

# melpar-a-graph

MELPAR, INC.

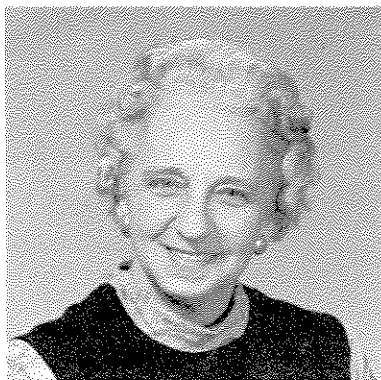
A SUBSIDIARY OF WESTINGHOUSE AIR BRAKE COMPANY

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## Cost Reduction Suggestion Wins Frieda K. Bernhard Air Force Award

Inspection Technician Frieda K. Bernhard was selected to receive an Air Force Award for her contribution to the Air Force FY 68 Cost Reduction and Management Improvement Program. She was one of 21 winners chosen from all Air Force Contractors. The awards were presented by the Honorable Townsend Hoopes, Under Secretary of the Air Force, at the awards ceremony held at the Los Angeles International Hotel, Los Angeles, California, on October 3rd. She was accompanied by Al Ross, Melpar's Cost Reduction Administrator.



FREIDA K. BERNHARD

Frieda was a finalist in Melpar's 1967 Value Improvement of the Year program for her cost reduction suggestion, "Inspection of Electrical Parts Mounted on Reels." This was an improved method of inspecting components by mounting them on reels. The easy transfer of the components from one reel to another, while testing those in between, eliminated 50% to 80% of the inspection time. This idea resulted in an annual savings of \$8,761.

### NEW INSURANCE COVERAGE EFFECTIVE FEBRUARY 1969

J. Pierce Chambers, Melpar president, announced at the recent management dinner on September 19th that accidental death and dismemberment insurance would be increased for Melpar personnel on the anniversary of our present policy February 1, 1969.

Melpar will provide increased coverage from the present \$7500 maximum to a new maximum of 1½ times the salary of the employee at no cost to the employee. This will make the AD&D coverage equal to the basic life insurance coverage carried now by the company and, in effect, provides a "double indemnity" feature to the plan.

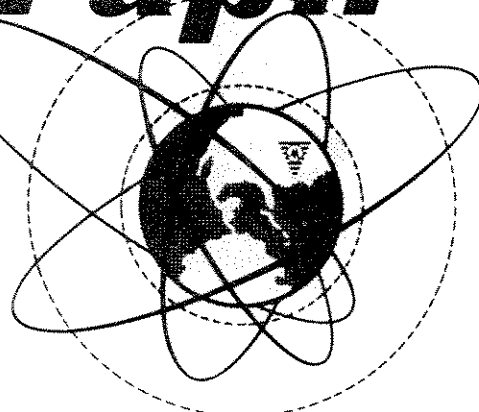
## Chambers Briefs Melpar Managers

J. Pierce Chambers, Melpar's President, briefed supervisors and managers on the WABCO merger with American-Standard and new corporate plans at a dinner meeting on September 19th in the Falls Church cafeteria.

A new corporate planning committee is to be established under Mr. Chambers to determine goals and programs for future development of Melpar's business. Special emphasis will be placed on improved communications throughout the company. All supervisory personnel will be encouraged to contribute to the company's growth through creative approaches to new problems and through improved controls over costs, schedules, and budgets.

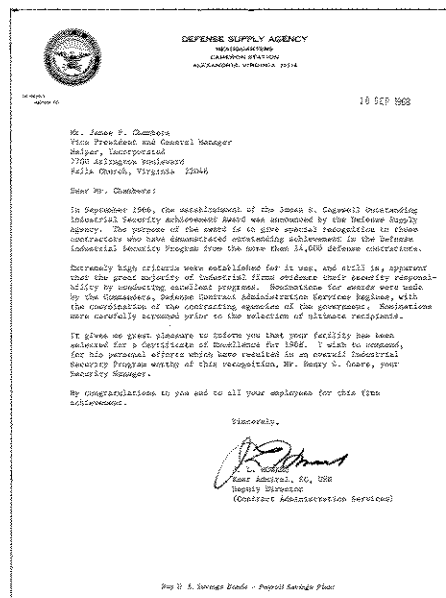
In defining the role of a Melpar supervisor, Mr. Chambers said, "First he must accept personal responsibility for the accomplishments of his people and his group and direct those accomplishments toward the growth and financial strength of the company . . . he must support its policies and work through management channels to improve those policies with the goal of making a stronger company which can provide a reasonable profit to the owners, permanent and stimulating work for its employees, and high quality products and services to its customers at a fair price."

(SEE PICTURES ON PAGE 2)



## MELPAR CITED FOR SECURITY EXCELLENCE

Melpar has been selected to receive a certificate of excellence under the James S. Cogswell Outstanding Industrial Security Achievement Award Program. The announcement was made by the Defense Supply Agency in the following letter:



Melpar's President, J. Pierce Chambers made the following statement regarding the award:

"I would like to add my congratulations. From 14,000 facilities in the United States, 89 were nominated for the Industrial Security Achievement Award. 17 were awarded plaques for outstanding achievement and 25 were awarded certificates of excellence. I wish to thank all Melpar employees for their contribution to this fine award. We must be constantly vigilant in the protection of classified information. I urge you to keep up the fine work."

## The Patent Picture

With the recent acquisition of seven new patents, Melpar increased its total holdings to 172.

Lab Manager **Neal H. Ishman** was the inventor of "Wide Band Voltage Controlled Oscillator." This invention relates to voltage controlled oscillator circuits incorporating phase and amplitude compensation networks to provide marked increase in modulation bandwidth capability.

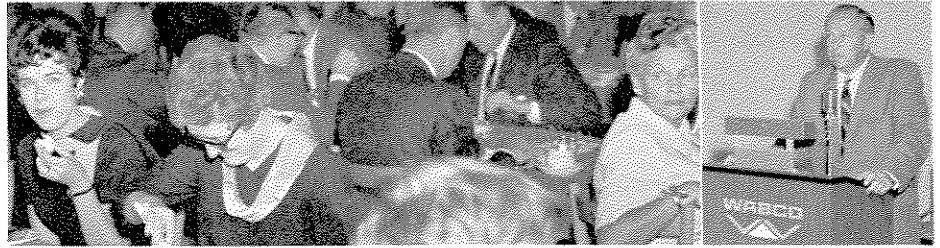
Branch Supervisor **Michael Hacskaylo** was the inventor of "Solid State Cathode" which relates generally to active thin film circuits and more particularly to a solid state cathode wherein current is enhanced by avalanche mechanism through a semiconductor and an insulator. This is the fifth patent issued to Melpar on which Mr. Hacskaylo was the inventor. His previous patents also relate to thin films.

The Water Pressure Activated Switch invention is adapted to respond to pressure when immersed in liquid to a preset depth. Among the wide range of uses of the switch would be arming of mines, precise depth sounding, inflation of life preservers or other survival equipment upon immersion in water to a preset depth, actuation of marker buoys for equipment which is intentionally or inadvertently submerged in water, such as fish nets, crustacean traps, dislodged outboard motors, or other nautical gear whose use necessarily subjects it to the possibility of accidental loss in relatively deep water. The inventors were Glenn A. Shewmake and Joseph L. Pentecost.

"Solar Heating Device" concerns a solar heating system for use in homes as well as other habitable structures which is more practical than the system currently being used. Charles D. Snelling was the inventor.

The Nematode Cold Trap Unit invention relates to a method and apparatus for harvesting and storing parasitic life (such as nematodes) which is easy to use, inexpensive and sterile (i.e. preserves the axenicity of the collected inoculum) when in use. The inventors were Jack D. Tiner and Jacob Smit.

The patent issued for "Steerable Luneberg Antenna Array" concerns an electronically steerable antenna array using a pair of parallel Luneberg lenses. The antenna array employs a system that is relatively inexpensive, not com-



"LADIES AND GENTLEMEN" . . . Melpar's President, J. Pierce Chambers speaks to supervisors at the September dinner meeting.



plicated and yet provides a uniform response over a wide bandwidth. Julian Caballero was the inventor.

The "Digital Helicopter Trainer" invention pertains to a helicopter simulator for training student pilots. One of its important features is that it is possible to use the same equipment to simulate both single and tandem rotor helicopters. The trainer uses a general purpose computer having a memory which is preloaded with a program indicative of the aerodynamic constants and equations of the craft the student is being trained to use. To change the craft being simulated, it is merely necessary to reprogram the computer memory with the required constants and equations for the new craft that is to be simulated. The inventors were F. E. Papin, J. R. Toler and S. H. Cotton.

Disclose classified information only when a "Need to Know" exists.

## From The Data Bank

(Reprinted from "People Count," Va. State Chamber of Commerce, Richmond, Va. Sept. 1968)

Latest figures released by the State Chamber of Commerce show the following:

From January 1 through June 30, 1968 in the U.S., 2,560 work stoppages (strikes) cost 1,350,000 employees a total of 24,700,000 man-days off their jobs.

During all of 1967 in Virginia, 87 work stoppages cost 50,500 employees a total of 382,000 man-days off the job.

As profits of US business rise, unemployment rates decrease. Check these figures:

	% of Profit on Sales	Unemploy- ment Rate
1958	4.2	6.8
1964	5.2	5.2
1966	5.6	3.9

(Increase in profits of 1.4 percentage points over the 8-year period produced a drop in unemployment rate of 2.9 percentage points.)

Employee benefits cost U.S. business more than \$75 billion in 1966. In 1967 this cost rose to almost \$90 billion. This represents 4 times the amount paid in dividends to stockholders during the same year.

Do your Christmas shopping early. It's easy, if you buy Savings Bonds and Freedom Shares, available "over the counter" at your bank—the ideal combination gift.

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## EARNINGS IMPROVEMENT PROGRAM AHEAD OF TARGET

Total dollar savings resulting from Melpar's Earnings Improvement Program have exceeded 62% of our 1968 goal of \$732,800. A substantial share of these savings is attributable to employee participation through the submission of cost reduction suggestions. The originator of each of these suggestions resulting in savings of \$500 or more received a U.S. Savings Bond ranging from \$25.00 to \$50.00. Employees receiving bonds last month are as follows:

R. C. Gregoire	Research
R. H. Hronik	Engineering
R. L. Payne	Plant Engineering
F. Rogusky	Marketing

The maximum award, a \$200 U.S. Savings Bond is still unclaimed. Why not be the first to earn this award by submitting your cost reduction suggestion? Simply complete form GO-340 and forward the original and one of the three copies to "Cost Reduction Administrator." The remaining two copies are intended for your retention and supervisor (optional). No approvals prior to your submittal to the Cost Reduction Administrator are required. After submittal, all processing, including evaluation, implementation and notification is performed by the Central Cost Reduction Committee.

**Zero Defects Awards**—The Central Cost Reduction Committee is also pleased to announce the following Quarterly Zero Defects Award Winners:

Pauline E. Hartman	Engineering
Polly Heston	Accounting
William D. Hixson	Material
Robert L. Migliorini	Research
Lucille Ferrante	Special Products
Lyal Morse	Reliability & Quality Assurance

These employees are to be congratulated for their outstanding performance and achievements.

**SHOW YOU CARE  
AND  
GIVE YOUR SHARE  
UNITED GIVERS FUND  
CAMPAIGN**

25 September - 30 October 1968

## WILCOX ELECTRIC WINS \$5 MILLION PHILIPPINES CONTRACT

Wilcox Electric Company, a Melpar subsidiary, has announced that its international subsidiary has received a "turn key" contract for approximately \$5 million from the Philippines Government.

The award calls for International Wilcox Electric Co., Inc., located in Kansas City, Mo., to supply a variety of aeronautical radio navigational aids and related equipment, including instrument landing systems (ILS), distance measuring equipment (DME), and visual omni range (VOR). It also provides for extensive training, support services and includes survey responsibilities and installation of all systems. Work will be accomplished over a three-year period.

When finished, according to International Wilcox, the Philippines will have the latest type of transistorized equipment.

The contract includes seven VOR/DME Model 485B/496A, 15 VOR Model 485B, 11 transistorized VOR Model 476A, one ILS Model 412A, 15 VHF radio control-links, 17 diesel-generator power plants, two VOT's, and five VOR Monitoring receivers Model 1792A.

International Wilcox presently is working on similar contracts in Mexico, Saudi Arabia, and Malaysia.

Wear your Security Badge.

## American-Standard Sales Exceed \$511 Million First Six Months

American-Standard sales for the first six months of 1968 totaled \$511,740,000 and earnings were \$11,908,000, compared to sales of \$465,614,000 and earnings of \$8,953,000 in the first half of 1967.

Earnings for the first six months of 1968 were equal to 61 cents per common share compared to earnings of 35 cents per common share in the first half of 1967, after provision for dividends on the 7% Preferred and \$4.75 Cumulative Convertible Preference Stock.

Sales and earnings figures have been restated to include operations of Westinghouse Air Brake Company which merged into American-Standard in June of this year on a pooling of interests basis.

## 439 SIGN UP FOR AM-STD STOCK PURCHASE PLAN

On the cut-off date, September 16, 1968, there were 1128 eligible employees for the American-Standard Stock Purchase Plan.

Of this figure, 439 employees or 38.9% accepted the plan.

At the termination of the WABCO stock purchase plan in June, 62 Melpar employees were enrolled.



**A7A MODEL PRESENTATION**... A model of the A7A weapon system trainer was recently presented to the Naval Training Center in Orlando, Florida, by Melpar who built the flight portion of the trainer. On hand were, from left, CDR Harry W. Cook, Melpar President J. Pierce Chambers, Capt. J.N. Miller, Dr. Hans Wolff and Mr. Robert Beshore. The model was built by Stanley Brower of Melpar's Graphics Department. (Official Photograph U.S. Navy)

## WABCO Vice President's Son Awarded Distinguished Service Cross

An heroic Special Forces medic, who not only took care of his own men, but braved intense enemy fire in Vietnam to treat a prisoner, received the Distinguished Service Cross for the action that cost both his legs.

The Green Beret Soldier, Sgt. Peter M. Stark, 24, was given the medal—a gallantry decoration second only to the Medal of Honor, at a special ceremony at Fort Monmouth. Sgt. Stark is the son of John E. Stark, WABCO Vice President, Industrial Relations.

The action for which Sgt. Stark was decorated for "extraordinary heroism" and "exceptionally valorous actions" took place in Tay Ninh Province of Vietnam on January 4 of this year.

He was with a Special Forces patrol that infiltrated a vacated Viet Cong base camp, where the patrol set up an ambush for enemy units that might approach.

Three Viet Cong moved into the trap, and one was wounded and taken prisoner. While Sgt. Stark was treating the prisoner, the patrol came under attack and moved toward a helicopter landing zone for evacuation.

"Sergeant Stark," his citation reads, "repeatedly halted under the intense enemy fire to administer lifesaving treatment to the prisoner. He and the prisoner were among the first to be loaded aboard the rescue helicopter.

"As the pilot readied for takeoff, the ship was hit by a devastating barrage of rocket grenades, machine gun and automatic weapons fire. The craft became airborne but crashed thirty meters from the landing zone.

"Sergeant Stark had both legs severed by the exploding rocket grenades. Completely disregarding his painful wounds, he crawled across the crash site to treat a severely injured comrade. When another soldier came to his aid, Sergeant Stark directed the man to treat the casualty while applying tourniquets to his own legs.

"He refused to be pulled out of the line of continuing enemy fire until the other wounded were moved to safety.

"Sergeant Stark's extraordinary heroism and devotion to duty were in keeping with the highest traditions of the military service and reflect great credit upon himself, his unit and the United States Army."



Major General W. B. Latta presents Sgt. Peter M. Stark with the Distinguished Service Cross.

DID YOU KNOW THAT . . . in 24 hours your heart beats 103,689 times, your blood travels 168,000,000 miles; you breathe 23,040 times, inhale 438 cubic feet of air, eat 3-1/4 lbs of food, drink 2.9 quarts of liquid; you speak 4,000 words, move 750 muscles and exercise 7,000,000 brain cells?

No wonder you feel tired!

Protect classified information when in use.



### NSF STUDENTS COMPLETE SUMMER ASSIGNMENTS . . .

Pictured here with the coordinators of the program are the National Science Foundation students who completed their summer assignments with Melpar the latter part of August. From the left: Al Lopez, who coordinated the program for Engineering, Rod Barron of Arlington who worked in the Computer Lab; Michael O. Karnis of Falls Church, assigned to the Tech Staff; Janice A. Mattson of Falls Church, assigned to the Astro-Chemistry Lab, Norman R. Thom of McLean, who did research on noise measurement; Dave Zahniser of Fairfax, assigned to the Computer Lab; William J. Watson, coordinator of the program for Research, and John H. Fuller of Falls Church, upper right hand corner, who worked in Shirley Research Virology Lab.

## ON THE DAIS . . .

Metallurgist Robert A. Hermann presented a paper at the 26th Annual Meeting of the Electron Microscopy Society of America which was held in New Orleans, La., recently. The paper was entitled "Fractographic Observations of Sapphire Whisker Reinforced Alumina" and was written by Mr. Hermann, A. P. Divecha, P. J. Lare and H. Hahn. This paper describes techniques and observation based on work performed under contracts dealing with reinforced materials.

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Melpar presented two technical papers at the recent Electronic and Aerospace Systems Convention held at the Sheraton Park Hotel in Washington recently. Melpar president J. Pierce Chambers chaired the publications selection group.

Project Engineer W. J. Richter and Senior Electrical Engineer Raymond L. Hawkins spoke on the "Multi-mode Propagation System."

Senior Physicist John Whelchel presented "The Fast Fourier-Hadamard Transform and Its Use In Signal Representation and Classification." The paper was written by Mr. Whelchel and D. F. Guinn.



## Field Crew Completes Task

Melpar's intrepid field crew from **John Morton's** Meteorology Laboratory with **A. V. Duffield** as Group Leader has recently returned from a successful two-month field trip in central Alaska where they collected weather data. Transportation to and from the isolated site was by helicopter which also supported their data collection efforts and supplied food, water, and equipment. Housing accommodations were arctic tents and meals were prepared over a camp fire.

In addition to its technical success there were several exciting episodes. **Ken Benson** outran a bear. **Bob Bates** climbed 5 feet up a 2-inch tree to escape from the same bear (according to Bob the bear was 7 feet tall). **Bob Foster**, in addition to killing a bear which was ransacking the camp, lost so much weight he had to hold his pants up with a safety pin. **John Shulnes** strained his back by driving a disabled "Ranger" (a small track vehicle) 10 miles through dense forest and was evacuated for medical care. **George Schaefer** walked twenty miles in one day with a heavy pack, suffered an infected blister on his foot and also had to be evacuated. **Gary Proctor** grew a splendid beard as an added attraction to an already spectacular handlebar mustache. **Phil McCoy** and **Charles Counts** stayed clean and civilized back at Clear Misile Warning Station while **John MacKissic** tried to stay clean by heating water and bathing in a bucket after the first frost.

Wolves were heard frequently, a moose set up headquarters fifty yards from camp, and two bear cubs moved into camp after their mother was killed. A majestic Trumpeter swan (a rare, almost extinct species) shared the small lake with our campers as did many families of ducks. Other common visitors were ptarmigan, spruce grouse, many species of mice, moles, shrews, and squirrels.

Upon their arrival the first of July it was never dark, the sun dipping just below the horizon for only about an hour. Spectacular sunsets merged into glorious sunrises. Daytime temperatures reached the 90's. When they returned two short months later there had been two nights of frost, the leaves were falling, and the nights had almost 12 hours of darkness.



**TEED OFF? . . .** The Greenwich Golf Club Championship tournament started September 7th at the course on Rt. 215 west of Manassas.

Pictured here are Jim Haley and Tom Wood at the first tee before playing the first round of the tournament. Information on scores and winner was classified.



**MRS. KLINEPETER WINS AT CHANTILLY . . .** Test Technician Goldie Klinepeter won the Cedar Crest Cup with a score of 88-19-69 in the Arlington-Fairfax Golf Association Class A Tournament at Chantilly recently.

Goldie has been golfing since 1950 and has placed second in several tournaments but this is her first championship.

She is pictured holding the Cedar Crest Cup, engraved with her name which she will retain until next year's tournament. She was also awarded a sterling silver Revere bowl.

## On the Mend . . .

**Mel Hunt** of the Metrology Lab is still in a cast but back to work after fracturing his kneecap in a water skiing accident.

**Jeanne Berry** of Publications and "**Chuck**" **Salmon** of the Photo Lab have returned to work following heart attacks.

**Earline Baker** of Accounting is wearing a cast following a fall in which she fractured her arm.

Recovered from surgery and back on the job are **Margaret Bryant** of Incoming Inspection, **Dorothy Nicholson** of manufacturing and **Al Revilla** of Marketing.

**Vi Everett** of Telecommunications was injured in an auto accident recently but has returned to work.

## SOUNDS FISHY TO US . .

System Engineer **Jim J. Fugate** made the head lines in a recent press release by the World-Herald News Service. Jim has been with the Melpar Omaha Office since the Finder equipment was delivered in April of 1961.

The article related how skin and scuba divers under the sponsorship of the Rebel Divers of Omaha at Ogallala, Neb., accounted for a reported 3,023 pounds of fish—mostly carp—during two days of spearing that ended Labor Day.

Skin divers accounted for a reported 1,255 pounds of fish and scuba performers 1,768. Jim, the grand champion, collected a record of 394.5 pounds of fish while scuba diving.

Jim and his teammate led in skin diving with 311.5 pounds and they upped that total to 609.7 in scuba.

Be Security Conscious—Our National Defense is at Stake.

## Melpar Explorer Scouts Resume Meetings

Melpar's Science and Engineering Explorer Scout Troops resumed their fall meetings on September 10th.

Sr. Scientist **Dr. Fred D. Ordway** described to the scouts in a slide program the arrangement of atoms and solids, how and why some things are crystalline and others amorphous. He discussed how scientists are using regular arrangement of crystals to determine the structure of molecules, even as complex as proteins, the basis of life itself.

**Mr. C. R. Wilhide**, Chairman of the Fairfax Finance Committee of the Boy Scouts was a visitor at the meeting.

**Mr. Wilhide** needs assistance in raising funds to carry out the program for a rapidly increasing boy scout population in Fairfax County.

Volunteers who wish to assist in canvassing businesses or individuals in the following districts may call **Mr. Wilhide** on 354-1100:

Herndon/Vienna  
McLean  
Falls Church  
Annandale  
Centreville/Clifton/Burke/Fairfax  
Springfield  
Franconia  
Mount Vernon/Pohick/Groveton

## GOING UP!

Congratulations to those who won promotions in September. Their names are listed here with their new classifications:

L. G. Rands	Engineering Specialist
K. S. Merrill	Librarian
S. L. Werner	Branch Supervisor
J. L. Southerland	Senior PBX Operator
W. E. Dawson	Senior Design Engineer
L. M. Barrick	Manager, Corporate Reports
J. D. Wilson	Accounting Supervisor
G. D. Poorman	Senior Design Engineer
A. G. Ross	Supervisor, Cost Control
R. R. Beck	Senior Electrical Engineer
R. V. Nystrom	Engineering Specialist

## Symanoskie Committee Commended For DOD Study

Chief Draftsman Joseph V. Symanoskie, Steering Committee Member since 1962 of the Engineering Data Management Section of the American Ordnance Association, was appointed Chairman in September 1967 of an Ad Hoc committee which conducted a study on "Department of Defense Requests for Non-contractual Data Items."

This study was made in response to a request by the Office of the Assistant Secretary of Defense.

Following recent completion of the study report, Joe received the following letter:

American Ordnance Association  
17th & H Sts., N.W.  
Washington, D.C.

Dear Joe:

Congratulations on the fine comments that Col. Elder gave you on your report. You are to be commended on a difficult but outstanding job.

It is indeed a pleasure for me to have the AOA Advisory Service recognized by DOD in this manner. Many thanks for your fine contribution.

Sincerely,

Victor R. Haugen  
Maj. Gen. USAF  
Director, Advisory  
Service.

(Col. Elder is the Deputy Director, Technical Data, Standardization Policy and Quality Assurance in the office of the Assistant Secretary of Defense.) He commented: "It is an excellent report which we would like to forward to personnel at all military installations who request drawings from industry, not only to encourage use of the form letter recommended, but to give these personnel insight to the problems that industry has in complying with their requests."

## Nine To Receive Melpar Service Pins

Nine employees pictured here will be honor guests at the September/October pin luncheon to be held in the cafeteria on October 16th. (Sally Finnell who received a ten year pin was not available for a picture).

### TWENTY YEARS



E. J. Diehl

### FIFTEEN YEARS



J. E. Conant



W. Herring



M. A. Orr



R. K. Sakamoto

### TEN YEARS



Rarene C. Helderman



R. E. Kent



H. S. Townsend

The total count of pins awarded now reads:

20 year pins - 14  
15 year pins - 120  
10 year pins - 734



"THE MOSTEST": Pictured here are the six Melpar employees who served as hostesses for the recent Electronic and Aerospace Systems Convention at the Sheraton Park Hotel in Washington. J. Pierce Chambers, Melpar's president, was in charge of publications for the convention. Melpar presented several technical papers and a display of our special products, and the "very special" employees shown here. Left to right: Vicki King, Georgia Watson, Wilma Watson, Hazel Channell, Beverly Seal and Marla Polifko.