

## McCarrell Appointed Product Director For Electronic Countermeasures

The appointment of Raymond H. McCarrell as Product Director for Electronic Countermeasures was announced by Robert E. Miller, Vice President for



Raymond H. McCarrell

Engineering Services, on January 11. Mr. McCarrell rejoined the Melpar staff on that date. He was with the Company previously, for a short period in 1963-64, as Technical Assistant to the Manager, Radar Department.

The new Product Director has broad technical and administrative experience in electronic countermeasures and related fields. From 1960 to 1963 he was Director of Electronic Countermeasures for Litton Systems, Inc. From 1955 to 1960 his time was divided between the jobs of ECM Group Leader with Hallicrafters Co. and electrical design engineer with Motorola. Earlier he was Radar Section Chief, U. S. Marine Corps, and Department Head, U. S. Marine Corps Electronics School.

Mr. McCarrell received the BSEE degree from Chicago Technical College in 1953. He did graduate work at the Illinois Institute of Technology.

## Cole to Be Keynoter

Ralph I. Cole, Assistant to the Vice President for Engineering Services, will be keynoter at the Career Guidance Conference on Science and Engineering to be held February 6 at Vitro Laboratories in Silver Spring, Md. Mr. Cole's topic will be "The Technological Explosion."

## NOMINATIONS FOR ANNUAL MELPAR AWARDS ANNOUNCED

The names of those nominated for the Melpar Invention of the Year, the Melpar Publication of the Year, and the Melpar Value Improvement of the Year awards were announced January 21 by William C. Purple, Vice President and General Manager. The nominees and their achievements in 1964 are listed below.

The winners of the awards, to be selected by the Policy Committee, will be named on February 25 at a black-tie dinner dance at the Courthouse Country Club, Fairfax, Va. All nominees and their wives, as well as several top Government officials, will be invited to attend the affair as guests of Melpar's officers.

Each winner will receive a personal trophy and will in addition have his name engraved on a plaque to go on permanent display in the main lobby of Melpar's Falls Church plant.

### Nominations Made by Committees

Before deciding on the five inventions listed, the Patent Committee considered 64 patent applications made by Melpar employees in 1964.

The Publications Committee reviewed 82 technical papers written by Melpar employees and published in 1964, before making its nominations.

(Continued on Page 3)

## Nominations for Annual Melpar Awards

### Melpar Invention of the Year

- K. J. Fawcett, W. H. Fuhr, E. B. Pefferman, and W. M. Stone, for "An Adaptive Pulse Analyzer"
- N. Fuschillo and R. A. Lindberg, for "High Strength High Temperature Electrical Conductor"
- F. J. Hemmer, for "Thin Film Circuit Vacuum Processing Facility"
- R. E. Mirabelli, for "Method and Apparatus for Training Self-Organizing Networks"
- R. C. Smith and M. Hacskeylo, for "Thin Film Capacitor"

### Melpar Publication of the Year

- G. C. Blanchard and C. R. Goucher, for "The Corrosion of Aluminum by Microbial Structures"
- I. Blei, for "Complex Formation Between Chlorpromazine and Adenosine Triphosphate"
- K. P. Chopra, for "Some Dimensional Considerations of Studies in Space-Flight Simulation"
- K. P. Chopra and L. F. Herbert (Consultant), for "Karman Vortex Streets in the Earth's Atmosphere"
- M. L. Gimpl, A. McMaster, and N. Fuschillo, for "The Observation of Adsorbed Oxide Layers on Gold and Nickel Films"

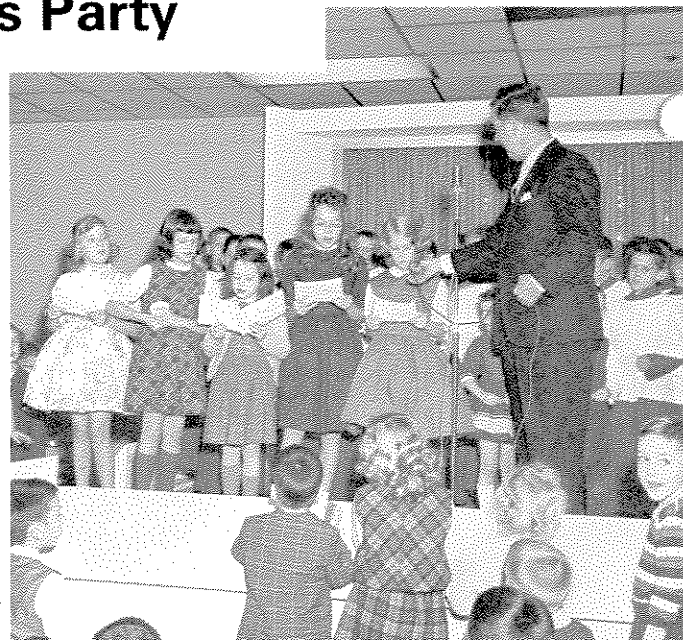
### Melpar Value Improvement of the Year

- J. J. Adams, for a proposal that reduced the cost of inventories and of testing hi-rel components.
- K. Hepburn, for proposals that improved shop practices and assembly techniques
- J. H. Leatherwood, for a proposal to standardize shipping containers and supplies
- D. O. Nicholls, for a proposal that reduced subcontract printing costs
- W. J. Watson, for proposals for improved administrative office techniques.

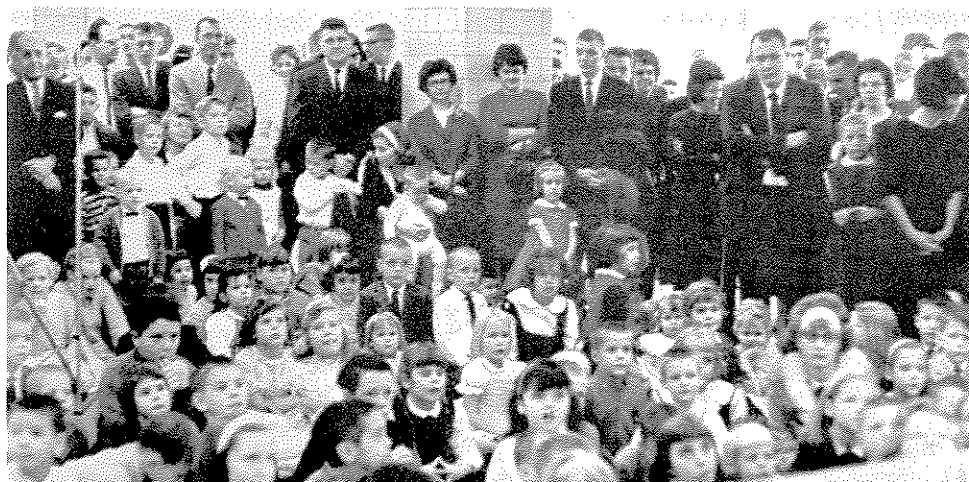
# 1300 Attend Melpar Christmas Party



St. Stephen's Boys' Choir gave a program of Christmas music. ↑



After the boys performed, the girls got into the act → at the urging of emcee Art Lamb.



Some of the crowd of 1300 who enjoyed entertainment, refreshments, gifts at party on Dec. 20.

The Amazing Scalzo wove a magic spell.



Part of audience at first performance.



All eyes are on the man of the hour. Recognize Lawrence Barnes?



Santa Claus, alias Virgil Van Cleef, and friend.

## MELPAR AWARDS

(Continued from Page 1)

An even bigger job faced the Value Improvement Committee. It had to make its choices from among 437 value improvement proposals accepted and implemented in 1964. These 437 proposals represented annual savings of more than a quarter of a million dollars.

### 1965 Competition Now Open

The threefold Melpar award program was instituted in January 1964. As announced at that time, the awards will be made annually. The 1965 competition opened January 1.

## GOING UP!

Warmest congratulations to the following employees, who won promotions in December (the titles following their names are their new ones):

August K. Bott, Accountant; David L. Brown, Senior Draftsman A; and James B. Crown, Accountant.

Francis C. Kasprzak, Senior Mechanical Engineer; Walter B. Morrow, Chemical Engineer; and Marion H. Seawell, Supervisor, Central Data Processing.

### Dr. Chopra Addresses

#### AIAA and ASMA Groups

Dr. Kuldip P. Chopra, of the Space Sciences Research Center, presented a paper, "Karman Vortex Streets in the Wake of Islands," at the Second Annual AIAA Aerospace Sciences Meeting held in New York on January 25. The paper, coauthored by Lester F. Hubert of the U. S. Weather Bureau, explains the recently observed properties of the mesoscale eddies behind the Madeira and Canary Islands.

On the next day, January 26, Dr. Chopra addressed the Armed Services Management Association at their bi-monthly dinner meeting in Boston. The topic of the address was "Weather Satellite Data and Armed Services Operations". Dr. Chopra emphasized the potential uses of weather satellites in a variety of armed services' operations in times of peace and war. The talk was followed by a question-answer period, which covered a wide variety of questions, ranging from satellite meteorology to changing patterns of research and education in India and U. S. A.

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**DR. RITT TO APPEAR ON TV SHOW.** Dr. Paul E. Ritt, Vice President for Research, is scheduled to appear on the Mark Evans Show, an interview program telecast by WTTG-TV (Channel 5), on Sunday February 14 at 8:30 p.m. Dr. Ritt is shown, at center above, with Mr. Evans during the taping of the show.

Topic of the interview was advances in electronics since 1945, with special emphasis on microminiaturization. During the discussion, Dr. Ritt referred to the many automatic devices for the home that are well within the reach of today's technology. One example he gave was an automatic pantry that would call the grocer and reorder whenever supplies reached a certain minimum.

## SUPERVISORS' FORUM

This month Lawrence E. Shaw, Assistant to the Personnel Manager, answers questions asked by supervisors.

**Q.** The November column stated that the accidental death/dismemberment benefit of Melpar's group insurance policy does not apply in the event of an accident occurring while the insured is engaged in any occupation for pay or profit. Doesn't such limitation greatly reduce the policy's value to the employee?

**A.** The accidental death/dismemberment provision of group insurance is intended to cover the employee during his leisure hours. Workmen's Compensation Insurance covers on-the-job accidents. Moreover, a separate Melpar policy, at no expense to the employee, covers accidents in any type of conveyance while the employee is in a company travel status. However, if death results from an on-the-job accident, the "life insurance" benefit of the group policy, as distinct from the "accidental death" benefit, is payable.

Despite the cited limitation the accidental death feature is worth while for the employee. Of all accidental deaths in the United States in 1963 only 13.6% were industry-connected. Accidents in the home and on the highway, swimming and hunting accidents, etc., accounted for the remaining 86.4%.

**Q.** Is it possible for an employee to

obtain information on the total of his earnings for Social Security purposes? I refer to all years worked, not just the years worked at Melpar.

**A.** The Social Security Administration will furnish the information upon request and urges that every worker request it about every 3 years. Should an error exist in a person's record beyond 3 years, 3 months and 15 days, it may not be possible under the law to effect a correction. The information may be obtained by completing Social Security Form OAR-7004, which can be obtained from any Social Security office or Melpar Personnel office. Or you may write a letter to the Social Security Administration, P. O. Box 57, Baltimore, Md. 21203, being sure to give your Social Security number and date of birth.

**Correction:** The pension article in the August issue stated that in 1965 the Social Security base would increase from \$4800 to \$5400. The statement was made upon what was considered reliable information. However, the bill did not pass Congress and in 1965 the base remains at \$4800.

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## Melpar Developing Collapsible Solar Still

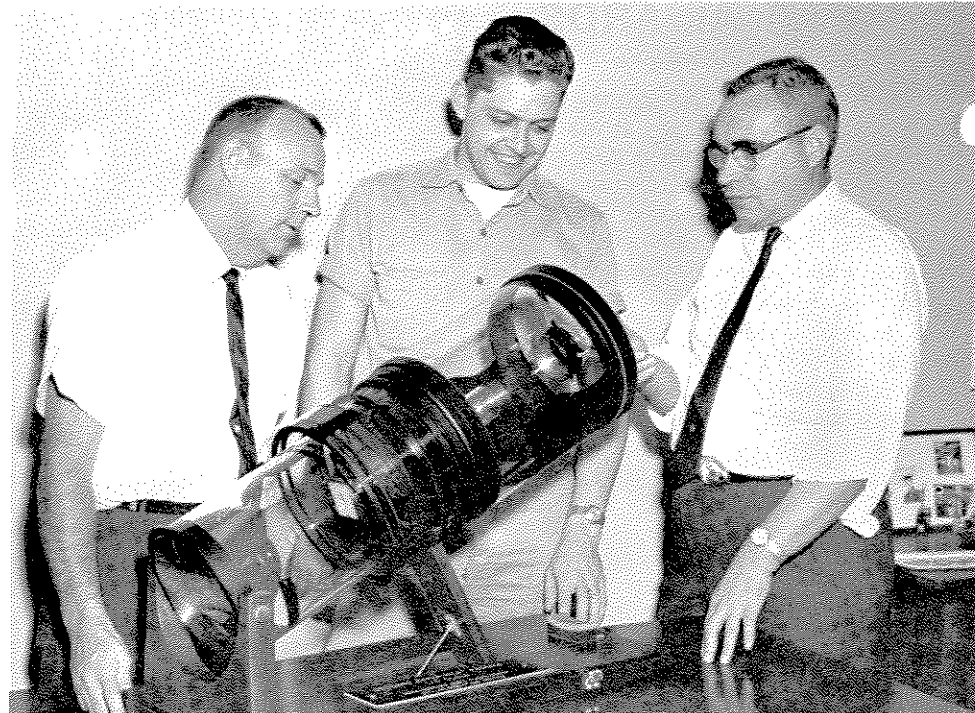
Melpar is developing a compact collapsible solar still for the purification and desalinization of water. The still is being developed for the NASA-Manned Spacecraft Center in Houston, Texas, as part of a sea-survival kit for MSC's space programs. The Company believes, however, that the portable solar still also could provide a completely new source of drinking water for the nation's outdoor enthusiasts.

Dr. Paul E. Ritt, Vice President for Research, points out that the new solar unit, approximately 40 cubic inches in size and weighing one pound, "represents the first major improvement in this type of operational still since World War II."

The unit is designed to make maximum use of the sun's radiation to condense fresh water from sea water, or to purify brackish or contaminated water so that the water can be safely consumed without further filtering.

The solar still, approximately 2 square feet at its base, will be capable of producing 2 pints of fresh water per day with solar radiation at a level of 1500 BTU's per square foot per day.

It will be made of collapsible plastic, to be inflated for operation. When placed in direct sunlight and charged with salt water, the still will immediately begin



**MAKERS POSE WITH MODEL.** In 1965 the NASA Goddard Space Flight Center is scheduled to orbit a large (3600-pound) satellite carrying a stabilized telescope platform to survey the entire sky. The satellite, the first of three Orbiting Astronomical Observatories (OAO's) to be launched, will carry telescope experiment packages above the distorting influence of the earth's atmosphere.

Shown above is a quarter-scale model of one of these packages. The model was designed by NASA-Goddard and built in our Manufacturing Shops. Admiring their handiwork are the three who had the most to do with its fabrications: Clyde Morgan, Manufacturing Shop Engineer; Bob Ingles, model maker; and Tom Terry, Shop Supervisor.

PHOTO BY SALMON

producing fresh water. Salt water, brackish water, or any waterbearing source can be used to charge the still, which will

operate throughout the day and collect water unattended.

The unit will be designed to maximize water conversion efficiency despite a changing orientation in relation to the sun. This is required because a fixed orientation which would provide the highest efficiency is not possible when the unit must operate on the turbulent ocean surface.

The Company sees a large potential public market for the portable package, beyond its initial basic military and space-survival purposes.

"With an ever-increasing number of Americans turning to the outdoors for their leisure hours, such a compact solar still can become an important part of the family's camping, hunting and fishing gear," Dr. Ritt says. "With such an easily operated system, campers need have little concern about potable water, even though they may be far from any source of tested drinking water."

An added marketing factor, Dr. Ritt notes, is that such a solar still can be produced at a relatively low price.



**SERVICE PINS AWARDED.** Employees who earned service pins in November or December were honored at a luncheon in the cafeteria of the Falls Church plant on December 16. As usual, each guest of honor was awarded his pin by his Operations Head or a representative.

Shown seated around the table are (clockwise from the left) Margaret Gerber, 10 years' service; Charles K. Craggs; Ted T. Cilley, 10 years' service; Bernard M. Tyler, 10 years' service; James F. Hilfiker; John B. Lynch, 10 years' service; Earl J. Diehl; Thomas L. Wood; and Atley L. Fristoe, 10 years' service.

Also celebrating service anniversaries with the Company, but unable to attend the luncheon, were Martin Butler (now on a field assignment) with 15 years' service, and James E. Ireland and Harvey Lawson, each with 10 years' service.

PHOTO BY SALMON

What's WATS? See page iii of your Melpar phone book.