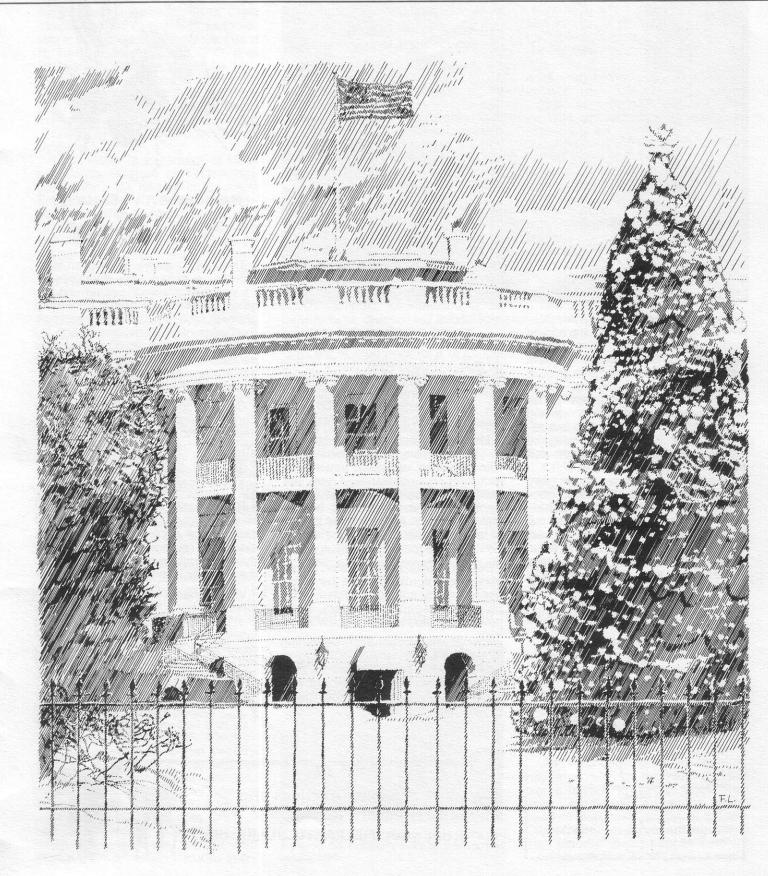


MELPARTICULARS

Volume 9, Number 8

E-Systems Melpar Division

December 1988



Melpar as I See



The year drawing to a close has been one of strong resurgence at Mel-We have par. worked hard as a team to produce record bookings, sales, and backlog. By any meas-

ure, our results this year represent a strong rebound from last year's levels.

This success stems from several notable areas. Competitive wins have demonstrated that we have a firm grasp of how to take on major corporations and defeat them. We have been equally successful in capturing follow-up business from traditional customers. This mix of new customers and substantial business momentum points to a healthy future for Melpar.

We thus enter a new year with a strong base of challenging development and production. We are adding staff and planning for future growth. Our task now is to execute the work we have and continue our pursuit of

future business. This holiday season offers us the well-deserved opportunity to rest and relax after a very demanding but rewarding year. It is important to spend this time celebrating the season and being with family and friends.

The new year will not be an easy one. Flat defense budgets and concerns about the affordability of defense programs will continue to put pressure on us to perform in a smart and professional manner. We've proven again this year that we are winners. As a team, we'll reassemble after New Year's and resume our pursuit of another record year.

Have a safe and happy holiday season.

Tallot S. Hu

MELPARTICULARS

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Security Points to Ponder

ARE YOU AWARE THAT. . .

- Unauthorized disclosure of classified information is punishable under provisions of Federal Criminal Statutes.
- Removal of classified material to residences, for any reason, is prohibited.
- If you intend to travel to or through a Communist or "designated" country, or attend a conference, regardless of geographical location, and it is anticipated that Communist country representatives will be in attendance, you are obliged to inform the Security Office before the trip or meeting and arrange for a defensive security
- · Discussion of classified information over the telephone is strictly prohibit-
- Whenever you receive classified material from an outside source, registration at the Company's Classified Material Control Station is required by Department of Defense (DoD) regulations.
- If you take up residence or are assigned to a location outside the United States, Puerto Rico, Guam, or the Virgin Islands in excess of 90 consecutive days during any 12-month period, you are required to report such assignment to the Security Office.
- The Government now requires you to challenge any questionable classification marking which you feel is incorrect. For example, if you are reading a document marked Confidential and have reason to believe that it should be reclassified at a higher level, you should refer this matter to Security as soon as possible.
- DoD authorization is required before classified information can be processed on any computer system- including personal computers, word processors, and memory typewriters.
- Unclassified information pertaining to classified Company projects cannot be released to the public without prior approval from the Government and the Company's Security and Public Affairs departments.



Remember. . . Security Never Takes a Holiday!

- The DoD requires all cleared individuals to report any instances of "Adverse Information" concerning another cleared employee's continued ability to protect classified information. Examples of adverse information include criminal activity, drug or alcohol abuse, treatment for mental illness or emotional problems, and unexplained affluence, to name a few.
- Combinations to classified security containers must be committed to memory and cannot be jotted down on slips of paper to be kept in desks, wallets, or pocketbooks, since any written record of the combination is, in effect, a classified document.
- Reproduction of classified material is not authorized on unapproved self-service copy machines and all classified reproduction must be authorized and accounted for through the Security Department.
- · Visit requests are required for classified visits to other contractor or Government installations. And a Government agency must certify your need-to-know if the Company does not have a contractual relationship with the place you intend to visit.

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Seasons Greetings and Best Wishes for the New Year from your MELPARTICULARS Staff



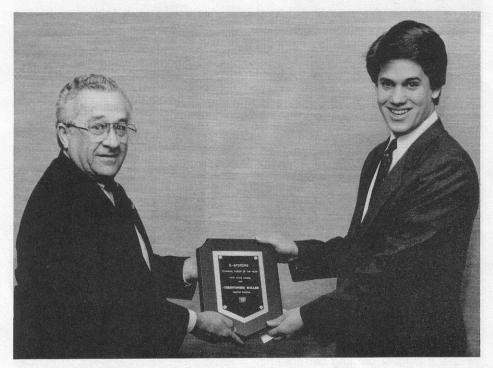
HIGH MARKS FOR CHRIS ROLLER AND THE TECHNICAL PAPER OF THE YEAR

Chris Roller is the first Melpar employee to receive the prestigious E-Systems Technical Paper of the Year Award. On November 2, 1988, Chris travelled to the Corporate headquarters in Dallas, Texas, where Mr. David R. Tacke, Chairman and CEO, presented him with the award for First Place. Chris received a check for \$1,000 and a plaque to commemorate his winning paper entitled "Communications Signal Direction Finding (COMM//DF) and Cueing for Optical Systems."

Chris Roller is a graduate of Massachusetts Institute of Technology (MIT) with a BA degree in Electrical Engineering. At MIT, Chris held a student internship at Aberdeen Proving Ground where he assisted with the development of computer models for interior ballistics flow. After graduation, Chris put graduate school on hold and chose a career at Melpar where he saw a tremendous opportunity for growth. Chris has been with Melpar for the past 2 1/2 years and believes the Company's youthful, innovative atti-

tude is its secret to success. The prize-winning paper evolved over a long period of time. Chris first wrote and later modified a white paper which was subsequently presented in March 1987 at the Association of Unmanned Vehicle Systems (AUVS) Symposium. Six months later, in August of 1987, Chris presented the paper at the annual Society of Photo Instrumentation Engineering convention. Two days later, he rewrote the paper yet again for a speech at the Airborne Reconnaissance Conference being held at the same convention. The focus for this last paper was a more detailed description of the concept of finding practical implementations for optical payloads. It was this version of Chris' paper which won the E-Systems Technical Paper of the Year Award.

The paper focuses on COMM/DF, which is the process of looking for the direction of arrival of target signals to increase the efficiency of target location and detection. Chris analyzed system effectiveness in flight time versus target detection time with and without COMM/DF electrooptical cueing. This paper recommends mounting a camera of COMM/DF payload on an unmanned aerial vehicle (UAV) instead of on a traditional aircraft. The usually slow-moving UAV has a highly effective target detection capability. Chris presented a low-cost, reliable, and effective system which includes infor-



David R. Tacke, Chairman and CEO of E-Systems, Inc., presents Chris Roller with a plaque for E-Systems Technical Paper of the Year.

mation on mission efficiency statistics, simulation results, typical mission scenarios, and diagrams of dimensions and field of view.

Chris is currently working on several new programs, including the design of a high-speed pulse processor. *Unmanned Systems* has published an updated version of this paper, coauthored with Melpar Engineering Supervisor Kerry Rowe, which includes reports based on actual COMM/DF flight tests. The publication of this paper could lead to potential new business for Melpar in the future.

Chris, recently married, admits he

has little time for hobbies. He enjoys reading, but keeps busy with graduate school. He is currently working on a masters degree in Electrical Engineering/Communications from George Washington University and expects to complete his studies by Fall of 1989 or sooner.

Chris' accomplishments are something to be proud of, especially at his young age of 22. Through his own initiative and hard work he has achieved valuable recognition for himself and Melpar in the defense community. Chris is a fine example for all E-Teamers. Congratulations Chris!

N

THE GIFTS WE GIVE TO CHILDREN'S HOSPITAL



Graphic Artist Laura Childress is this year's designer of the Children's Hospital posters and holiday card.

The December holiday season always brings a great sense of giving, and this year was no exception. Once again, during the week of December 5-9, the employees of Melpar demonstrated their ample generosity by participating in the annual fund drive for Children's Hospital National Medical Center.

As is the custom, Melpar not only raises money for the Hospital, but works toward a specific goal. This year, employee donations were used to purchase a vital End Tidal C02 Monitor for the operating room. This piece of equipment is used by

CHILDREN'S HOSPITAL Cont. on page 8

FRANK CARAU AND MELPAR: 40 YEARS AND GOING STRONG



Think back 40 years and try to remember what you were doing. In 1948, many of us were children, some were already working at various trades, and the rest of us were not yet even born. There is one man, however, who was working at Melpar then and is still working here today.

Frank Carau, a senior systems engineer, has the distinction of being Melpar's longest running current employee. Forty years ago, he signed up as an electronic technician working with the Company's AKT-6 and UKR-1 telemetering system. That was way back when Melpar was just beginning. Since then, the Melpar Division has been bought and resold to a number of firms, including Westinghouse Air Brake Company, American Standard, Inc., and LTV Electrosystems which was sold and incorporated as E-Systems.

All this buying and selling tended to make employees uneasy, Frank says. The takeover by American Standard was an especially uncomfortable time. Where Melpar once reached peak employment of 6,000 under Westinghouse Air Brake, that number dropped to a low of about 450 employees under LTV Electrosystems. At one time, American Standard even considered closing down the plant. Instead, they sold off different departments to other companies, some of which are competitors of Melpar today.

Through all this change, Frank Carau stayed with Melpar. Starting out as an electronic technician earning \$50 a week, he later transferred to Quality Control where he remained until his move to Engineering 8 years ago.

About the Company and the changes it has gone through, Frank says, "It's an interesting Company. For one thing, it has been and still is open to change. You've got to be able to adapt to technical advancements like computers and continue

to upgrade your facilities. At the same time, you don't want to go overboard. I think Melpar does a pretty good job at mixing restraint and innovation. In this business, you are constantly learning. It's a good place to challenge your abilities."

In the beginning, he says, Melpar did strictly Government contract work. He remembers working on extremely delicate radar beacons which were used before the invention of the transistor. Even the first transistors were very fragile. "If you even barely touched one of these transistors," Frank recalls, "it might have self-destructed. Today, transistors are made to withstand incredible amounts of vibration and shock."

According to Frank, the biggest change has been in electronics. Optical instruments such as the microscope have made it possible to design and assemble integrated circuits. Were it not for solid state electronics there would be no computers as we know them today. The first computers were mechanical and took years to generate the data that electronic ones now do in seconds. Frank remembers the early electronic computers filling up an entire room. Now, a computer can fit on a circuit board. And as we know, computers are used in just about everything these days.

"There has been so much change," he says, "that it's difficult for young people to appreciate the difference. It's been an interesting time of life. If I were living in the horse and buggy days, I think I'd be bored stiff!"

Frank is filled with memories from the past 40 years when the Company was involved with some fairly unusual projects from animal research to lunar decontamination. Under the ownership of Westinghouse Air Brake, Melpar animal research involving artificial heart implants led to the eventual development of the Jarvis heart.

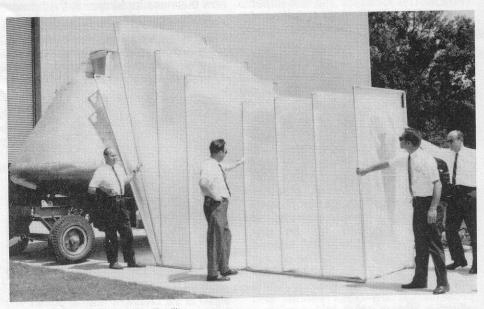
Also during that time period, Melpar developed a series of epoxy varnishes. Frank remembers using one of these varnishes, called Melvar (what else?), to make a redwood canoe covered with Melvar-saturated fiberglass. "That canoe lasted for years," states Frank proudly.

Probably the most interesting project was the so-called "Apollo Mobile Quarantine Facility." Frank says the man on the moon was the most significant event in the past 40 years. Like many other companies at that time, Melpar had a hand in this momentous lunar mission.

FRANK CARAU Cont. on page 5



"Where's my surfboard?" Frank Carau's passion for sailing will take him to the Bahamas after his retirement this year.



The Apollo Mobile Quarantine Facility.

THE GRAHAM ROAD SCENE

For those of you who have not volunteered some time to the kids at Graham Road Elementary School, we ask you: why not?

This semester has seen the largest number of Melpar volunteers to date. Yet the number is still far too small.

Every Wednesday, a group of employees from the Falls Church and Fairfax facilities makes a special trip over to the school to have lunch with the students. Words cannot describe the enthusiasm of the children and the excitement they get the minute they see an E-Teamer walk through the door. Everyone of them wants to have a lunch pal. Unfortunately, there are more children than there are volunteers.

Ask any volunteer about the program, and he too will respond with enthusiasm. "The first time you go to Graham Road, you tend to feel a little nervous," confides Dawn Mitchell of Systems Engineering. "It's amazing, though, how quickly that feeling goes away once you get there. The kids love to talk and are all just so happy that you came."

"They're all so cute," says Marianna Garges of Cost Analysis. "If you say something, and they smile as a result, it makes your whole day. Going to Graham Road can give you a

real big ego."

Chris Corlett of Business Planning comments, "It's a nice change of pace to be around the kids. Just going to the school is fun since it brings back lots of memories. The milk cartons we used to get are still the same except they cost 35 cents now."

Marianna agrees that the program evokes past memories. "It's fun to tell them about the times when I was their age," she says. "From what they tell me, I can tell that things have changed since then!"

Melpar adopted Graham Road Elementary School 2 years ago.



Lauri Petroy of Business Planning and her lunch pal, Heather, engage in "girl talk."



Greg Collins and Mike Lewis, both of Systems Engineering, escort their charges through Graham Road's cafeteria lunch line.

Since then, E-Teamers have volunteered their time in many ways, including helping the students in the English as a Second Language Program and participating in the ever-popular Lunch Pal Program. The students show their gratitude by providing Melpar with artwork for the hallways and performing holiday pageants in the cafeterias during the December holiday season.

The programs with Graham Road have not only been fun, but have

gained Melpar's recognition in the local community. On November 18, E-Systems Melpar Division was formally recognized by the Fairfax Chamber of Commerce for its contribution to the Adopt-A-School program.

If you would like to bring some delight to a child's day and are interested in going to Graham Road, feel free to contact Tricia Reneau in Personnel, x 2717. Remember, we can't spread ourselves around enough! M

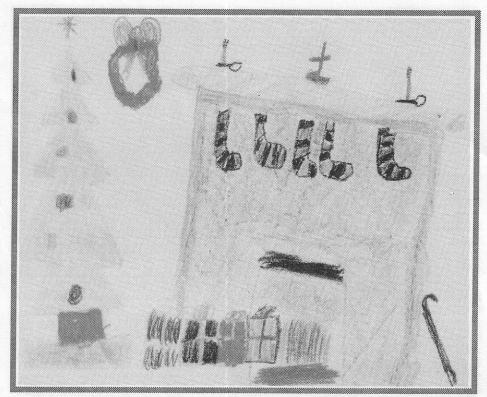
FRANK CARAU Cont. from page 4

One of the greatest worries of scientists during this period was that the moon harbored potentially fatal strains of bacteria and microbes, and that if a person who had been on the moon came back to earth, he would bring this bacteria back with him and infect people on earth. Out of this concern came Melpar's development of a lunar decontamination module, the "Apollo Mobile Quarantine Facility." This device was used upon Apollo's return to scrub and disinfect the astronauts to rid them of any moon contamination.

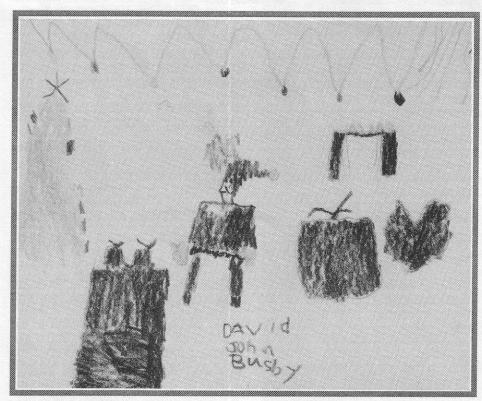
The past 40 years have certainly been filled with interesting and exciting events for Frank. Yet, there is still a lot to look forward to as he antici-

pates retirement next June. Since his favorite pastime is sailing, his first plan is to sail down the inland waterway and spend a warm winter in the Bahamas. He also enjoys snow skiing and intends to make several trips out to Colorado to visit and ski with his kids.

Frank does not plan to retire from the work force completely, however. He has already joined the Coast Guard Auxiliary in which he hopes to be of help to the public. That might seem to be a whole lot going on for someone who has just retired. Frank disagrees. In words we can all learn from, he wisely contends, "Activity keeps you young."



Jennifer Krintz (age 6), daughter of Donald Krintz.



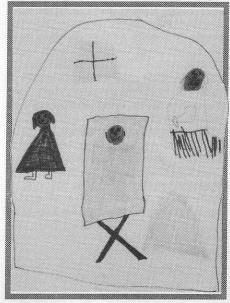
David Busby (age 5 1/2), son of Chuck Busby.

MANAGING CANCER'S CHALLENGES

The dispensary has some very informative books that deal not only with the treatment of cancer, but also with the emotional aspects of the disease. These books may be checked out for your use by seeing Rosalie Georgeadis, R.N. If you have any questions concerning cancer, you can call a toll-free number, 1-800-4-CANCER.

AND THE WINNERS ARE...

Congratulations to the three winners of Melpar's Holiday Happenings Drawing Contest! The three contestants' artwork was selected to compete in the final contest at Corporate Headquarters in Dallas. Thanks to all three children for sharing their work with everyone at Melpar.



Adam King (age 6), son of Charlotte King.



DID YOU KNOW THAT...?

Among the many benefits that Melpar offers to its employees, and one that few of us are aware of, is the free notary public. Four people at the Falls Church facility and one person at the Fairfax facility are certified notary publics and offer free services to Melpar employees. One of the nicest advantages is that you never have to leave the building.

If you need something notarized at the Falls Church facility, you can call Arleen Cain in Personnel at x 2729, Bill Watson in Facilities at x 1589, or Hal Tunick in Purchasing at x 4419. Pat Kimmel in the Falls Church Credit Union also provides free notary public services to any member of the Credit Union (non-members pay \$2). At Fairfax, contact Debbie Sparks in Personnel at x 3878.

Now, getting a document notarized is easy, convenient, and best of all, free!

1988 SERVICE AWARDS — 4th QUARTER

Thirty Year Service:



Thomas R. Bailey



Agnes A. Eaton



William C. Stribling, Jr.



Herman S. Townsend

Twenty-Five Year Service: John W. Hale Charles H. Thurber, Jr.

Twenty Year Service: Robert B. Swanson Robert J. Johnson

Fifteen Year Service: Homer R. Herrman Wilbur P. Lund James P. Nally

Ten Year Service:
Michael J. Bednarck
Janos Bognar
Kitty A. Brown
Paul T. Jenkins
Marlene A Liming
Carolyn C. Smith
Rebecca L. Testa
Anne M. Thornton
Patrick L. Udell

Five Year Service:
Cheryl L. Ashford
Clyde L. Bonebrake III
Louise E. Borrelli
Garnetta L. Brown
Arlene A. Caputo
James E. Chadburn
Edna J. Chrisner
Catherine L. Clinton
Hazel G. Cockrell
Christopher G. Craig
Deborah M. Davis

Five Year Service Cont: Dewey L. Davis Kim T. Do Mark S. Eaton John B. Finucan Roger H. Hand Gary E. Hartmann David M. Hepler Dwight D. Hinebaugh Frederick C. Holland, Jr. William I. Jones Michael J. Kelly Paul M. Lewis Laurence V. Lillvik Lucy A. Murphy Billy D. Oldridge Larry A. Peura John P. Rinn Robert D. Savage Eric A. Shull Ralph M. Stephens Kent W. Stewart Pamela L. Stoneback Paul M. Storaci Samir F. Taha Rocco Tenaglia Gina S. Thomas Lester B. Thomas II Jeffrey M. Torma John J. Vernoski Arthur R. Whittum Tommy R. Williams

Elizabeth J. Wise

PROMOTIONS — October and November

J.G. Beane J.E. Chadburn G.C. Channel B.J. Clark F.I. Crim M.S. Eaton J.L. Feuerhelm D.A. Hansen T.D. Hauffe S.G. Jenkins G.R. Keith S.A. Kissinger S.C. Littlefield C. Miller H.H. Nguyen L.L. Reinhard J.L. Sastri S.A. Sommer L.A. Turner

Falls Church

M.D. Amato

B.S. Harris
K.W. Heuple
C.R. Lalley
D.R. Lavalee
E. Melendez
J.P. Osterwalder
V.J. Roy
P.A. Scelsi
C.M. Shaw
E.A. Shull
J.W. Starnes
H. Vuong
V.L. Yoder

Fairfax

From: Elec Engr Contracts Spec Sr Design Engr Programmer Report Secretary Planner Design Engr Assoc Budget Analyst Sr Ops Analyst Cost Analyst Data Entry Opr Tech Writer Chief Nurse Planner Assoc Tech Editor Sr Elec Engr Elec Engr Mgr Tech Staff Engr Mgr Programmer

Jr Cost Analyst
Program Analyst
Ind Engr
Jr Elec Engr
Engr Supv
Prin Mech Engr
Assembler 1 cl
Personnel Rep
Elec Engr
Sr Test Tech
Test Engr
Jr Cost Analyst

Sr Elec Engr Contracts Admin Fld Engr Supv S/W Analyst Stores Supv Planning Spec Sr Design Engr Budget Analyst Prin Ops Analyst Sr Cost Analyst Sr Data Entry Opr Sr Tech Writer Benefits & Med Supv Planning Spec Tech Editor Prin Engr Sr Elec Engr Engr Mgr Engr Director S/W Analyst

Cost Analyst
Sr Program Analyst
Sr Ind Engr
Design Engr
Engr Mgr
Member Tech Staff
Assembler 1 cl
Assembler Tech
Sr Personnel Rep
Sr Elec Engr
Jr Test Engr
Cost Analyst

IN MEMORIAM

Harold LaPrad, senior shipper and packer at the Falls Church facility, died on November 9, 1988, at the age of 55, as a result of a heart attack.

Harold joined Melpar in October 1957 as a receiving and identification clerk. During his 31 years of service, he developed many friendships and earned the respect and admiration of his co-workers. He will be greatly missed.

He is survived by his wife Susan, a daughter Sherry, and a son David, all of Falls Church.



Ronald R. McDonald, a field principal design engineer, died December 7, 1988 of a heart attack at Fairfax Hospital. He was 48 years old.

Ronald began working at Melpar almost 18 years ago as a design engineer. He will be missed very much by his colleagues and friends.

Ronald is survived by his wife Wilburta, a son Ronald, Jr., of Springfield, Virginia, and a son Raymond of Winchester, Virginia.





Sporting their tennis trophies are, left to right, Ronald Lee, Bob Warakomsky, Lynn Garland, Mark Barbato, Talbot Huff, Tim Harvey, Norma Francis, Kevin Martin, Leroy Collins, and John Cole. (Not pictured, Tony Hansberger.)

CHILDREN'S HOSPITAL Cont. from page 3

anesthesiologists during surgery to monitor the level of carbon dioxide being given off by the patient's body. The hospital was badly in need of the equipment which costs \$7,500 to purchase. Melpar employees not only met that goal, but surpassed it by contributing a total of \$10,367.75 to the Hospital!

Along with the large donation check from Melpar employees, Children's Hospital also received four large holiday greeting cards designed by Laura Childress in Graphics. These cards were signed by employees from the Falls Church, Fairfax, Merrifield, and Dulles South Four facilities who contributed to the campaign. Our young friends over at Graham Road Elementary School were also donators of custom-designed cards for the children at the hospital.

Children's Hospital is recognized as one of the finest pediatric care centers in the world. All children are eligible for care at the Hospital regardless of their parents' ability to pay. But because the Hospital is a private institution which relies solely on the contributions of individuals and companies, its future depends heavily on the generosity of others. Melpar is proud to be a regular contributor to the Hospital and hopes that the annual donation will help make life a little brighter for the children there.

CORRECTION

In the October issue of Melparticulars, several members' names of the Melpar Stingers women's softball team were inadvertently omitted. Those women are Marlene Eisenbarth, Tracey Friday, Margie Hill, Susan LaRosa, and Sue McDaniel. M

THANKS to Senior Graphic Artist Frank Lambdin (Publications Dept.) for his cover rendering of a "White Christmas at the White House." M

Sports Comer

MAKING A LOT OF RACKET

1988 tennis season. This year Melpar had an active and involved tennis program.

However, the scarcity of women players resulted in female team members playing in the Men's B division playoffs. Special congratulations go to Lynn Garland in achieving a third place finish while competing with the men.

The 1988 tournament playoffs were completed just in time for the annual scheduled awards ceremony and luncheon. Vice President and General Manager Talbot Huff presented awards to the following winners:

MEN'S A SINGLES:

First place – Mark Barbato Second place – Tim Harvey Third place – John Cole MEN'S B SINGLES:

First place - Ronald Lee Second place - Kevin Martin Third place - Lynn Garland

MEN'S DOUBLES: First place - Mark Barbato and

Leroy Collins Second place - Tim Harvey and

Tony Hansberger MIXED DOUBLES:

First place - Lynn Garland and John Cole

Second place - Norma Francis and Bob Warakomsky

Congratulations to all!

M

E-Systems, Inc., Melpar Division 7700 Arlington Boulevard Falls Church, Virginia 22046 Forwarding and Address Correction Requested