

# melpar-a-graph

MELPAR, INC.

A SUBSIDIARY OF WESTINGHOUSE AIR BRAKE COMPANY

Volume 12, No. 2

March, 1967

## January Contract Bookings Total Over \$3 Million

Melpar President Jay V. Wilcox has announced award of new contracts and change orders to existing contracts totalling \$3,175,801 during January. Mr. Wilcox noted that the January bookings were the largest since March of 1966 giving the Company a good start toward a profitable year in 1967.

Major new contracts were received during January from the Department of Defense, the Navy Department, National Aeronautics and Space Administration, as well as several commercial concerns.

## Operations and Personnel Lead in 1966 Cost Reductions, Suggestions & Reports

Final savings have been computed and we are pleased to announce that Melpar has exceeded the 1966 Cost Reduction goal of \$550,000 by more than 15%, resulting in a total savings of \$637,334. Operations and Personnel shared group honors, Operations leading in Suggestions with \$50,008 and Personnel in Reports with \$74,637. Each shared second place honors, Personnel in Suggestions and Operations for Reports.

Individual savings resulting from the four elements of this Program are as follows:

**Employee Value Improvement  
Proposal Program (Suggestions)**  
\$132,364  
**Value Improvement Reporting  
Program** \$224,438  
**Value Engineering Program**  
\$10,504  
**Procurement Savings Program**  
\$270,028  
**Total:** \$637,334

Contributions from each of the major organizations to the Suggestions and Reports of Savings Programs are as follows:

|             | Suggestions | Reports  |
|-------------|-------------|----------|
| Operations  | \$50,008    | \$67,672 |
| Personnel   | 40,088      | 74,637   |
| Rel. & QA   | 24,045      | 1,730    |
| Engineering | 213         | 33,790   |
| Research    | 12,184      | 39,258   |
| Marketing   | 1,004       | 6,923    |
| Finance     | 4,822       | 428      |

The above results reflect a very significant increase over 1965 Program results in both our Employee Suggestion and Procurement Savings Programs, of 300% and 33% respectively. Employees who participated in these programs are commended for their efforts.

Our new 1967 Earnings Improvement Program is on its way towards achieving the new goal of \$750,000 with the following persons submitting ideas as of February 13th:

See Cost Reductions, Page 6

## ANNUAL AWARDS DINNER

Five outstanding employees were honored at Melpar's Annual Awards Dinner on February 21, 1967 at the Elk's Club, Fairfax, Virginia.

Selected as VIP man of the Year was H. R. Evans, Jr., from Operations; B. D. Smith was recognized for the Publication of the Year, and F. E. Papin, J. R. Toler and S. H. Cotton received the Invention of the Year Award jointly.

Winners were selected by the Melpar Policy Committee from the finalists listed below. Nominations were made

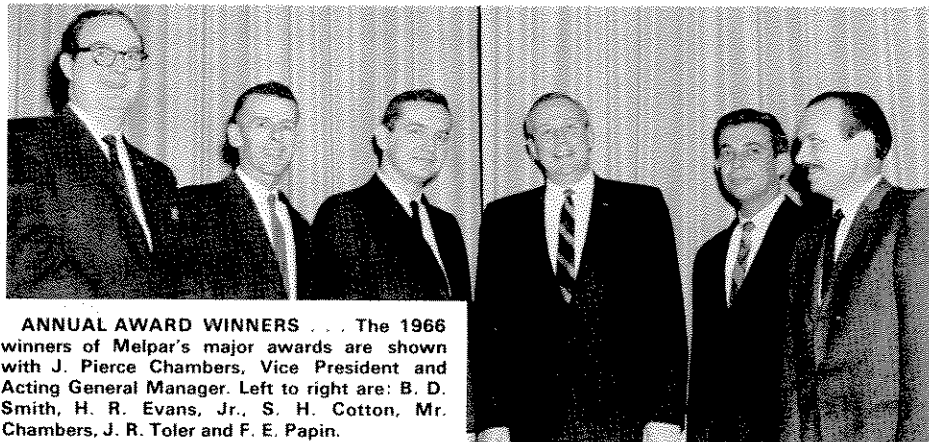
by the Patent Committee, Publications Committee, and Value Improvement Committee. Each winner received a personal trophy, his name engraved on a plaque permanently displayed in the main lobby of the Falls Church plant, and a year's subscription to the technical journal of his choice.

The award finalists were:

### VALUE IMPROVEMENT OF THE YEAR

H. R. Evans, "Reduced Cost of In-

See Awards Dinner, Page 4



**ANNUAL AWARD WINNERS** . . . The 1966 winners of Melpar's major awards are shown with J. Pierce Chambers, Vice President and Acting General Manager. Left to right are: B. D. Smith, H. R. Evans, Jr., S. H. Cotton, Mr. Chambers, J. R. Toler and F. E. Papin.

## Field Service Operation Returns to Engineering

In January 1967, Melpar's Field Service Department was assigned to Engineering. S. V. Covaleski, Department Manager, now reports to R. E. Miller, Vice President for Engineering. The new alignment is designed to achieve closer coordination between the engineers who design our equipment and the Field Service Engineers who provide support after delivery to the customer.

The Field Service Department was originally organized in 1952 as a part of the Engineering Division at Union Switch and Signal Division of WABCO, which at that time was starting manufacture of the Melpar designed F-86D Flight Simulator. Subsequently, the Field Service Department acquired responsibility for support of the F-100 series simulators, also designed by Melpar and produced by US&S. In July of 1958 a WABCO corporate decision was made to transfer the US&S Field Service organization to Melpar. This transfer was concurrent with delivery of the first of 21 Melpar designed and manufactured F101B flight simulators. All of the F100 and F101 simulators are still in operation and maintained by Melpar Field Service personnel. Of the original personnel transferred from US&S, 31 are still with Melpar on Field Service assignments.

In addition to maintaining 60 flight simulators throughout the world, our field service engineers maintain FINDER, ALD-4, MLM/GLM, AGM-12, and APR-23 -24 equip-



S. V. Covaleski

ments. The FINDER equipment, which is installed at SAC Headquarters at Omaha, Nebraska, was originally developed by Melpar and delivered to the Air Force in 1961. It is one of the largest special purpose data processing systems in the country and has provided remarkable performance with exceptionally good mean-time-before-failure records. Of the current maintenance group of 23 personnel, 17 of these worked on the original development contract prior to moving to Omaha.

Melpar equipments are installed at 33 locations throughout the United States and at 14 sites overseas. Overseas bases include Bentwaters and Upper Heyford RAF Stations in England; Hahn, Ramstein, Bitburg and Spangdahlem Air Bases in Germany; Wheelus Air Base in Libya; Subic Bay in the Philippines; Tateyama and Yokota Air Base in Japan; and Fairbanks in Alaska.

It is a common misunderstanding that our Field Service Department is



**FIELD SERVICE ENGINEER COMMISSIONED A "KENTUCKY COLONEL"** . . . General Frank A. Bailey, Chief of Staff, Arkansas Air National Guard, presents Bernard C. McMullen the honorary commission of Kentucky Colonel, on behalf of the Kentucky Air National Guard.

Mr. McMullen had been assigned for several years to the Kentucky Air National Guard in Louisville. Lt. Col. William Beck of the Kentucky Air National Guard recommended him for general excellence of service performed in support of the flight simulator, MB4 F101-A.

made up of relatively short-term personnel. Actually, Melpar's Field Service Department has been an extremely stable group. Of the 87 people in the department, 58 have been with Melpar 5 years and over. Within this group, 36 have been with us 10 years and over. One man, L. Nielsen, located with the FINDER group at SAC, Omaha, has 17 years of service with Melpar. As a further indication of stability, 85% of our field service personnel are married and have families.

Steve Covaleski joined Field Service while employed by US&S and transferred to Melpar during the move described earlier. He has 14 years of service with the WABCO family and takes a keen personal interest in his employees. Steve recently visited our Japanese installations at Tateyama and Yokota Air Base. While enroute he visited five of our personnel in the Philippines maintaining equipment being used in the Viet Nam War.

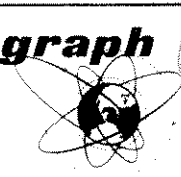


**PATENTS AWARDED** . . . C. B. Raybuck, (center) Chairman of the Patent Award Committee, presents patent awards to four Melpar inventors. They are: from left to right, O. O. Alderman, P. E. Ritt, B. D. Smith and J. D. Tiner.

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## ON THE DAIS ...

The Zodiacal Light and Interplanetary Dust Symposium conducted in Honolulu, Hawaii in January, featured a technical paper authored by seven Melpar research scientists. The seven are members of a space experiments team headed by R. S. Powell who presented the groups' paper entitled, "Analysis of the Zodiacal Light". The team included P. D. Woodson, M. Alexander, A. G. Konheim, D. C. Vogel, T. McElfresh and R. R. Circle.

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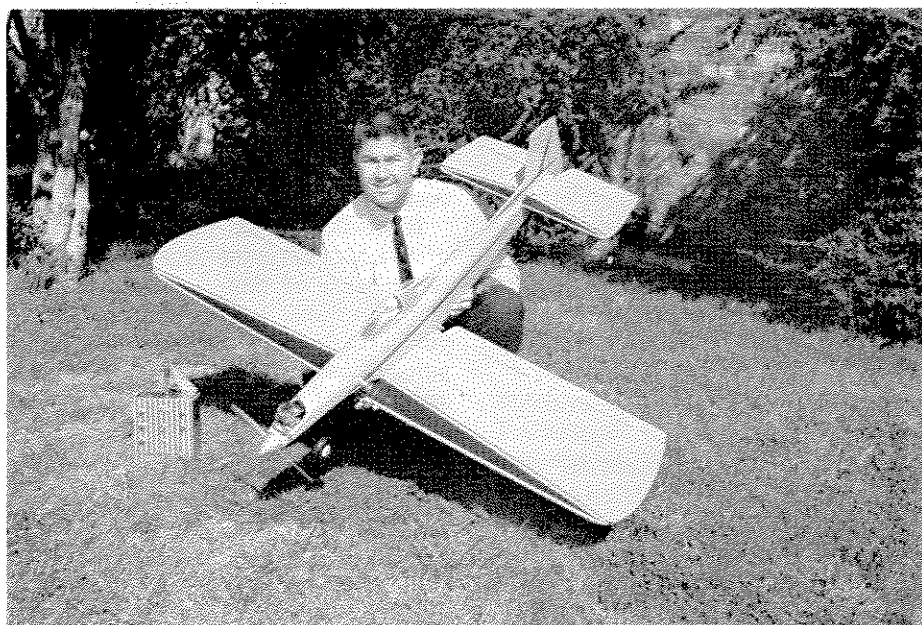
Dr. S. J. Campanella spoke at a Seminar conducted at Georgia Tech on February 7th, on "Pattern Recognition". The material presented was based on the Electronic Research Laboratory's work in pattern recognition by the use of event representation in terms of an end dimensional vector.

The discussion treated the application of hyper planes and quadratic hyper surfaces for constituting decision

criteria. Dr. Campanella also participated in a seminar at Catholic University on February 8th, sponsored by the IEEE section of the University. He was a member of a panel made up of representatives of government, industry and the University. They engaged in a round table discussion on the problems faced by students moving from the University into the job world.

\*\*\*\*\*

B. D. Smith, Transportation Systems Manager, was a guest speaker at a recent meeting of the American Institute of Aeronautics and Astronautics in Boston, Mass. The title of the technical paper which he presented at the meeting was "Simulation of Rapid Mass Transportation Systems". The work described in this paper has been supported by the High Speed Ground Transportation office of the U. S. Department of Commerce.



**MODEL AIRPLANES ARE HIS HOBBY.** ... Tony Little of the Publications Department builds model planes for a hobby. His latest creation is a Beachcomber (see photo above). Tony has had 70 flights with this plane, with one major overhaul "around the 30th flight." The overhaul became necessary as a result of a crack-up during an unplanned vertical landing in the middle of a highway near Sterling Park which splashed the entire nose section from the wing forward all over the highway. The motorists kindly pulled off the road to avoid hitting the plane.

Model planes have been his hobby since Tony was 8 years old. In the last few years his interest has been concentrated on radio control types and currently he has five planes under construction.

The Beachcomber has a wing span of 64-1/2 inches and weighs 6-1/2 pounds. It is a radio controlled model with a range of approximately five miles. It has all normal flying altitude controls: elevator, rudder, ailerons, motor, trim and brakes. The construction time was around two hundred hours. The plane is made of balsa wood, 1/16th inch plywood and the entire model is covered with silk finished with 15 coats of butyrate dope. The flying time on eight ounces of fuel is fifteen minutes. It has a 2/3 HP motor and a twelve-inch propeller.

Tony shares his hobby with his two little girls, ages four and six who are already displaying an interest in daddy's planes.

Tony's assignments as a Senior Technical Illustrator at Melpar, includes the design and construction of scale models of actual engineering concepts. He has built many models including U. S. Army jeeps (for which he won 1st place at the National Association of Industrial Arts in 1965), the Apollo Spacecraft Simulator, and a mock-up of a gas chromatograph.

## ANNUAL AWARDS



J. Pierce Chambers, Vice President and Acting General Manager addresses guests at the 1966 Melpar Annual Awards Dinner.



K. C. Streeter (right), Chairman of the Publications Committee, presents the award for the winning Publication of the Year to B. D. Smith.



C. B. Raybuck (second from left), Chairman of the Patent Committee, presents a joint award to (left to right), J. R. Toler, S. H. Cotton, and F. E. Papin for their award winning invention, "Digital Helicopter Trainer."



# ARDS DINNER

## TWENTY RECEIVE SERVICE PINS

The Service Pin Award Luncheon was held in the cafeteria on February 16th for twenty employees who received ten, fifteen and twenty year service pins. Fifteen employees who received their ten year pins are pictured below. Cloyd Ratcliff of Field Service was not present for the picture.



A. M. Ross (right), Chairman of the Value Improvement Committee, congratulates H. R. Evans, Jr., upon winning the 1966 Value Improvement of the Year award.



Vivian H. Sweeney



Thomas J. Terry



Viola G. Everett



Isabel T. Alligood



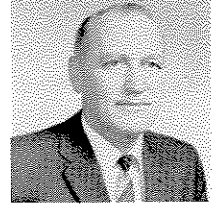
William A. Meyer



Alfred M. Ross, Jr.



Jesse M. Hadley, Jr.



Conrad H. Reifel



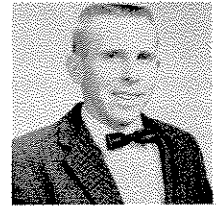
Margaret T. Muth



John T. Chandler



Charles Evanto



Watkins W. Elliott



Gerald G. Thorne



Thomas L. Alnutt



Ronald O. Saunders

## ANNUAL AWARDS

*Continued from Page 1*

stalling Metal Framed Portable Walls".

**F. L. Hickish**, "Reduced Quantity of Loctite Sealant Procured".

**D. Hinchey**, "Reduced Volume of Test Equipment Calibrated by the Metrology Lab".

**L. C. Abel**, "Reduced Machining Time in Making Templates".

**F. E. Olzewski**, "Simplified Testing of Semiconductors".

### PUBLICATION OF THE YEAR

**L. J. Blumenthal**, "A Management Rationale for Reliability".

**V. J. DeCarlo**, "Vacuum Ultraviolet Photochemistry, VIII. Photolysis of Hydrazine at 1236 Å and 1470 Å".

**J. C. Kim & E. P. Kaiser**, "Degradation Analysis of Digitized Signal Transmission".

**F. V. Mink & N. Fuschillo**, "Flexible 2000° F Insulated Power Conductors for Space and Terrestrial Applications".

**B. D. Smith**, "Simulation of Rapid Mass Transportation Systems".

### INVENTION OF THE YEAR

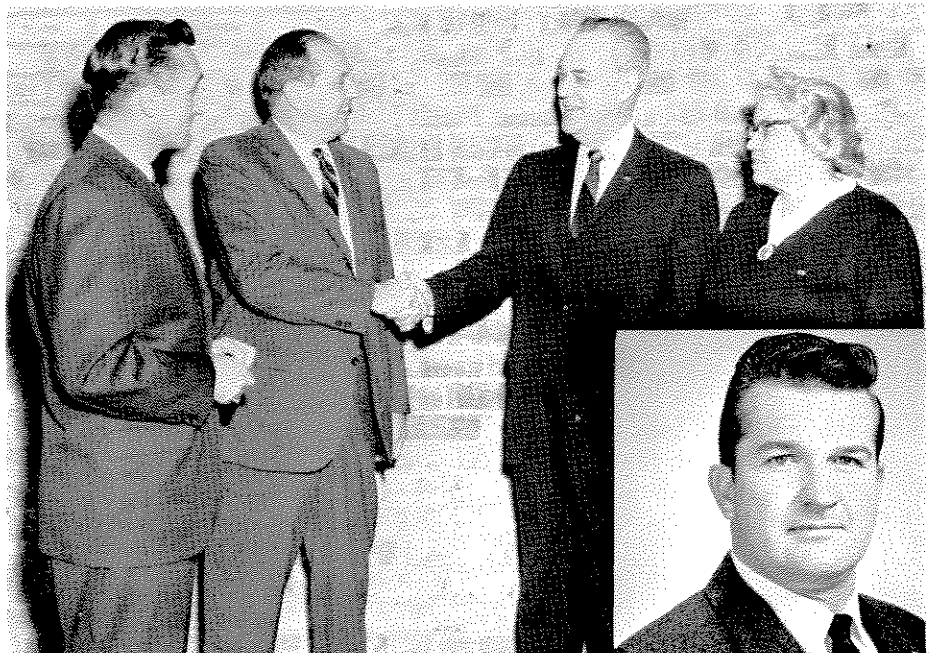
**F. A. Behrens**, "Rapidly Starting Oscillator".

**E. M. Connelly**, "Integrated Circuit Statistical Switch".

**M. A. Mitz & G. C. Blanchard**, "Process for Detection of Viable Microorganisms".

**F. E. Papin, J. R. Toler & S. H. Cotton**, "Digital Helicopter Trainer".

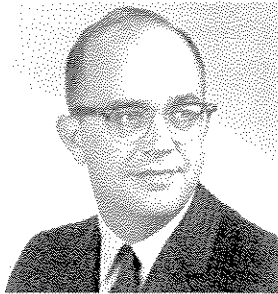
**M. Schuman**, "Invention X (Classified)".



Ethel Case (right) and M. L. Houck (left) who received fifteen year service pins, look on as Vice-President and Acting General Manager J. Pierce Chambers congratulates S. M. Sjosten who received his twenty year service pin. R. W. Wright also received his fifteen year service pin but was absent when the picture was taken (see photo inset).

## Knapp Joins Melpar as Director Of Contract Services

Mr. John F. Knapp has been appointed Director of Contract Services reporting to Stuart L. Dance, Vice President for Marketing. Mr. Knapp will be responsible for Contract Administration, Proposal Preparation and Pricing, and Contract Claims.



Mr. J. F. Knapp

Mr. Knapp, a graduate of Dartmouth College, was formerly assistant secretary and manager of contracts for HRB-Singer. He has extensive experience with government contracts, negotiations, and proposal preparation. The Knapp's, John, his wife Mary-louise, and three children, Lucy 14, Molly 12 and John, Jr., 9, plan to reside in the Northern Virginia area.

## VIRGINIA CHAMBER OF COMMERCE APPOINTS DR. T. L. WOOD REGIONAL CHAIRMAN

Personnel Director T. L. Wood is serving as Regional Chairman for the Northern Virginia area of the 1966-67 Management Relations Committee of the Virginia State Chamber of Commerce. Dr. Wood has been a member of this committee for the past three years.

The committee sponsors one of the largest adult education programs in Virginia. Under this program, management training courses are conducted over a statewide television network for private industry.

Since the spring of 1964 when the program was introduced, 11,000 supervisory personnel throughout Virginia have been enrolled in four courses. A fifth course will be starting April 4, 1967 on "Developing Communication Skills". It will be offered twice each week for eight weeks in the Falls Church plant. Student nominees will be named by cognizant operations heads from our management group.

Forty-two Melpar supervisors and

## GOING UP!

Congratulations to the following personnel who received January promotions:

Viola Everett to Staff Secretary A, Joy F. Blevins to Executive Secretary, J. W. Martin to Research Assistant, J. E. Ireland to Supervisor, Shipping and Transportation.

Three new Lab Managers were named: H. Hahn, O. T. Inge, and J. C. Mould.

F. J. Knerr advanced to Planning Supervisor, J. Trops to Senior Illustrator, J. L. Buckler to Methods Engineer, and R. L. Hawkins to Senior Electrical Engineer.

R. G. Smith moved up to Field Buyer Expediter, C. W. Sisk to Engineering Support Supervisor, C. H. Nelson to Senior Electrical Engineer, R. W. Presgraves to Research Assistant and E. Pulsifer to Supervisor of Project Staff.

## Perfect Attendance Record

Announcement has been made of a group of permanent, full time personnel who have achieved a **perfect attendance** record, with **no absences or latenesses** for the entire calendar year of 1966. They have received commendation from their supervisors for their devotion to their job and their dependability. Those who achieved this enviable record are listed below:

**ENGINEERING:** T. A. Smirolido, H. A. Campbell.

**MARKETING:** J. T. Chandler, F. J. Drummond, P. A. Thompson, W. O. Clifford

**RESEARCH:** J. L. Alston, K. W. Benson, H. Blackburn, Jr., M. G. Gasser, F. D. League, H. D. Moyer, R. I. Smith, W. J. Tierney, Jr.

**OPERATIONS:** J. R. Barrick, G. N. Hanback, C. O. Renalds, H. C. Watkins, Jr., H. F. Burchell, Jr., J. E. Bledsoe, W. H. Ingram, R. J. Moneyhon, J. V. Musala, A. Parrott, C. H. Schmitt, J. A. Walton, M. V. Auman, H. A. Johnson, E. L. Daacke, C. N. Wimmer, G. H. Zuck.

Congratulations on a proud record to each of you.

managers have completed one or more of the four TV courses offered to date in this Management Training series.

## WABCO Announces Record '66 Sales

Westinghouse Air Brake Company (WABCO) has announced that 1966 sales totaled a record \$309,569,000 a gain of 12.9% over the \$274,300,000 reported for 1965. Earnings for 1966 totaled \$16,803,000, up 11.4% over the \$15,081,000 recorded in 1965. Earnings per share were \$3.74 in 1966, as compared with \$3.38 in the previous year. Consolidated income before taxes for 1966 was \$27,033,000 as compared with \$23,226,000 in 1965.

With the year ended December 31, 1966, WABCO has reported increases in sales and earnings for five consecutive years. For the five years, the increase in sales averaged 16.4% per year and the increase in earnings averaged 20.5% per year.

Mr. A. King McCord, Chairman of WABCO, stated that sales of construction and mining and railroad equipment increased 12.3% and 16.5% respectively and that there were good gains in sales to other commercial markets.

As for the current year, Mr. McCord noted more than the usual uncertainties and the uniquely disadvantageous impact that suspension of the 7% Investment Tax Credit has on railway equipment suppliers, but stated that with a marked improvement expected in operations at Melpar, a beginning backlog equal to 41% of 1966 sales, and good prospects for sales abroad, it seems reasonable to expect that earnings in 1967 will equal earnings recorded in 1966 and there is a good chance to continue, or even exceed, recent gains.

## Engineering Society Elects Ralph I. Cole President

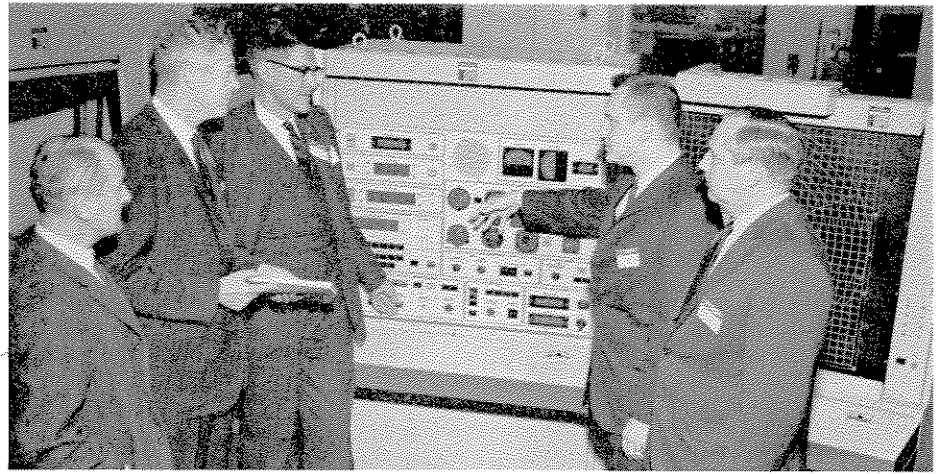
Ralph I. Cole of Engineering Services has been elected President of the Washington Society of Engineers, the oldest engineering society in the eastern United States. The purpose of the society is the advancement of engineering on a broad front through presentation of programs of interest to all engineering disciplines.

Mr. Cole joined Melpar in July 1952. He received his B. S. degree in Electrical Engineering from Washington University and his M. S. degree in Physics from Rutgers University. He is a licensed Professional Engineer in the Commonwealth of Virginia.

## JAMES P. PARDEN HEADS DAYTON ENGINEERING SERVICES OFFICE

The appointment of James P. Parden as manager of the Dayton, Ohio, Engineering Services Field Office, has been announced by S. L. Dance, Vice President for Marketing.

Mr. Parden joins Melpar following a three-year association with the Radio Division of Bendix Corporation where he served as manager of the Dayton field office. Earlier he served as regional manager for Hoffman Electronics, also headquartered in Dayton. Mr. Parden is a graduate of South Dakota School of Mines and has also taken graduate courses at Xavier University in Cincinnati.



Dr. Russell D. O'Neal, second from left, Assistant Secretary of the Army for Research & Development, listens as S. H. Cotton, Manager of the Simulation and Training Department explains the operation of an instructor station utilized with Device 2B18, which is a simulator for the UH1-E helicopter. This unit is system #5, due to be delivered shortly.

The Assistant Secretary was accompanied on his visit to the Falls Church plant by his deputy, Charles L. Poor, third from left, and military assistant, Col. Michael J. Strok. At right is J. Pierce Chambers, Vice President and Acting General Manager.

## SUPERVISOR'S FORUM

### Profit of 14 Large Stores "Wiped Out"

The following article was rewritten from an article in the National Safety Council's Safety Newsletter, Trades and Services Section for November 1966.

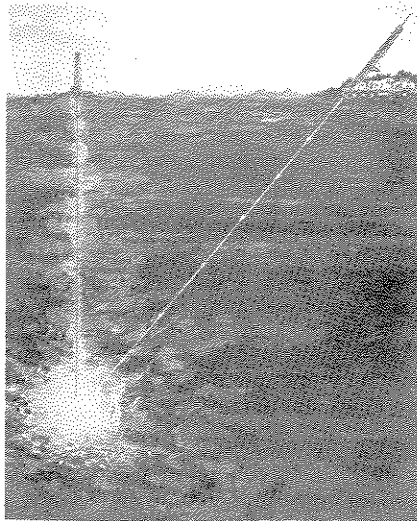
The insurance manager for one of the country's largest mail order-department store chains reports that "employees of 14 stores with annual sales of \$5 million each, worked all of 1965 to produce the profit needed to pay for last year's accidents to employees and customers."

It is difficult to realize that sales of \$71,500,000 were required to meet the expense of claims and workmen's compensation insurance, and harder yet to realize that the indirect or uninsured costs might well wipe out another \$71 million. All employees of this company were affected because company progress and individual opportunity are directly related to profit.

What were the causes of these accidents? Mostly little things: obstructions in aisles and stairs, falls due to not using ladders and other specially designed equipment, failure to use materials handling equipment, careless driving, and the violation of smoking rules.

Melpar has a good record of controlling losses due to accidents but there is still room for improvement. Are there uncorrected hazards in your work area? Report them to your supervisor or call the Melpar Safety Office on 2182.

W. F. Vivori, Ext. 2550 Engineering  
W. J. Watson, Ext. 2142, Research  
J. F. Whiteley, Ext. 2244, Marketing



**WABCO DRILLING DIVISION DEVELOPS NEW DRILLING RIG CONCEPT FOR THE ATOMIC ENERGY COMMISSION** An engineering study resulting in a new concept for a drilling rig to provide quick and safe post-shot data in underground nuclear tests has been delivered to the United States Atomic Energy Commission (AEC) by Westinghouse Air Brake Company (WABCO).

The plan calls for a mobile slant-hole rig (illustrated, upper right) that can drill directly toward the site of an underground test and recover core samples soon after the detonation. The direct-drilling concept was developed by WABCO's Drilling Division (the former George E. Failing Company of Enid, Oklahoma), under an AEC contract.

The slant-drilling rig allows the crew to "set up" away from the emplacement shaft and to begin sinking a hole on angles up to 45 degrees—aimed directly to the emplacement point. Drilling is stopped prior to the detonation, but is resumed soon thereafter to reach the test area in the shortest possible time. Principal innovations of the new design are (1) mechanical devices for handling drill pipe, casing and drilling tools during drilling; and (2) a system to overcome gravitational forces which normally complicate tool handling.

It is anticipated that a prototype rig will be tested in the near future at the Atomic Energy Commission's Nevada test site.

## Cost Reductions

*Continued from Page 1*

### PERSONNEL

S. E. Bush T. L. Wood

### OPERATIONS

H. R. Evans J. L. Bell  
R. G. Zelloe (2) D. H. Campbell  
G. W. Pierce D. H. Ogelsby  
W. R. Acord J. W. Miller  
H. Fox H. L. Phillips  
P. J. Krakes R. Burke

### RESEARCH

Dr. F. Ordway J. H. Carpenter

### MARKETING

F. Geesey J. T. Chandler

### ENGINEERING

W. Vivori (3) C. G. Kaster

If your name is not included in the above list, submit your ideas now to our Cost Reduction Administrator. Remember that a copy of the memo you receive for each accepted suggestion or report of savings is filed in your personnel jacket to be attached to your next merit review.

If you have any questions or need assistance in submitting your ideas on a VIP form, don't hesitate to contact your supervisor or your organizational representative on the Central Cost Reduction Committee:

L. M. Barrick, Ext. 2609, Finance  
S. J. De Ianni, Ext. 2248, Rel. & QA  
A. B. DePasquale, Ext. 2450, Personnel  
A. M. Ross, Ext. 2707, Operations