave Hilder for his suggestion to purchase a less expensive type of commercial washer. George Elie, 422-1, (left) observes the presentation.

VOTERS

If You Are Not Registered There Is Still Time

The Deadline For Massachusetts Residents Is October 3.

New Hampshire Residents Should Contact Their Town Officials For Their Registration Deadlines,

> Be Sure You Are Registered, And Be Sure You Vote This November 3.

Short Subject

The Little People of America, an organization of citizens no taller than four feet ten inches, got together in Portland, Maine, recently to voice their grievances. The Chicago-Tribune reported that the 50 delegates to the convention complained that the telephones in phone booths are too high and that cars are built for long-legged people.

Bell System Family T Record Offer P.O. Box 5257 Terre Haute, Ind. 4		
I have enclosed George M! at \$3.00 postage and guaran	per album. Price	
Name		
Address		
City	State	Zip





FIRE PREVENTION WEEK OCT. 5 - 9



During the first three months of this year, over 200 employees underwent training in the use of emergency fire equipment. As a result the fellow who sits across the table at break could possibly be administering oxygen or manning a hose or an extinguisher at anytime during his working hours.

The Plant Protection force set up the program and later grouped the trainees into auxiliary fire teams to assist the guard force in the event of an emergency.

Taking part in these recent team drills were (from left): Lt. Vincent Deacy, 211-2N; Guard Joseph Kemp, 211-3N; Joseph Croteau, 974-10N; Guard Arthur Patnaude, 211-3N; Ernest Hillidge, 974-19N; Paul Riley, 974-10N; Harold Duffen, 1167-6; John Page, 1167-5; Emilio Venturi, 1167-5; and Lawrence Daigle, 1167-5.







