

# MELPAR-A-GRAPH

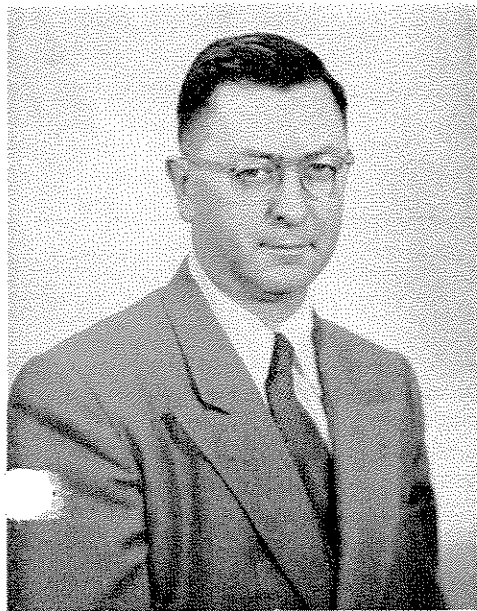
MELPAR, INC. • A SUBSIDIARY OF WESTINGHOUSE AIR BRAKE CO.

Volume 1, Number 4

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## HUNDREDS EARN PAY INCREASES

### CAMP TO VISIT TURKISH ARMY IN OPERATIONS RESEARCH TOUR



Dr. Glen D. Camp

Aid and counsel in the field of Operations Research will be given the General Staff of the Turkish Army by Dr. Glen D. Camp, Consultant to the President, during an extended visit to Ankara, the capital of Turkey.

Nationally recognized for his work in the intricate technology of Operations Research, Dr. Camp was sought out by the North Atlantic Treaty Organization to join a group of scientists from NATO countries in briefing Turkish military authorities on current techniques in logistical programming. In addition to his work with Melpar, he previously served in the office of the Chief of Naval Operations, and has lectured extensively on many aspects of this field.

Dr. Camp's services were made available by the Company to NATO at the request of the U.S. Air Force. He will leave for Turkey via MATS on March 2, stopping briefly in Paris for preliminary discussions with other scientists engaged in the mission.

### STORM WARNING EQUIPMENT IS SHIPPED BY WATERTOWN

Expected to be of major aid in warning of the onslaught of tornadoes, a Severe Storm Indicator developed by Melpar-Watertown is now enroute to Tinker Air Force Base in Oklahoma.

Though even the black boxes of electronics have not yet answered Mark Twain's plea to "do something" about the weather, this complex, 4,000-pound radar set will be used to locate storm areas and position and track particular disturbances; a sferics counting device, in addition, will count the number of disturbances in an area.

Extensive field tests of the equipment will be conducted at the Oklahoma base during the spring months when the frequency and severity of tornadoes and other violent weather manifestations are at their height.

Designed and developed under a contract with the Air Force Cambridge Research Center, the Severe Storm Indicator is assigned at Watertown to Project Engineer Philip Vaccaro.

### A4D SIMULATION IS DISCUSSION TOPIC

The degree and extent of simulation achieved by each phase of the A4D Skyhawk aircraft simulator being developed and built for the U.S. Navy by Melpar was described at a Systems Simulation Conference conducted at the Falls Church plant during February.

Attended by representatives of Douglas Aircraft Co., Special Devices Center, Bureau of Aeronautics, the Naval Aviation Safety Council, and Patuxent River Naval Air Station, the conference was presided over by Project Engineer K. C. Streeter.

All the ranking engineers of the Simulator Section, each covering that phase of the program for which he is responsible, addressed the meeting. During a later group discussion, aspects of interest to particular visitors were further explored.

### *National Wage Survey Is Basis of Merit Review*

Hundreds of Melpar people in many engineering, production, and service classifications will soon receive substantial wage and salary increases as the result of a special merit review now in progress.

As is the Company's standard practice, supervisors will inform their people of the merit review results the moment their evaluations and recommendations have received executive approval. It is expected that the bulk of the announcements will be made before the end of March.

An extensive survey of both national and local job contents and wage structures, conducted by the Personnel Department, was the basis of the rate revisions. The Company's work-schedules, which remain in effect, were not a factor in the survey. Commenting on the move, Executive Vice-President and General Manager E. M. Bostick said, "the increases now being put into effect are, of course, part of Melpar's continuing effort to make certain that our pay scales are fair and equitable while consistent with the maintenance of our competitive position."

"Over the next few months, we plan to further evaluate our wage and salary structure in all categories and to make additional adjustments wherever warranted."

In the course of its survey, the Company participated in a study of wage policies in the Middle Atlantic States sponsored by the Bureau of Labor Statistics. In addition, data gathered by the Department of Defense, covering production-job rates in the metropolitan Washington area, and an exchange of wage scale information with a number of other companies in the electronics industry were used to establish the new rates. The Personnel Department plans to continue fact-finding work of this nature in the future.

## OPINION

The story is told of a London law clerk, aged 70, called to the office of the sole surviving partner, aged 85. Informed that the ancient firm was to be dissolved and that he was now to be pensioned, the clerk indignantly cried, "but Mr. Fortescue, when you hired me fifty-two years ago, you told me the job was permanent!" Mr. Fortescue was a bold man, to have forecast the future in such positive terms.

In all reason, we of Melpar know we cannot foretell the future. Mr. Fortescue is not presently with us. But because we are a soundly functioning organization, we carry a built-in insurance policy against the risks of the future.

Our Engineering Services group—10 men strong—travels the country over, searching out potential customers. Our engineers are continuously reviewing the nation's military and industrial needs for electronic equipment in the light of a constantly changing "state of the art". Capital funds are being invested regularly to expand and up-grade our physical ability

to take on newer and larger projects. Simultaneously, many hundreds of us are daily engaged in carrying out another broad assignment—producing the goods of the trade in the required volume, of the required quality, and within the time allowed.

Customers are simply people who want work done. And before they entrust it to any company, they look for better references than buildings and tools and pieces of paper. In Melpar's history is the evidence, plain for all to see, of a proven past and a stable present.

We are many people, of diverse talents, grouped in areas of endeavor as our experience has dictated. We have a decent respect for each other's assigned task and a mutual confidence that every task will be done to the best of our collective ability.

No matter what other factors influence his judgment, no customer will ever shrug off that reference. Nor will he ever cease to demand it!

## Color Movie of Automatic Assembly Made at Melpar

A motion picture in full color, and featuring slow motion treatment of high speed operations performed by Mini-Mech, the automatic assembly machine being developed by Project Engineer A. A. Lawson's group at Falls Church, was exhibited by the February symposium on automation held by the AFCEA in Washington.

The movie, made by Melpar photographers R. K. Sakamoto and G. V. Hecht, was praised by many of the symposium audience for its technical excellence and imaginative treatment. A running commentary accompanying the film was given by Mr. Lawson and Senior Engineer H. K. Hazel.

### CORRECTION

A person associated with the MELPAR-a-graph in a minor capacity omitted a small but important digit in the caption accompanying the Test Equipment picture on page 2 of the February issue. Instead of "... \$300,000 investment ..." it should have read "... \$1,300,000 investment ..."

With time off for good behavior, the culprit will be released from solitary confinement in 1957.

## Corner Honored at Farewell Luncheon

Company executives, department heads, and his close associates in Arlington Division bade farewell to former Arlington Division Manager A. N. Corner at a luncheon given in his honor on February 23.

Mr. Corner announced his imminent departure for Cambridge, Mass., where he has been appointed to an executive position with Electronics Corporation of America. During four years service with Melpar, Mr. Corner played a vital role in the Company's highly successful first venture in the flight simulator field before turning to the task of producing the MSQ-1A radar system in volume.

## TECHNICAL SEMINAR FEATURES WOOTEN ON SIMULATOR DESIGN

Another in the series of internal technical seminars conducted by Melpar engineers at the Falls Church plant will be held today, February 29. Project Engineer A. D. Wooten of the Simulation Section will describe and demonstrate "D-C Analog Computation", with particular emphasis on its use in flight simulator design.

Designed to further the professional development of engineering personnel, the seminar topics are chosen with the aim of effecting an orderly interchange of information on work in progress. Engineering Section Heads have been requested to invite to particular seminars, those of their groups to whom the subject matter is immediately or potentially relevant.

Recent seminars have been entitled "A Summary of the Antenna Section Activity" by K. S. Kelleher, "Cooling of Airborne Electronic Equipment" by H. H. Thompson and J. A. Hohos, and "An Unusual Electronic Analog-Digital Conversion Method" by B. D. Smith.

## FALLS CHURCH WORK PRINTED

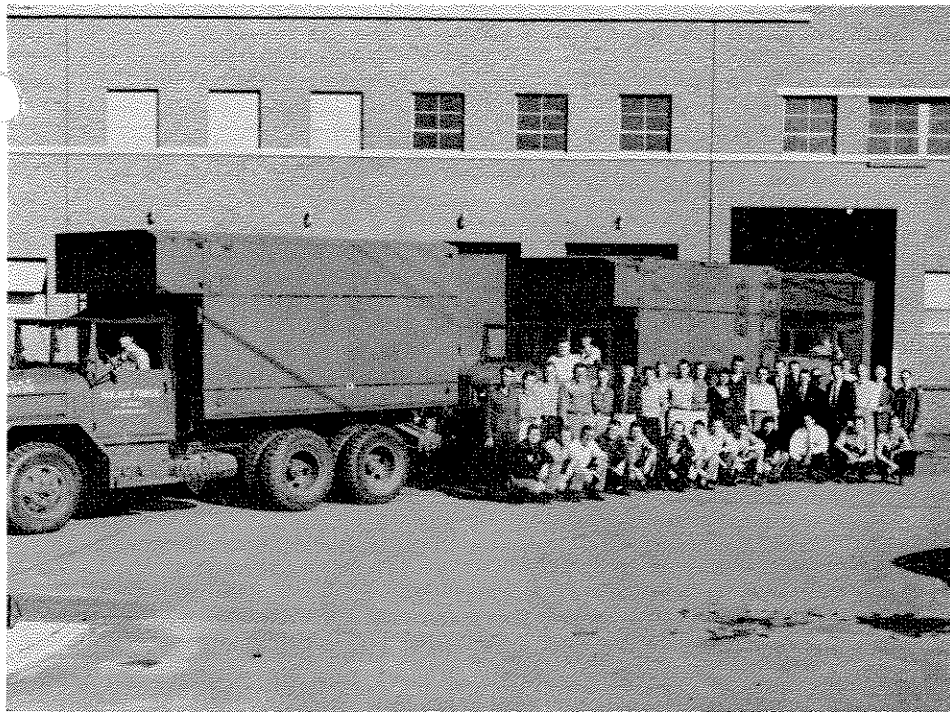
The February issue of The Proceedings of the IRE, widely circulated technical journal, contains an article written by three Melpar engineers. "Artificial Dielectrics Utilizing Cylindrical and Spherical Voids", the article is signed by H. T. Ward, W. O. Puro, and D. M. Bowie, all of Falls Church.



**NO DOUBT** about it now . . . Bold ceramic red lettering within a 9-foot diameter circle of polished aluminum identifies the Company's Falls Church laboratory. Contractor's men are seen preparing to install the balance of the sign, reading **SUBSIDIARY OF WESTINGHOUSE AIR BRAKE COMPANY** in 18-inch high aluminum block letters extending the full length of the upper level wall.

## THE HIGH COST OF WORKING

It requires an equipment investment of approximately \$2500 to fit-out the necessary laboratory bench space to put a Melpar engineer "in business" on a development project of normal complexity.



**JUST THE BEGINNING . . .** and carefully escorted by a contingent from Arlington Division's Final Assembly Department, the first MSQ-1A radar system heads for the highway en route to its Air Force base destination. Full details of the huge production program are printed in this issue of the **MELPAR-a-graph** for the first time, following removal of security restrictions.

## DETAILS OF \$25,000,000 RADAR JOB CAN BE TOLD

With the lifting of security restrictions on all but certain technical aspects of the MSQ-1A program, it now is possible to reveal details of the largest single project ever engaged in by Melpar.

Valued in excess of \$25,000,000, Melpar's part of the effort entails the construction of a large number of Close Support Ground Radar Systems. Employed in ground guidance and tracking of aircraft, the equipments qualify both as a means of defense and as a field testing mechanism for the valuation of airborne instruments.

Housed in three trucks, seen in the accompanying photograph, each MSQ-1A system tots up a gross weight of 35 tons. All three trucks are fully air-conditioned, and in each, humidity and temperature are closely controlled. The power required for operations is drawn from a pair of 30 KW generators. An unusual feature of the design involves the packaging of the system components in a manner permitting their removal from the truck bodies for air transport.

First engaged in the program as a sub-contractor to Reeves Instrument Corp. of

New York, designers of the system, Melpar now is a prime contractor for Rome Air Force Depot as well. Illustrative of the magnitude of the task are these numbers: more than 300 production people of all types have thus far expended 441,000 man-hours on the program; in the course of manufacture and assembly alone, an additional 1,340,000 man-hours will be required.

The MSQ-1A is virtually the exclusive tenant of the Company's 125,000-foot leaseholding in Arlington County, while its flight test facility is spread over a two-acre location in Fairfax County.

Mindful of the Department of Defense policy designed to encourage the use of small business in major procurements, the Company has called upon a total of 280 sub-contractors located in 24 states from coast to coast to participate. Our sub-contractors have supplied equipment pods, computers, cabinets, servo-mechanisms, gear trains, consoles, antennas, and many other items both large and small. In all, nearly \$9,000,000 worth of sub-contracts have been or will be placed for the program.

## PATENT AWARDS GO TO MELPAR MEN

Patents recently were awarded to two Melpar men—Project Engineer A. A. Lawson and Dr. Glen D. Camp, Consultant to the President.

Mr. Lawson's invention, covered under patent number 2,726,889, involves a mechanical latch valuable in the construction of consoles and cabinets for military applications.

Dr. Camp's invention of a circuit increasing the quality of signal discrimination attainable in pulse radar systems is protected by patent number 2,726,386. In accordance with standard industry practice, both patents have been assigned to Melpar, Inc.

## R. I. COLE CHAIRMAN AT ATOMIC SESSION

The oncoming atomic age and the extraordinary demands it will make upon science and scientists was the theme of a symposium held recently to celebrate Engineers and Architects Day in Washington, D. C. With Ralph I. Cole of Engineering Services, Falls Church, serving as general chairman of the Executive Board, the sponsoring groups welcomed over 600 guests to the event.

Chief speakers were Willard F. Libby, Commissioner, Atomic Energy Commission; John Hilliard, Deputy Assistant Director for Manpower, ODM; S. S. Steinberg, Dean of the College of Engineering at University of Maryland; and G. J. Comstock, Vice President of the Easton Metal Powder Company.

The symposium was sponsored by The D. C. Council of Engineering and Architectural Societies, The Washington Academy of Sciences, and the Washington Section of IRE.

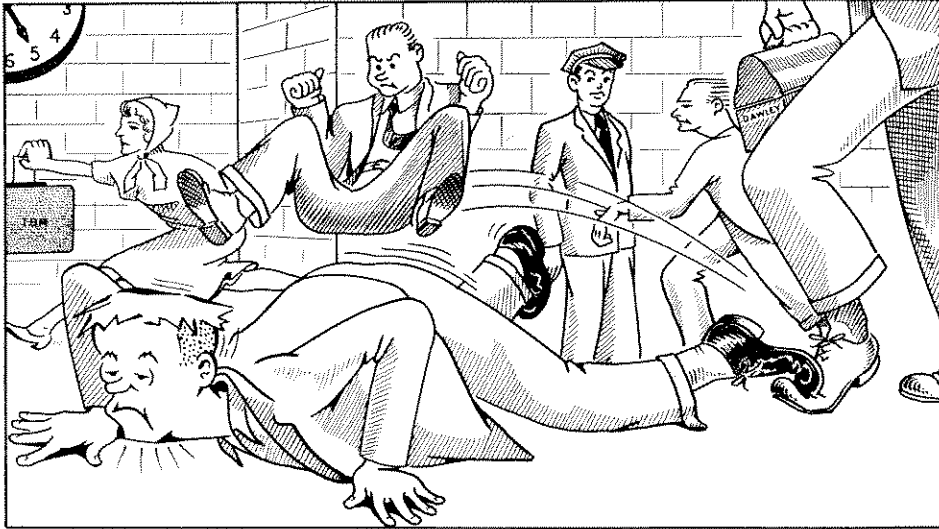
## VECTOR ANALYSIS COURSE IS NEW IN COLLEGE STUDY PLAN

With the recent opening of a course in Vector Analysis, a total of 76 Melpar people have been enrolled in off-campus college level courses being conducted by George Washington University instructors at the Falls Church Plant.

The Personnel Department is continuing to record applications for additional courses to be inaugurated when enrollment meets the University's requirement.



Mr. Murgatroyd Misfit



Murgatroyd got there first—to the hospital, that is.

### SUPERVISION NAMED AT WATERTOWN

Watertown Plant Manager A. A. Abate has announced the assignment of various supervisory duties in that plant. In the Mechanical Engineering section, J. J. Staller and F. G. Usseglio now report directly to Assistant Chief Engineer Herbert Kurth in leading mechanical design activities.

J. H. Breen, J. D. D'Angeli, and R. G. Yetman will serve as Drafting Department group leaders, reporting to H. S. Shapiro, Chief Draftsman. In the Model Shop, Gennaro Moscaritolo, L. J. Pouliot, and F. J. Rastellini now report as group leaders to Supervisor F. W. Hodgkins.

### MELPAR PEOPLE HAVE PERFECT SCORE IN 1955 X-RAY TESTS

Not one active tubercular case was discovered among the 1,082 Melpar people who accepted the chest X-Ray service offered in 1955 by Fairfax and Arlington Counties. This heartening result recently was reported to the Company's Medical Department by health authorities of both counties.

The Medical Department's past records further reveal that since 1951, when the service first was made available to Melpar people, a total of 1,754 chest X-Rays have been made among Company personnel and that only one person has been shown requiring medical care for tuberculosis.

The Company plans to participate in the X-Ray program again in 1956, and will arrange visits of the mobile units to Falls Church and Arlington for the purpose.

## GOING UP!



Clemens H. Schmitt

Clemens H. Schmitt has been appointed Engineering Machine Shop Foreman at Falls Church. Mr. Schmitt joined the Company in May, 1951 as a machinist and was promoted to Instrument Maker in May, 1952. He succeeds John W. Bivins, who had served with Melpar since September, 1947. Mr. Bivins has joined the American Safety Razor Company in Staunton, Va. and will supervise the construction and maintenance of its molds, tools, and dies.

Three promotions took effect in the Quality Control Department. F. L. Carau rose to Supervisor in charge of the De-

partment's Test Equipment and Falls Church Engineering Test activities. L. E. Evans and N. M. Seese were named Assistant Supervisors, reporting to Mr. Carau. The repair and calibration of test equipment is assigned to Mr. Evans; Mr. Seese supervises Falls Church engineering test work, except Convair.

At Melpar-Watertown, J. S. Golab has advanced to Senior Engineer. Also at Watertown, C. A. Sellon rose to Engineer, while A. J. Meade became a Mechanical Engineer and G. W. Ruggiero advanced to Design Engineer. P. J. Hurley and J. L. Bulfer were promoted there to Junior Draftsman, and N. C. Joyce moved up to Secretary. Raised to Senior Technician were L. J. Pouliot, Gennaro Moscaritolo, and F. J. Rastellini.

C. K. Balderson became night shift Lead Man in the Sheet Metal Shop of Arlington Division. E. B. Emshwiller and R. J. Kozlik are new Task Leaders in Assembly.

In Falls Church, R. L. Kuchera, J. J. Knoblock, W. M. Cleary, and Larry Turf advanced to Engineer. E. C. Cheadle was promoted to Senior Engineer. A. E. Baker moved up to Senior Procurement Planner, and W. F. Moore became Senior Planner.

M. F. Dunham has risen to Senior Spares Planner at Arlington. Also at Arlington, J. M. Stancill is now a Procurement Planner, while C. W. Sisk became a Spares Planner.

Other Quality Control Department promotions occurred at Arlington. J. Z. Bell was raised to Junior Test Engineer. L. M. Sheeskin advanced to Junior Engineer. R. L. Gross and William Armentrout were named Task Leaders in the Electro-Mechanical Inspection section.

Two new Group Leaders, L. S. Carter and H. W. Johnson, have been named in the Engineering Machine Shop at Falls Church. M. F. Famiglietti was promoted there to Senior Draftsman, while K. B. Bramble rose to Draftsman Checker.

In Arlington's machine shop, J. B. Lockwood has moved up to Machinist B. In the Sub-Assembly Department, H. P. Treakle was promoted to Junior Methods Engineer.

C. D. Breeden was promoted to Secretary at Falls Church. In the Technical Writing Department, R. W. Thorp advanced to Senior Technical Illustrator and D. M. Cox was promoted to Vari-Type Operator.