# melpar-a-graph

**MELPAR** 

An American-Standard Company

Volume 15, Number 2

May 1970

# Melpar Men of the Year Hahn, Lanier, Swindells and Zobay

Melpar Men of the Year were honored at the Annual Awards luncheon held in the cafeteria on April 22nd. Awards were made in three areas of achievement: "Publications," "Inventions" and "Value Improvement Suggestions."



MELPAR MEN OF THE YEAR . . . Henry Hahn with Vice President R. B. Power, W. R. Lanier with President J. Pierce Chambers and F. E. Swindells, J. L. Zobay and Vice President T. D. Kelly.

Winners for the Publication of the Year were H. Hahn and W. Palich for their paper, "Preliminary Evaluation of Porous Metal Surfaced Titanium for Orthopedic Implants."

"Invention of the Year" was "Solid State Battery Cells" by F. E. Swindells and W. R. Lanier.

The VIP Award for best suggestion of 1969 went to J. L. Zobay for his idea to use a plastic dip seal in lieu of tape prior to conformal coating of PC boards.

Also nominated in these categories were:

### Publication of the Year:

E. M. Connelly and A. R. Schuler for their paper "A Theory of Adaptive Man-Machine Systems Applied to Automated Training." They received a citation for "Significant Scientific Contribution with Broad Application and Potential."

R. A. Herman, P. J. Lare, F. Ordway and H. Hahn for their paper, "Recent Advances in Whisker-Reinforced Light Metal Alloys" for which they received a citation for "Significant Summary Reference in the Field."

### Invention of the Year:

J. W. Paljug and S. S. Brody for their invention, "Log/Linear Electrometer," H. Hahn for "Bone Implants" and B. R. Koch for "Digital Automatic Speed Control for Railway Vehicles."

# Value Improvement Suggestion of the Year:

J. J. Adams for his proposal to reuse chlorothene in cleaning printed circuit boards through use of a still.

Mary Lee Wood for her suggestion to provide a central control to reduce the number of Code B memos; Richard Elliot for his test jig which simplified the testing of certain PC boards through use of multiple indicator lights, and Fred Rogusky for his suggestion which simplified and reduced the costs of distribution for proposals.

J. Pierce Chambers, Melpar's President, presented the winners with attache cases as awards for their outstanding achievement. Each winner will also have his name engraved on the appropriate plaque in our main lobby and will receive a one-year subscription to the technical publication of his choice.

### '69 COST REDUCTIONS EXCEED CORPORATE GOAL

Final savings have been computed and Melpar is again pleased to announce that it has exceeded the 1969 Cost Reduction Corporate Goal of \$700,000 by more than 57%.

Engineering and Personnel earned top honors with first place going to Engineering with a total dollar savings of \$247,568 and second place going to Personnel with \$46,660.

The Procurement Savings Program of the Purchasing Department made a substantial contribution to the dollar savings with cost avoidance savings which exceeded \$762.825.

For 1970, a new Corporate goal of \$750,000 has been established. Individual Departmental goals are as follows:

| Organization           | 1970 Goal |
|------------------------|-----------|
| Research & Engineering | \$140,000 |
| Manufacturing          | 90,000    |
| Finance & MIS          | 50,000    |
| Marketing Services     | 15,000    |
| Personnel              | 20,000    |
| R & QA                 | 50,000    |
| Material               | 30,000    |
| Purchasing             | 240,000   |
| Plant Engineering      | 65,000    |
| Miscellaneous          | 50,000    |
| TOTAL                  | \$750,000 |

Make this year more successful than ever. Send your ideas now on Form GO-340. If you should have any questions regarding the completion of this form, ask your organizational representative, Supervisor, or Al Ross, Cost Reduction Administrator (X2707). If accepted and implemented, your suggestion could earn you up to a \$200.00 U.S. Savings Bond.

(continued on page 6)

# American-Standard Establishes Mel-Labs, Inc.

A new subsidiary, known as MEL-LABS, Inc., to operate a Life Sciences Center, Environmental and Applied Science Center and Special Products Department, has been established according to J. P. Chambers, President. These operations are located in Springfield, Va. and Rockville, Md., and employ 120 scientists, engineers and supporting personnel.

The research laboratories have been engaged since 1960 in work for Government and commercial customers involving heart devices, virology, immunology, cancer, biochemistry, air and water pollution, meteorology, and medical instrumentation. Special Products has a varied array of products such as timing and frequency devices, and pollution detection equipment which it sells to commercial customers.

The management of Mel-Labs, Inc., is as follows:

J. P. CHAMBERS President

R. B. POWER
Technical Director

T. D. KELLY Treasurer

A. G. ROE Secretary

D. E. LEWIS ... Manager, Special Products Department

T. P. MELOY Manager, Environmental & Applied Science Center

T. B. OWEN
Manager, Life Sciences Center

W. J. WATSON Manager, Support Services

Forgiveness saves the expense of anger, the cost of hatred and the waste of energy.

### **Economic Facts Of Life**

Productivity — output per man-hour — went up only 0.9 percent in 1968, the smallest annual increase since 1956, the Bureau of Labor Statistics reports. Both 1956 and 1969 were years of low unemployment and reduced rates of economic growth.

Unit labor costs rose by 6.3 percent in 1969, compared with a 4.2 percent gain in 1968.

# ZERO DEFECTS QUARTERLY AWARD

### WINNERS

Melpar is proud to announce the following Zero Defect Award Winners for the fourth quarter of 1969:

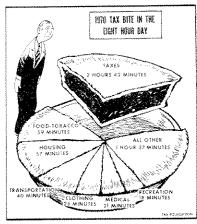
Virginia Mullinax was chosen by the Purchasing Department. Mrs. Mullinax was given the award in recognition of her extremely low defect rate in typing purchase orders, blanket purchase agreements and contracts from hand written drafts. Although Mrs. Mullinax places great importance on accuracy, the completion of P.O. typing workload continues to be timely.

Additionally, Mrs. Mullinax operates and supervises the Melpar TELEX/TWX centralized facility, the usage of which increased almost 25% during 1969. According to Fred Morley, Manager of the Purchasing Department, "Notwithstanding the volume of work this employee produces, errors in the work she completes are rarely evident."

Material Control's award for the fourth quarter went to T. A. Hayes. As the Storekeeper in charge of Project Stores, Mr. Hayes was cited for the outstanding manner in which he receives, stocks, and issues material on all contracts at the Falls Church facility. At present, there are approximately 100 active contracts requiring separately stocked material. Moreover, Mr. Hayes is very conscientious in the performance of his duties and his assistance to other departments is an asset.

Reliability and Quality Assurance designated Jerry Criste as recipient of their fourth quarterly award. Mr. Criste was chosen for his ability to speedily master his task with virtually no errors. Mr. Criste's tasks include performing Reliability Tests for such programs as the APX-72 and the 807B, and establishing and maintaining the official Reliability Assurance Test Logs which must comply with military standards. Mr. Criste has performed diligently and has an outstanding reputation among all fellow workers.

Each of these winners received a personalized desk set and choice of another gift. A memo of commendation was placed in each winner's personnel file.



WOULD YOU BELIEVE ... that after May 15th you'll be working for yourself? According to Tax Foundation, Inc., in 1970, Americans will need nine minutes more of their eight-hour workday to meet their taxes than they did in 1969. (2 hours and 43 minutes a day.) That's 96 working days a year — so from Jan. 2nd through May 15th you'll be working to pay your Federal, State and local taxes — after that you'll be working for yourself!!!

The picture to the right shows the rest of the bite of the eight-hour day. Below are the times estimated for taxes in past years:

1969: 2 Hours, 34 Minutes 1968: 2 Hours, 26 Minutes 1966: 2 Hours, 19 Minutes

## Ideas on Liberty....

TWO SIDES OF POVERTY

If paying people not doing productive work is anti-poverty, it's more than offset by the pro-poverty effects of taxing away the earnings of those doing productive work.

If handing out money is anti-poverty, taxing in the money is pro-poverty.

If putting people to work is anti-poverty, then union restrictions, minimum wage laws, discriminations, and the like which keep people from getting a job are pro-poverty.

If training people to take jobs is anti-poverty, taxes which discourage investors from providing these jobs are pro-poverty.

No matter how fast we increase our anti-poverty measures, poverty continues to grow because of the increasing and spreading of pro-poverty actions.

Protecting the right of every American to be free to work without disruption or restriction (Open Employment), letting those who work enjoy the fruits of their own labors (Taxation with Limitation), and permitting investors to profit from their financing of productive enterprise and employment (Free Private Enterprise) — these are the things which do the most to eliminate pro-poverty conditions and reduce poverty.

# The Patent Picture



Dr. R. Burton Power presents Sam Brody a copy of his recently issued patent.

Five new patents were issued to Melpar recently by the U.S. Patent office.

The first, "Thin Film Capacitor," relates to a thermally evaporated dielectric film having greater stability of electrical parameters over wider temperature region, than any previously known evaporated film.

The second invention, "Thin Film Circuit Element of Amorphous Semiconductor Exhibiting a Voltage Variable Non-Linear Resistance with Symmetrical Characteristics," relates to a thin film circuit device employing an amorphous layer of boron, germanium or silicon. The device is useful in general where symmetrical varistors are used for voltage regulators, safety switches, etc.

The third invention, "Synthesis and Wave Generation With Compactly Carried Waveforms," concerns a network capable of synthesizing and analyzing compactly carried waveforms only over a specified time interval. It has applications in signal recognition speech compression and high frequency recording.

The fourth patent is titled "Apparatus and Method for Obtaining Optical Rotatory Dispersion Measurements." This invention concerns optical rotatory dispersion measurements and analysis of optically active substances in highly absorbing or scattering media.

Sam Brody and John E. Chaney (exemployee) were the inventors of "Flame Photometric Detector with Improved Specificity to Sulfur and Phosphorus."

The invention concerns a method and apparatus for obtaining quantitative results from a gas chromatographic column where the method and apparatus are highly specific for and highly sensitive to sulfur and phosphorus compounds. Some of its practical applications are in air pollution studies, detection of flue gases and monitoring of sulfur containing effluents from scrubbers, reactors or catalyst beds in both laboratory and plant utilization.

# Congratulations!

Congratulations are in order for Jr. Tech Writer Sharon Heffelfinger who recently received her BA in English from George Mason College, and to Tech Writer Jodi Watts who received her BA in Fine Arts from American University.

V. J. Serafino was awarded a Master of Science in Engineering by George Washington University on February 21, 1970. The title of his thesis is "The Logical Design of a Digital Picture Encoding and Decoding System."

Senior Scientist Gregor Swinsky recently received his Doctorate from the Catholic University of America in Mathematical Statistics.

These significant achievements were completed under the Melpar Tuition Reimbursement program.



MEET BRIDGETTA BELLE ... Bridgetta Belle Bourne, two year old daughter of Melpar Programmer Francis and Mrs. Bourne, has been selected as Poster Girl for the National Association of Hearing and Speech Agencies of Health, Education and Welfare.

Bridgetta, who is deaf, has been attending Gallaudet College Pre-school since she was 18 months old, where she is being taught to speak.

Both of Bridgetta's parents are graduates of Gallaudet College.

Hearing and Speech Month is sponsored by the National Association of Hearing and Speech Agencies.

### VAZQUEZ RECEIVES COMMENDATION FROM BENDIX

Supervisor of Inspection, Miguel (Mike) Vazquez has received the following letter of commendation from Bendix Communications Division:

American Standard-Melpar Division 7700 Arlington Boulevard Falls Church, Virginia

Re: Commendation Miguel Vazquez, Inspection Supervisor

#### Gentlemen:

During last week's monthly APX-72 meeting, Bendix Communications Follower Management personnel made mention of the subject person and his outstanding effort.

Since "Mike's" arrival on the scene there has been a steady improvement in quality on the APX-72. In fact, during recent months when this office was in process of reducing its personnel level, there was no doubt in our minds that the reduction could be made without worry. Bendix Resident Quality supervision finds it unnecessary to perform in line inspection because he has schooled his subordinates so well.

Mike exhibits good control over all levels of responsibility. His cooperation and efforts have led to a steady up grade of quality and quite naturally have resulted in making the availability to Shipping a positive thing.

While commending Mike, we would be remiss in excluding a good word for his line inspectors. They have also performed an outstanding job in controlling the quality of such a large volume manufacturing fabrication and assembly contract.

In conclusion, it is our opinion that we can be assured of continued quality output as a result of Mike Vazquez' efforts and the capable supervision of Melpar's Quality Control Department.

Sincerely,

E. Charles Meyenburg Subcontractor Administrator Bendix Communications

Congratulations to Mike and his Line Inspectors.

An expert is one who is called in at the last minute to share the blame.

Published by MELPAR

A Division of

American Standard Inc.

7700 Arlington Blvd . . Falls Church, Va. Editor . . . . . Jane K. Smith, Ext. 2706 Photographers . . . . . R. K. Sakamoto H. O. Glittenberg

# Going Up!

Recent promotions and advancement to higher classifications have been received by the following:

W. L. WILSON Senior Design Engineer

F. D. HOFFMAN Senior Programmer

J. TROPS Sr. Draftsman A

R. E. ALLEN H. K. GRAHAM Jr. Electrical Engineers

J. L. FINN Sr. Engineering Technician

M. J. POWELL Sr. Metrology Technician

C. A. BERNIER Line Inspector 1/C

M. KOZAR
N. A. GRANT
M. F. GREEN
F. E. SMITH
O. SIERRA
Light Assemblers 1/C

P. E. TIBBS Report Typist

B. M. BROCKWELL Sr. Clerk Typist H. S. TOWNSEND Custodial Foreman

L. B. FRANK Supervisor, Technical Information Analysis

### EARLIER RETIREMENT

The trend toward early retirement, before age 65, has picked up considerable steam in the past year. According to a study appearing in the Social Security Bulletin, nearly half of all retirement benefit awards in 1968 were "actuarially reduced" because the beneficiaries elected to retire before age 65.

Since the option of retiring at age 62 and drawing smaller social security benefits was extended to men in 1961, the trend has been steadily mounting, with a big increase in those taking it last year. Up to December 1968, in fact, 30.3 percent of all those who had received retirement benefits — including those who retired before the option was available — had accepted a reduction for early retirement. This compares with 24 percent in 1966, and only 4.7 percent in 1961.

How much do early retirees draw in retirement benefits? Last December, the average monthly benefit received, after the reduction, was \$95.48. This was up from \$80.26 in 1966 and \$69.00 in 1961. It compares with an average monthly benefit paid to men who elected not to retire before the age of 65, of \$114.99 at the end of 1968.

# Sign Up For U.S. SAVINGS BONDS AND NEW FREEDOM SHARES where you work or bank.

NOW PAYING 5% ... Series E and H Bonds are now paying 5% interest when held to maturity. You can take advantage of Melpar's Payroll Deduction plan to invest in United States Savings Bonds.

# Where They Spoke

Arlington-Dr. Fred Ordway, principles of material structures, before Northern Virginia Industrial Education Club.

Miami Beach—Dr. C. W. Martin, "Tall Floating Towers," a paper co-authored by the late Phil McCabe using a working model made by Tony Little, before the American Society of Civil Engineers.

Salt Lake City, Utah—John Morton, "Minimeteorology," before Utah Chapter of the American Meteorological Society.

NIH, Maryland—Dr. Gregory Swinsky, "Non-Parametric Concordance for K Time Series in the Small Sample Case," a part of his PhD dissertation effort.

New York City

Arden House Workshop-John E. Whelchel, Jr., "Properties of Mixed Radix Fast Fourier-Hadamard Transforms," before IEEE group on Electroacoustics.

# In Print ...

A paper entitled "F.F.T. Organizations in High Speed Digital Filtering" is scheduled to be published in the IEEE Transactions on Electroacoustics, June 1970, in the special issue on digital filtering. A co-author of the paper is D. F. Guinn of the Electronic Warfare Department.

COOL IT, MAN!

Next time you hurt, don't reach for the familiar bottle of beep-beep tablets. Instead try an ice cube.

To put ice to work as a pain reliever, put a burned finger in cold water to which an ice cube or two has been added. Or hold a cube against the burned area, until the pain disappears. There will be a very little swelling, and blisters won't appear, so the burn will heal much faster.

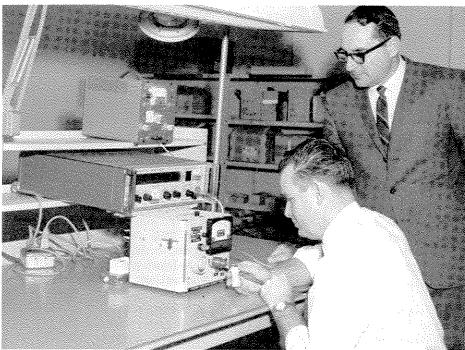
A fainting condition due to extreme summer heat — face flushed and eyes glassy — should respond dramatically to cold water containing ice cubes rubbed across arms, forehead, and the back of the neck. Ice stops bleeding, not only externally, but under the skin from bruise. Ice helps prevent infection, too Cold keeps germs dormant. A cube held against the wound until the doctor arrives practically eliminates the danger of infection.



MELPAR EMPLOYEES WIN 3RD & 4TH NATIONAL COST REDUCTION AWARDS ... A. E. Hilker, left, and L. L. Farmer, right, of the Incoming Inspection Department were recently selected to receive Air Force awards for their contribution to the Air Force FY 1969 Air Force/Contractor Cost Reduction Program. These awards were made "in grateful recognition of an individual cost reduction action of outstanding significance to Air Force Procurement," and were the first to be made by the Air Force for FY 1969. The awards, signed by the Secretary of the Air Force, R. C. Seamans, Jr., were presented by General J. Lindberg (second from right) in President J. P. Chambers' (second from left) office on the 22nd of January.

These awards are the 3rd and 4th that Melpar has received for efforts under its Cost Reduction Program. The first was received by Frieda K. Bernhard at the Fourth Annual Air Force/Industry Cost Reduction Awards Ceremony and the second was the DoD Cost Reduction Program Achievement Award.

Mr. Hilker and Mr. Farmer were both finalists in Melpar's 1968 Value Improvement of The Year program for their joint cost reduction suggestion, "Improved Method for Electrical Inspection of Variable Resistors." This was an improved method with reduced time and improved results for inspection of variable (trim) resistors.



### **NEW METHOD**

New method, which is faster, safer, and produced more complete results, uses a power driven device, which was designed and constructed by Mr. Hilker and Mr. Farmer, which replaces manual hand turning operation. This device automatically stops at the electrical end points within the resistor without damaging mechanical stops.

The new method eliminates 75% of inspection time which results in an annual savings of \$5,772.

# MELPAR EMPLOYEES DISPLAY GOOD CITIZENSHIP

Floyd M. Artrip, Arline Gales, and Robert Omohundro were witnesses to a recent abduction attempt on one of Melpar's employees. Their prompt volunteering of information to the Fairfax County Police who investigated the incident led to a speedy arrest in the case. Their actions brought the following letter of commendation from President J. Pierce Chambers.

"I commend you for the courage and the qualities of good citizenship you displayed in the recent attempted abduction case involving one of our employees.

"This spirit of helping to defend the innocent and identifying the guilty will hopefully discourage repetitions of such acts in our neighborhood in the future.

"I want you to know that your fellow employees appreciate what you did and respect you for your actions."

### HIGH INTENSITY LAMPS

Do you have one of the small high intensity lamps in your office or home? This is the type that uses a small 12V bulb, has a transformer in the base, and usually has two arms that swivel. Dr. Sidney Siegel of the National Institute of Child Health and Development reports that on some models, when the bulbs burn out, the current to the transformer remains on if the switch is left on. Since the bulb is not lighted, people may think the current is off. This leads to the possibility, especially on the very inexpensive models, that the transformer can overheat and since the transformer case is usually plastic and the lamp is used on a desk where plenty of fuel is readily available, a fire could result. Always make sure the light is turned off when leaving the room.

Also it is dangerous to allow a curtain or other flammable material to fall on a lighted lamp. The heat generated can easily start a fire.

# YOU CAN'T WIN . . . Writers and Editors:

"If he prints jokes, people say he is silly. If he doesn't, they say he is too serious. If he clips things from other publications, he is too lazy to write his own stuff. If he doesn't, he is stuck on his own stuff. If he doesn't use every word of every contributor, he doesn't appreciate genius. If he does, then his columns are filled with junk. If he changes the other fellow's writing, he is overcritical. If he doesn't, he is blamed for poor editing. Now, sure as fate, someone is going to say he swiped this from some other sheet. He did." And we did too.

Reprinted from the National Bureau of Standards house organ "Standard"

# SEVENTEEN CELEBRATE MELPAR ANNIVERSARIES

FIFTEEN YEARS





W. S. Alderson

W. E. Barber

H. Boltic











K. L. Cooper

E. M. Doran

A. S. Kozak

J. R. Peeler

W. M. Poe

C. W. Sisk **TEN YEARS** 

E. Stanfield











M. B. Eakins





C. R. Hill

J. D. Wilson

The first quarterly Service Pin Luncheon of the new year was held in the cafeteria in early April. Seventeen honor guests received their fifteen and ten year service pins, which were presented to them by their department heads.

# Tackie Powell's Son Wins

# Oratorical Contest

John Powell, 15 year old son of Executive Secretary Jackie Powell, won First Place in the Fairfax Optimist Club's Oratorical Contest held March 26th. The contestants, all under 16 years of age, spoke on "Youth - Full Partners in a Better Tomorrow."

John, a Sophomore at Fairfax High School, now becomes eligible to continue in the Virginia Area Contest, and the National Contest which brings the winner a \$2000 college scholarship.

## '69 COST REDUCTIONS

(continued from page 1)

Be alert! Cost reductions are essential in order to stay in business.

To remain competitive, to attract customers, and to provide stable jobs, Melpar must furnish quality goods and services at the lowest possible price. Remember that cost reduction dollars are high-powered dollars. Each of us must be mindful each day of any savings possibilities on our job - Management and Line Personnel. Every cost you save or avoid contributes to the economic health of Melpar.

The money the other fellow has is capital; getting it away from him is labor.

# New Arrivals

Congratulations are in order to the following employees who recently became proud parents. New little girls arrived for: Phil Montague, John Chandler, Robert Corbett, Matthew Famiglietti, Sue and John Russo, B. F. Hale, Kenneth Matheny, Clarence Stultz, Ed Isbell, and twins for Germain Ludwig.

Baby boys were presented to Lawrence Terry, Richard Cleve, Robert Turner, Fred Brewer, Warren Rosenberger, and James Holmes.

### WHAT DOES A HUMAN FACTORS ENGINEER DO?

Ever since he has been a human factors engineer, Germain Ludwig of the Simulation Department has been faced with the questions of what human factors engineering is, just what he does and what good human factors does for the project. After the birth of his twin daughters on 10 February, he finally found a good useful application of his expertise in human factors engineering. His wife was completely baffled by the prospect of having to care for two infants at the same time. In order to rescue her from this dilemma he applied all of the principles of good human factors practices and developed a complete task analysis of the job. After analyzing the job and determining what functions must be performed he then proceeded to develop a function allocation chart complete with rationale. He determined what functions were to be performed and by whom they would best be performed, i.e., man, woman or machine. After outlining the functions and breaking them down into their respective tasks and subtasks, he was able to determine what psychomotor skills were needed to perform them. From here he developed a time line analysis of these tasks from which he was then able to create a procedures manual for the job of feeding, burping, changing, etc., etc., a set of twins. So that is what a human factors engineer does - sometimes.

## DRUG ABUSE INFORMATION

Anyone may call, 24 hours a day, and hear a tape-recorded message giving common drug abuse manifestation and names and telephone numbers of community help resources. This service, sponsored by the Woodson Congregations for Community Action, was designed to help parents confronted with a drug abuse crisis. Phone 978-7874.