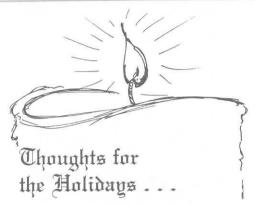
# MELPARTICULARS

Volume 3, Number 6

E-Systems, Melpar Division

December 1982

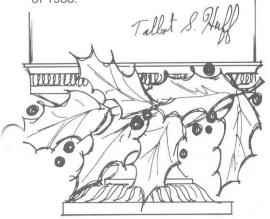


I want to wish each of you an especially happy holiday season and hope your "Winter Break" is a time of relaxation and renewal.

1982 was a record-setting year for Melpar. Our growth during this year and the past several, has been possible because of the hard work of Melpar employees. It is the dedication and hard work of our employees that has made us what we are today. The facts are formidable: in the last two years we have had a 119% increase in sales, 38% increase in occupied space and 66% increase in employment. A highlight of this past year was the dedication of Fairfax and our transition into a two-facilities Division.

For 1983 I see good, strong, healthy growth. We have proven we can adjust to rapid growth and I am sure we will do it again. In 1983 we will continue to improve on providing not only comfortable facilities, but also the appropriate automated tools and devices to allow Melpar employees to be even more productive. During the coming year we will venture into new areas of business and add new customers to our business base.

Enjoy your break and return refreshed and ready for the challenges of 1983.



### TIS THE SEASON TO BE GIVING . . .

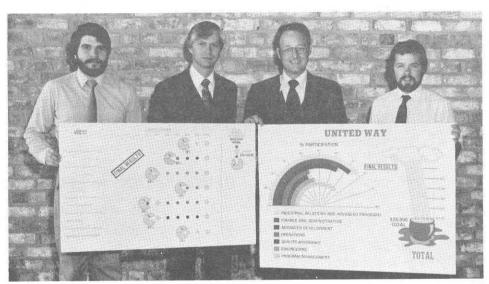
Holiday Season at Melpar is evidenced by our annual fund raising drive for Children's Hospital during the week of December 13-17th. Again, this year E-Teamers contributing to Children's can add their names and personal greetings to an illustrated booklet entitled "A Gingerbread House." Before the pages are bound they will be made available in the main lobbies of Falls Church and Fairfax for contributors to sign. The illustrations by Stephanie O'Rourke of Publications depict cotton-tailed rabbits enjoying holiday past-times. Highlighting the book is a snow-topped gingerbread house. We

are certain that the patients and staff of Children's Hospital will enjoy the illustrations and the many signatures throughout the winter scenes.

Children's Hospital National Medical Center is a place where compassion and concern are combined with the highest medical standards. The hospital is not a government sponsored institution, and does not receive any special government funds. This specialty pediatric hospital addresses the needs of children on many levels—as a caregiver. educator. researcher and advocate. Initially established to

CHILDREN'S HOSPITAL Cont. on page 3

#### **UNITED WAY CONTRIBUTION UP 38% OVER LAST YEAR**



Shown with status charts, left to right, are artist Robin Croft, chairman Mike Smith, deputy chairman Larry Cecchini and artist Kevin Segner. Missing from photo is deputy chairman Tony Maestri.

Melpar's United Way Campaign, conducted during the week of 18-22 October 1982, collected a grand total of \$25,858. Status charts, prepared by Kevin Segner and Robin Croft of the Publications Department, illustrated the Division's climb towards the goal of \$26,000. Each day these charts were updated to illustrate not only the progress towards the overall Division goal, but also the participation achieved by major organizations in the Division. This year's leader, with 78% participation, was the Industrial Relations/Advanced Programs group; following close behind were the Pro-

gram Management group, with 75% participation, and Finance and Administration, with 73% participation.

With your help, this has been another year in which E-Teamers have demonstrated their concern for their fellow citizens through active participation in the United Way Campaign. This participation has been exemplified through a 38% increase over last year's total contribution of \$18,705. The United Way extends a heartfelt thank you to all E-Teamers and hopes that future contributions from Melpar Division will continue to show E-Teamers' concern for their community.

#### MELPAR'S E-BUS FROM IR&D TO PRODUCT







A standard E-BUS Interface (top left) combined with DEC'S LSI 11/23 (bottom left) provide system-wide analysis and maintenance.

Since its development in 1981, the Melpar Division's E-BUS<sup>TM\*</sup> has progressed substantially. The E-BUS system is a high performance local area network designed for use in distributed real-time systems. The system is based on a bus topology using baseband coaxial cable as the transmission medium. It is designed to provide a data communications link between heterogeneous computers, satisfy long term fulfillment of distributed processing needs as well as providing for expandability, survivability and fault tolerance.

Currently being incorporated into several military systems, E-BUS is becoming widely recognized as a Local Area Network (LAN) with an eye to the future. E-BUS enhancements have allowed, and will continue to allow, systems in which it is used to expand to meet numerous present and future military distributed processing/computer networking requirements. Plans for 1983 include further development for conformance with a wider range of military specifications and greater real-time data handling capabilities.

Early this summer, a major marketing effort was launched by Melpar for this "up-and-coming" system, including the development of an E-BUS advertisement and a comprehensive article by Bill Livingston, Technical Assistant to the Director of Ground Systems and Supervisor of the Data Communications and Networking Group. The article and ad will appear in the December issue of Defense Electronics, the theme of which is the U.S. Intelligence Community. Under the guidance of Bill Livingston and Richard Tallman of Advanced Programs, a detailed product brochure is being prepared for distribution in December to coincide with the Defense Electronics coverage.

The dedicated work and continuing funding of the overall E-BUS development effort have allowed Melpar to

stay ahead of its competition in military computer networking techniques. No other system is known to have the real-time, modular, distributed processing capabilities of the E-BUS LAN. With appropriate continued emphasis on development and marketing of E-BUS, Melpar is positioned to capture a major share of the military LAN market.

The continuing advances of the E-BUS system clearly demonstrate the importance of good planning. From an IR&D project in 1979 to a major marketing effort during the 1982-83 time frame, the growth of the E-BUS concept typifies the positive benefits to be obtained through dedication to system/product development.

\*E-BUS is a trademark for the distributed processing system developed by the Melpar Division of E-Systems, Inc.

# Security Spotlight

During the past few months there has been increased press coverage of the efforts the current administration is taking to stem the illegal outflow of U.S. high technology to the Soviet Union and other nations. A recent Security Seminar at Corporate Headquarters had as its main theme, "Preventing Proprietary and Technology Transfers to Unauthorized Recipients. This indicated E-Systems management's deep concern for the wellbeing of the Corporation and its ability to protect classified as well as its proprietary technology, know-how, critical materials, test equipment, endproducts essential to R&D, and ability to manufacture modern high-quality military equipment.

E-Teamers at Melpar are encouraged to take up the challenge and help in countering the constant penetration attempts by those individuals whose sole purpose is to obtain illegally any Division proprietary or technical information. Be alert for those seemingly innocuous inquiries as to what Melpar is doing in the EW arena. Electronic industries in the 1980's will be the prime target for production technology. You, as an employee of Melpar, may be a source for this technology. Protect proprietary information just as vigorously as you do U.S.

classified information.

#### REGISTRATION SET FOR GW'S SPRING SESSION AT MELPAR

George Washington University's School of Engineering and Applied Science will continue to offer graduate courses in electrical engineering, communications and computer science at Melpar. This degree program is offered in cooperation with participating members of GWU's Industrial Liaison Program. 1983 Spring Semester classes are:

EE 241 Information Theory-Thur
EE 243 Communications Theory-M
EE 245 Signal Detection and
Estimation Theory-W

CSci 154 Digital Computer Design-Thur

CSci 158 Algorithmic Methods and High-Level Languages-M

CSci 227 Management Information Systems and Data Base Management-W

Registration and orientation are scheduled for January 11, 1983, in the Melpar cafeteria from 5:00 to 7:30 p.m. Classes begin on Monday, January

17, and will meet in the evenings from 6:30 to 9:30 p.m.

For additional information on academic matters, contact Professor Raymond L. Pickholtz, the Program Faculty Advisor, 676-6538 or 560-5000, extension 2478. For assistance and administrative details, contact the Program Coordinator, Edward B. Wright, 676-7024.

#### **MELPARTICULARS**

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E-Systems, Melpar Division

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#### FAIRFAX COUNTY SCHOOLS' VIDEO PROJECT FEATURES MELPAR

E-Systems is one of several local businesses being featured in new video program for students in Fairfax County public schools. When the program is complete it will be used to acquaint students with the variety of business and career opportunities that exist in this area. At E-Systems the video crew took close-up shots of E-Teamers at the wire-wrap operation, circuit card assemblies, cabling, rack assemblies, hybrid operation, and the new CAD (Computer-Aided Design) equipment in Drafting.

#### CHILDREN'S HOSPITAL Cont. from page 1



Left to right, co-chairmen of the Children's Hospital Committee, Betty Owens, Marion Lugar and artist Stephanie O'Rourke.

treat children of the metropolitan Washington area, Children's Hospital National Medical Center is now also national and international in scope, treating children referred from hospitals around the nation and foreign

The clinical expertise of Children's Hospital includes nearly 800 medical staff members, over 500 nursing personnel, and more than 1600 allied health professionals, support service personnel and administrative employees. The full-time and attending medical staff specialists provide expertise in all the pediatric specialties. Nursing staff includes pediatric nurse practitioners and clinical specialists with particular experience in such areas as critical care, trauma and surgical nursing, and newborn nursing care. Physician specialists are in such areas as neonatology, cardiology, hematology/

#### NED RHODES IS PART-TIME PROFESSOR



Ned Rhodes, Principal Electrical Engineer with Ground Systems, is teaching "Machine Language and Programming" at George Mason University this semester. The course is a required one in GMU's newly developed Engi-

neering and Computer Science Curriculum for junior and senior level students. Earlier this year, Ned gave a four-day intensive seminar on Pascal programming language.

Ned is RT-11 Special Interest Group Symposia Coordinator for Digital Equipment Computer Users Society (DECUS), U.S. Symposia. In his role at DECUS, he works closely with the RT-11 development group to plan sessions and the future directions of the operating system. He has delivered numerous papers at DECUS on various aspects of RT-11 Operating System for the PDP-11 computer.

He has had two articles published in BYTE magazine. The January issue contained an article on how he modified his APPLE computer to talk to the deaf, and the March issue contained a hardware review.

He recently completed the requirements for a Certificate in Data Processing (CDP). The CDP represents an effort to certify persons in the data processing field. The exam covers five areas including hardware, software, mathematics, systems analysis and management.

At Melpar, Ned is involved with the continued development of E-BUS and Data Communications for two of our major systems.

When not working, teaching or writing papers, Ned enjoys outdoor activities such as hiking and cross-country skiing.

oncology, ophthalmology and surgery, and are available 24 hours a day.

Since its founding in 1870, the hospital has treated area children regardless of parents' ability to pay. The only way the hospital can make up for this financial burden is through the generous support of the community it serves. This season share the holiday spirit of giving and lend your financial support to Children's Hospital—you'll be in good company and glad you did.

### E-SYSTEMS REPRESENTED AT AUSA EXHIBITION



Pictured with Melpar's E-130 is Major General John B. Blount, Chief of Staff of TRADOC at Ft. Monroe, Virginia, and John R. Thomas of Melpar's Advanced Programs group.

The 1982 Annual Meeting and Exhibition of the Association of the United States Army (AUSA) was held at the Sheraton Washington Hotel this past October. Highlighting this year's meeting was the reelection of John W. Dixon, Chairman and CEO of E-Systems, to his fourth term as Chairman of the Council of Trustees for AUSA. AUSA has 150,000 members with chapters worldwide. It is a non-profit educational organization working for the betterment of the U.S. Army.

At the exhibition, Melpar displayed an E-130 RPV, VHF and UHF Receivers, and an F1-F1 Repeater.

# Library Up-date

Melpar's technical library recently acquired a complete set of specifications and standards, as well as qualified products lists and drawings, on microfiche. This collection, located in the Specification Center, includes both federal and military documents.

With microfiche, over 100 pages can be stored on a single 5x7 card. Using full-size specifications, the library can keep on hand many more times the documents than possible before, thus alleviating storage space problems. Now all specifications and standards will be immediately available.

The Specification Center will be receiving weekly updates to this set, thus assuring that you will have the most current and applicable specification or standard at your fingertips. Any questions or requests for information should be referred to Jackie Leventhal on extension 2812.

#### CONGRESSMAN FRANK WOLF VISITS MELPAR



Congressman Frank Wolf from the 10th District of Virginia goes through the cafeteria line before addressing a lunchtime group on Monday, October 25th. Standing with him are Fred Wahl, Chairman of Melpar's Political Action Committee (PAC), two members of Congressman Wolf's staff, VP and General Manager Talbot Huff, Congressman Wolf, and E-Teamer George Exarhacos.



The following people were recently recertified in Cardio Pulmonary Resuscitation (CPR).

FALLS CHURCH: Cal Baker, Bill Barber, Frank Boyko, Cletus Cave, Ann Donnelly, Mark Dokken, Susan Duvall, Bob Haggerty, Norma Hayden, Robert Hohl, Bev Hudson, Jane Kinzler, Shirley Kissinger, Peggy Lewis, Debbie MacClary, Walter Maxwell, Monica McMahon-Emergency Medical Technician (EMT), Peggy McTamany, Cliff Perrin, Pete Piraneo, Connie Pruitt, Kathleen Sampson, Anne Simmons, Russ Stewart, Greg Taylor, Richard Taylor (EMT), Becky Testa, Richard Whynall, Ned Wright.

FAIRFAX: Jeff Bergie, Steve Floyd, John Heath, Mike Paljug (EMT), Norman Taylor (EMT).

CPR decals have been placed in areas where there are certified personnel. Identify those personnel in your area who are trained in CPR so in the event of an emergency you can know who to alert. Thanks to Nurse Shirley Kissinger and Dick Taylor who have organized the Red Cross Classes at Melpar.

#### TIMELY TOPICS FEATURED BY PROFESSIONAL ENHANCEMENT PROGRAM

The initial schedule of this year's Professional Enhancement Program began on November 2nd with a slide show and discussion given by VEPCO representative Rick Carter on "Saving Energy in the Home." Rick had a number of ideas which could be put into practice at minimum cost. Handouts and information on energy audits were distributed with extra copies deposited in the library for ready reference.

On November 16th, and again on November 19th at the Fairfax facility, Danielle Westphal of the American Lung Association addressed a lunchtime group on ways to "Kick the Smoking Habit." This program was particularly timely as the 18th of November was National Smokeout Day

The third program of the series was a display of crafts by E-Teamers on December 7th. Psychologist Joel Friedman from the Woodburn Center for Community Mental Health addressed the topic of "Stress and the Holidays" on December 14th. Following the holiday week at Melpar, Dr. David Bever of the Department of Health and Physical Education of George Mason University is scheduled to talk about "Exercise and Weight Control"—a topic that we all no doubt will be ready for after the festivities of the season.

#### SAVINGS BONDS INTEREST RATES TIED TO FIVE-YEAR MARKET AVERAGES

On October 27, President Reagan announced the most significant change in the U.S. Savings Bond Program in 40 years. Beginning November 1, a new market-based interest rate formula will be effective for Series EE

U.S. Savings Bonds.

All Series EE Bonds purchased on and after November 1, 1982, and held at least five years, will earn at least 85 percent of the average yield during the holding period on outstanding Treasury marketable securities (notes and bonds) with approximately five years remaining to maturity. New bonds held less than five years will continue to earn interest on a fixed, graduated scale.

"This major change in the way Savings Bonds interest is computed will help return bonds to the forefront of savings instruments," the President said. "Savings Bonds will now be able to keep pace with other investments, and their owners are guaranteed a competitive return regardless of market conditions. This is another important step in our effort to encourage added savings, which are a key to our country's economic growth."

Americans now hold more than \$67 billion worth of Savings Bonds, which have long been a relatively stable, cost-effective element in the Treasury Department's debt management efforts. With the new market-based rate, bond holders will enjoy higher rates when the market is high, rather than a fixed rate. Should market rates fall sharply, Savings Bonds held five years or longer have the added protection of a guaranteed minimum return of 7.5 percent, compounded semi-annually.

Older Series EE Bonds, Series E Bonds, and U.S. Savings Notes (Freedom Shares) that are still outstanding and earning interest five years from November 1982 will also earn the market-based rate if it is higher than their guaranteed minimum yields. Older bonds held less than five years will receive the interest rates already guaranteed them to the end of their original or current extended maturity period.

The familiar benefits of bonds—safety, tax advantages, convenient purchase and redemption—continue as before.

Take stock in America. Buy U.S. Savings Bonds.

#### SERVICE AWARDS FOURTH QUARTER

### Thirty Year Service:

Jesse R. Baldwin (Top, right) Redding L. Crafts (Bottom, left) Georgia L. Wilson (Bottom, right)







#### Twenty-Five Year Service:

Marcus R. Artman Rex M. Enos Joan H. Grieve Ned Jackson Reynold Jamison Harold LaPrad Carty S. Lawson George A. Marchaza Elmer H. Marine William B. Moore

#### Twenty Year Service:

Mary L. Lee Ethel D. Lorenzo Ronald L. Michael Edward A. Rose, Jr. Jack O. Scroggins Howard P. Willis

#### Fifteen Year Service:

Arthur L. Stewart George Williams

#### Ten Year Service:

Edward K. Chan John J. Coley Anthony N. Hansberger Kathleen M. Harrington Norma J. Hayden Eileen M. Kehoe

#### Five Year Service:

Dorothy M. Brand Daniel C. Davis Irvin P. Gillmer William H. Monroe Laura J. Morley Thomas W. Moyer Roger C. Strauss

Seasons Greetings from the MELPARTICULARS' STAFF

### **Credit Union News**

#### Loan Policy Change

In an ongoing effort to better meet the needs of the members and provide more benefits, the Board of Directors has approved two (2) changes to the Loan Eligibility Requirements. The changes are in effect immediately.

- Any member who has ten (10) or more years employment with Melpar is now eligible for a signature (unsecured) loan up to \$3,000, with a maturity period of 36 months maximum.
- 2. Any member who has six (6) months employment with Melpar, is now eligible for a title-secured loan up to \$10,000 with a maturity period of 48 months maximum.

The Credit Union membership requirements for loans remain unchanged at six (6) months membership for signature (unsecured) loans and three (3) months for secured loans.

#### A Word to the Wise

Due to the continued growth of the Credit Union, and the ever increasing number of loan applications, the loan processing time period can be as long as ten (10) working days. Therefore the Credit Union asks that you plan in advance and submit applications as early as possible to allow for sufficient processing time.

#### **Special Rates in Effect**

Beginning December 1, 1982 and ending January 31, 1983, loan rates for automobile purchases have been reduced. The interest rate on loans for a new car will be 12% APR (Annual Percentage Rate) and for a used car the rate will be 14% APR.

So, if an auto purchase is in your plans, check with your Credit Union before you make any deal. Be it a new car or used car, we are running a "SPECIAL!"

#### PROMOTIONS—SEPTEMBER AND OCTOBER

From: P.J. Amorosi Inventory Cont Clerk R.T. Balling Assembler D.A. Bell Elec Eng FR Bonner Sheet Metal Mech 1cl Elec Eng J.M. Cox M.T. Cunningham Planning Aid A.L. Fristoe Planner S.J. Guevara Security Clerk Clerk Typist Principal Eng J.J. Knies JD Lewis F.R.Maddock Purchasing Asst P.C. Martin Cost Analyst Prin Software Analyst L.D. Morley J.D. Nally Asst Prog Manager Elec Eng J.J. Russo Payroll Clerk N.L. Rutherford B.G. Stilwell Eng Supv

Group Leader Assembler 1cl Sr Elec Ena Shop Supv Sr Elec Eng Planning Asst Planning Spec Jr Security Spec Sr Clerk Typist Eng Supv Sr Purch Asst Sr Cost Analyst Eng Supv Prog Manager Sr Elec Eng Sr Payroll Clerk Eng Mgr

#### CRYPTICALLY SPEAKING: LXJJY LIFBSXYQ\*

The Melpar Cryptographic Society met on October 26th to hear Norm White speak on the Beale Cipher. According to the Beale legend, \$30,000,000 in gold lies hidden in a location designated by the Beale cipher, which as yet remains unsolved. Norm described the colorful history surrounding the legend, and also provided much detailed technical material describing the successes and failures surrounding past code-breaking attempts

During the club's business session, Denny Husch and Dick Whynall were appointed to the executive committee. Denny agreed to serve as program chairman and Dick volunteered to chair the by-laws committee.

On November 18th Denny Husch presented an "Introduction to Monoalphabetic Cipher Systems." These systems encompass simple substitution methods of encipherment. Breaking such codes is usually necessary as the concluding step in typical cryptanalysis procedures. The December event for the club is a Christmas dinner for members and their spouses. For information on future speakers and activities, watch the bulletin boards. "Happy Holidays

# **Sports Corner**



Left to right, sporting their golf trophies are Chuck Sisk, Andy Nickle, Bill Moeller, Vice President and General Manager Talbot Huff, Tom Bridges, Don Hinchey and Arlo Janssen.

#### **GOLF**

As winter approaches, the 1982 Melpar Golf League is history. Eagerly anticipating the debut of next Spring and the 1983 golf season, members of the Melpar Golf League assembled on November 15th at the Arlington-Fairfax Elks Lodge for the 1982 Golf League Awards Banquet. The banquet hall was overflowing with delectable cuisine, as well as stories of the superb shotmaking exhibited during the 1982 golf league, and other fairy tales. Melpar's Vice President and General Manager, Talbot S. Huff, was on hand to present the awards to this year's winners. Andy Nickle won the postseason playoffs and the overall league championship with a fine 2-up victory over runner-up Chuck Sisk. Bill Mitchell "sandbagged" his way to the award for low net with an outstanding net score of 25. We have asked Bill to ensure that he includes his score for the last 3 holes next year. Bill Moeller "snap-hooked" a round of 34 to win the low gross prize. Bill will not be allowed to play from the ladies' tees next year. Arlo Janssen, after his annual trek to the Masters Tournament at Augusta, cut 6 strokes off his handicap to capture the "most improved" award. Tom Bridges and Don Hinchey shared honors for the "closestto-the-hole" award after each player hit it 3 feet from the pin. Tom and Don have consented to limit their mulligans to 10 on the money holes next year.

The League officers extend their appreciation to all those who played in this year's golf league and hope for an even better season next year.

#### **BLOODMOBILE A SUCCESS!**

October 12th — 117 pints Thanks to all who donated

#### RACQUETBALL

The Melpar Racquetball Ladder began play on November 1st and will continue until the end of April. The Ladder, open to all Melpar employees, provides three skill levels (ladders A, B, C). One match per month is required but most players have been enjoying more frequent competition.

The Racquetball Ladder was recently revived by several E-Teamers in Advanced Systems in an attempt to regularly provide more frequent and varied competition. New players are always welcome. Please check the Sports Bulletin Board or call Eric Pittlekau, ladder chairman, on extension 2560 for specific information.

#### **TENNIS**

Congratulations to this year's tennis tournament winners and thanks to all who participated. Winners for each category are:

Mixed Doubles

1st place Carmen Benitz/ Tom Neff

2nd place Molly Hungerford/ Hector Munk

**Doubles** 

1st place Tim Garney/ Scott Oakes

2nd place Rick Bordwell/ Bob Braun

B Singles

1st place Bruce Jerome 2nd place John Cole 3rd place Bob Braun

A Singles

1st place Tom Neff 2nd place Tim Harvey 3rd place Mike Yoselle

Hope to see you all next year, starting around May.

#### E-TEAMER'S DAUGHTER PERFORMS AT KENNEDY CENTER

Kelli Martin, daughter of Carl S. Martin, an electrical engineer with Airborne Systems, is a talented ballerina. Recently, she appeared with the New York City Ballet at Washington's Kennedy Center in a production of the ballet *Mozartiana*, choreographed by George Balanchine. For this part she was selected by audition from more than 300 local ballet students.

This holiday season Kelli will appear in the Washington Ballet's Nutcracker Suite to be performed at George Washington University's Lisner Auditorium from December 16th to December 31st. Kelli, now thirteen, has studied ballet since she was six years old at the Rockville School of Ballet and the Washington School of Ballet.

### MARRIOTT ADDS TO THE HOLIDAY SPIRIT



Phyllis Mayle shown with prize cake.

Costumed Marriott employees prepared the special Halloween "Fare" at the Falls Church cafeteria. Cook Mike Eachus and Carla Henderson baked and decorated the pumpkin-shaped cake that was won by Phyllis Mayle of the Falls Church mail room.

On November 18, Marriott served a Thanksgiving menu for both Falls Church and Fairfax. Included in the price of lunch was a chance to win a 12-14 pound turkey. The winners were, Betty Sherba at Falls Church and Dawn Ehlers at Fairfax. Marriott provided a jar with gum drops for each facility. The winners of the turkeys had the closest guess for their facility.

According to Cafeteria Manager Fred Mueller, Fairfax can look forward to many more special events and menus when their cafeteria opens.