

MELPAR-A-GRAPH

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

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May, 1957

RAYBUCK IN MAJOR MOVE TO IMPROVE TECHNICAL LINKS

The assignment of Vice President for Research and Engineering C. B. Raybuck to duties involving inter-plant coordination among the Company's research and development activities was announced during April by E. M. Bostick, Executive Vice President and General Manager.

Vice President Raybuck's assignment is a move of major importance in adapting the Company's managerial techniques to its increasingly varied and widespread structure. Confronted with professional personnel and facilities geographically dispersed and engaged in many different technical areas, Mr. Raybuck is charged with the key responsibility of assigning proposed new work so as to focus our best available resources—material and man—upon it.

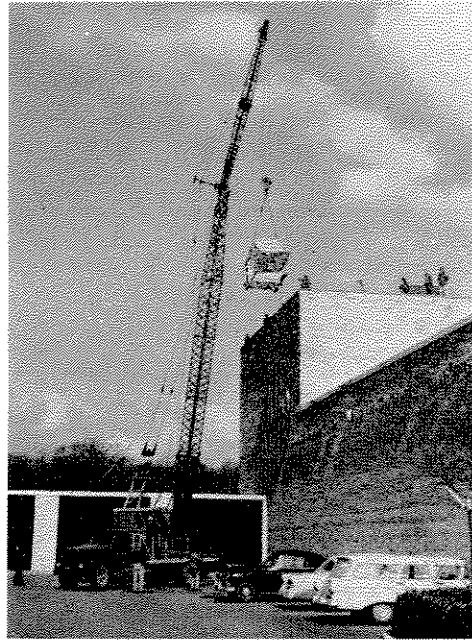
Aiming to exploit the Company's increasing breadth in the major phases of technology—its advanced research capability, its heavy engineering capacity, and its expanding production potential—Mr. Raybuck will monitor the handing on of work from one phase to the next, a treatment deemed essential in our forward planning.

He will give major attention also to the evaluation of new trends in research and development as they affect our corporate progress, so as to keep the Company staffed and equipped to enter new fields of interest wherever they may appear.

THAT LIST!

Vacation schedules must (I Say Again, Must) be returned to the Personnel Department no later than May 10th. Each of the departmental schedules must be approved by the responsible Department Head.

In preparing their vacation lists, the supervisors concerned are particularly requested to see that employees eligible for less than ten days vacation are scheduled after July 15.



IT'S NOT HOT . . . but it's heavy. Riggers are swinging a heavy duty weldment positioner into place at Falls Church. With a 2-speed servo drive added, it serves as an antenna mount capable of rotating a 16,000-pound burden. **Photo by Lyle Tatroe**

MELPAR MEN DELIVER CAREER NIGHT TALKS

For the third successive year, Melpar has participated in the Career Nights sponsored throughout the Washington area by various industrial and civic groups. Career Night brings representatives of a wide variety of occupations to describe their work to the student body and to answer questions evoked by it.

Melpar employees, chosen to represent the engineering profession and the electronics industry, have discussed preparation for an engineering career, the qualifications necessary for it, and its value.

In carrying out the 1957 program, Dr. T. L. Wood, of Personnel, participated in Career Night at Washington-Lee High School; Senior Engineer E. C. Cheadle visited Annandale High School; Section Head E. H. Bradley was programmed at The George Washington University and at George Mason High School; and W. C. Schaub, Employment Manager, addressed the Career Night jointly sponsored by eight high schools of Washington, D. C.

1st QUARTER PACE OF NEW BUSINESS SETS HIGH LEVEL

The operating results posted by Melpar during the first quarter of 1957, measured by any standard, afford solid confirmation of the Company's continued growth. Sales totalling \$13,231,784 were recorded during the quarter, and this record level of performance was accompanied by new business bookings amounting to \$13,597,976.

The immediate significance of the new business figure—its support of the Company's high rate of activity—is obvious. A look behind the number, at the volume and diversity of work it represents, yields an equally significant conclusion in that it reveals a steadily broadening base of operations.

In recent months our participation in the B-58 Hustler program has entered a new phase calling for an increased output of equipment. We have been commissioned to develop a number of electronic countermeasures devices, a meteorological unit, and beacons of advanced design for use in missiles; developmental work in the acoustics field, missile ordnance, and terminal equipment are other entries.

In production, while MSQ-1A radar systems continue to move through assembly and field test, a growing number of different items are being added to Arlington Division's commitments. Now in its planning and procurement stage is a major program of flight simulator construction. We are, or soon will be, producing in quantity such equipments as radar beacons, microwave components, a wide variety of antennas, countermeasures instruments, and miscellaneous ordnance items.

Other indications of the Company's accelerating pace abound. Since the beginning of the year, 535 new people have joined us; perhaps a milestone in employment should here be recorded—on Monday, April 22, our 3000th employee came aboard. In fact, before that day was ended 43 persons had reported for work to peg our total roster at 3040.

OPINION

There will be a slight delay before men wearing inverted fishbowls and rabbit ear antennas on their heads become a familiar sight on city streets. The time for sending letters to Hong Kong or Reykjavik stamped Via Rocket Mail is not quite yet.

Problems remain to be solved before anybody attains the ability to spray guided missiles around the landscape with the ease of an Annie Oakley indulging in target practice. A day or so must pass before this country and its allies can jauntily gesture at a bank of ultimate weapons and take them as a license to go fishin'.

Meanwhile the sometimes exciting, often prosaic, work of fitting the little we know now of matter and its uses to the objective currently before us—survival—has to continue. While we fashion thunderbolts of Homeric titling, we must also devise a more authoritative jamming transmitter, a more responsive relay, a better solder joint.

Plotting the course of a research and development effort often takes on the quality of touring through a Chinese maze. The likeliest way and the unlikeliest way can get all mixed up. A week's reading of the newspapers and popular magazines

will reveal that this generates confusion in the public mind and, often, the impatient reaction: 'why don't they just go ahead and invent an all-purpose revolving widget and stop squandering money'.

We'd like to. We'd like to exercise foreknowledge of the exact degree of success, and the true worth, of every line of inquiry in progress or contemplated and thus be able to say 'this and no other is the one best way'.

How neatly, then, could we schedule our national scientific and engineering effort—each organization, each program, each man placed like operations in a machine sequence.

But that can never be; the information at hand is too scanty and men are too fallible. For some strange reason, the human being refuses to be so conveniently type-cast. That's probably maddening to planned society straw bosses—but we gladly accept it.

We must investigate ideas, explore logical (and sometimes illogical) premises, abandon those which don't pan out, and always persist. Otherwise we become vulnerable; and that is the impermissible error.

MELPAR STORY REPORTED IN BOSTON, WASHINGTON

Both The Boston Herald-Traveler and the Washington Post and Times Herald recently have told some aspects of the Melpar story in feature articles which bring the Company's history and achievements to the notice of the general public.

Our activities in Watertown and Boston were reviewed by Herald-Traveler reporter Richard Miller. His story opens with the query: 'How can you test the accuracy of an anti-aircraft gun without actually firing it?' He answers the question by describing the characteristics of Melpar-Watertown's T-9 Dynamic Tester.

Miller's story outlines some of the work carried on by our Research Department at Melpar-Boston, and also incorporates a resume of the Company as a whole to indicate its standing in the industry.

The Post's Mechlin Moore tied his version of 'Melpar's 10-year success story' to the booming growth of suburban Washington, particularly in Northern Virginia. He points to Melpar's effect on the local economy as evidence that attracting light industry is the antidote for a severe overdose of local taxation.

BRITISH SCIENTISTS SEE FALLS CHURCH ECM WORK

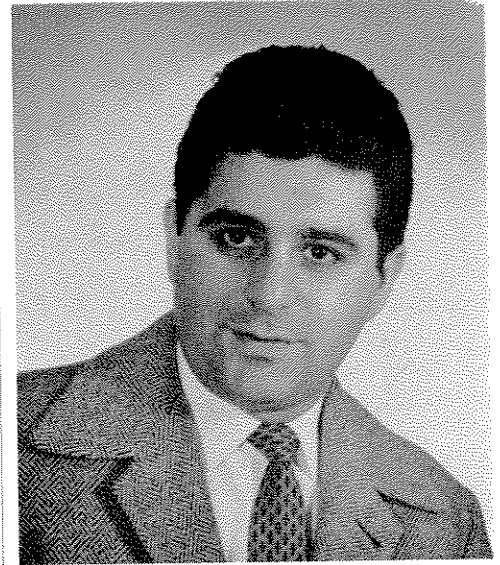
A group of widely known British electronics experts, engaged in a study tour of various United States industrial and governmental laboratories presently active in the field of electronic countermeasures, were recent guests of the Company at its Falls Church headquarters.

Led by H. B. Stone of the Office of Naval Research, the sponsoring agency in this country, the British visitors included Herbert E. Hogben of the Admiralty Signal and Radar Establishment, Dr. David G. Kiely of the Admiralty Research Establishment, and S. T. Wright of the British Joint Services Mission.

Discussions of Melpar's varied work in countermeasures were led by Project Manager R. E. Miller, and Section Heads R. E. Williams, C. E. Bergman, and K. S. Kelleher. The range and extent of our technical investigations and equipment development were received with intent interest by the visitors.

Closing the session, Dr. Kiely described British work in the development of constant beamwidth antennas, comparing it with work in progress at Melpar.

AQUILINO WINNER OF PRIX de ROME



Donald Aquilino

One of the two Prix de Rome fellowships in painting awarded annually by the American Academy in Rome has been won by Donald Aquilino, Technical Illustrator in the Technical Writing department at Melpar's Falls Church laboratory.

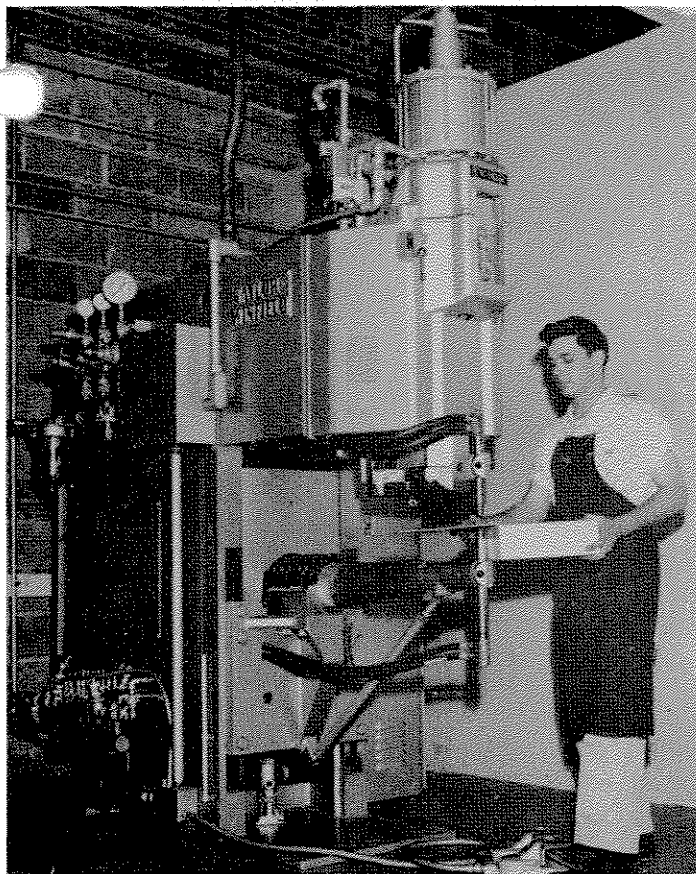
The fellowship brings Mr. Aquilino a \$1250 award, transportation to and from Rome, living quarters and studio space at the Academy, and an additional allowance for European travel. Competition for the Prix de Rome is nation-wide in scope and is open to creative artists of every degree.

Mr. Aquilino's winning entry was an abstract oil painting done in pursuit of his Master of Arts degree, which he is to receive in June from American University. 27 years old, Mr. Aquilino joined Melpar in January, 1957, having previously been an art instructor at American University. Accompanied by his wife, he plans to leave for Rome in September to take up his fellowship.

Employee Handbooks Available

An employee handbook, titled "YOU and MELPAR", has been prepared and issued in versions adapted to the interests of exempt and non-exempt employees in the various Melpar plants.

The handbook summarizes and lightens the necessarily complex language of Melpar's formal Procedures Manual so as to explain the highlights of our personnel policies and benefits. Copies of "YOU and MELPAR" are available at all Personnel offices.



PTS ARE PERMANENT, when produced by this massive machine looming over Sheet Metal man Robert Fravel in the Arlington Division shop.

ARLINGTON DIVISION INSTALLS B & S AUTOMATIC AND 100 KVA TAYLOR-WINFIELD SPOTWELDER

Pure luck alone enabled the visitor to watch Arlington Division's newly installed automatic screw machine in action recently. Fat and happy in his ignorance, the visitor had failed to make an appointment with the #00 Brown & Sharpe; had he appeared fifteen minutes later, it would have been too late. The machine, disgorging completed parts at the rate of one every seven seconds, would have been finished its run.

Secure in the knowledge that he was not bothering a machinist, the visitor watched and listened while the automatic's cams smoothly followed their paths, the tool turret snapped its way from one position to another, and finished pieces dropped with a pleasant ringing into the receiving pan.

Set-Up Man Sarver explained that the machine has a range of cycle times from .75 to 100 seconds and runs at spindle speeds from 34 to 7200 rpm. Its two cross-slides are independent of the tool turret, and are similarly cam-actuated.

By using scribed cam blanks furnished by Brown & Sharpe, Machine Shop Foreman J. D. Harris is able to maintain a total tool-up time, from cam design through their manufacture and installation, of eight hours. Thus the economical lot size for a piece part proposed for automatic production is easily calculated.

Another major facility just installed in Arlington, a 100 KVA Taylor-Winfield spot-welder, was viewed from a respectful distance. Introducing the monster, Sheet Metal Shop Foreman J. D. Harrie tossed off the comment that, when it joins two pieces of one-eighth inch aluminum, 50,000 amperes flow through its welding tips. That number wants respect.

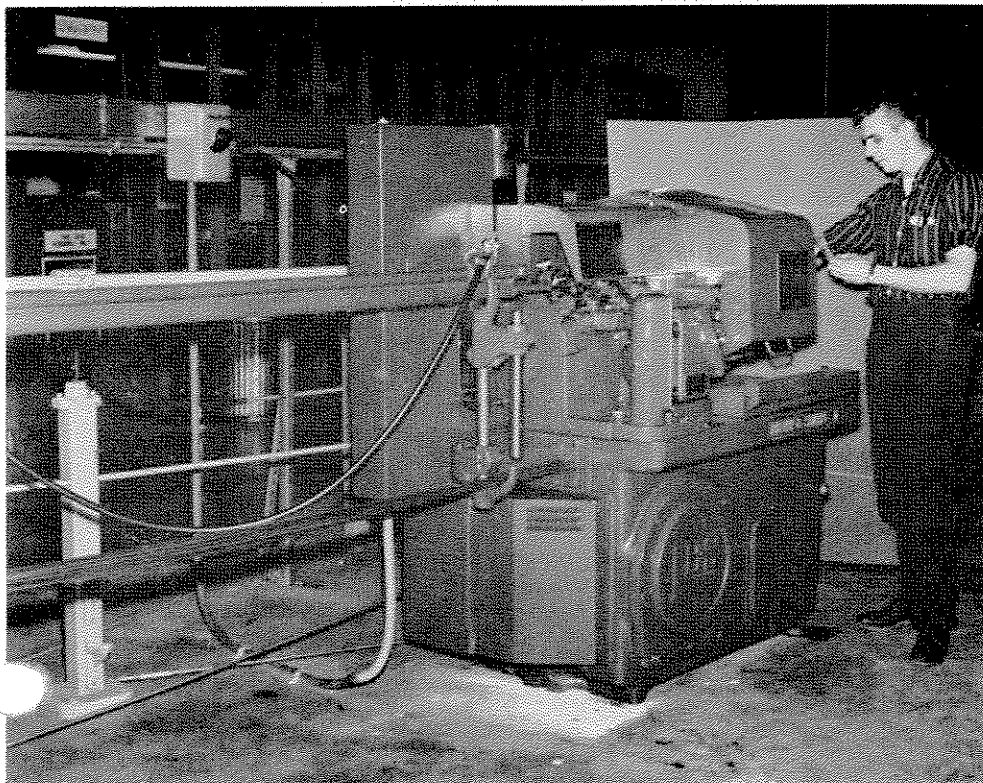
The welder now is in the process of being qualified to produce Mil-Spec work in aluminum, magnesium, stainless steel, nickel alloys, and low carbon steel.

INFORMATION — PLEASE

Vice President-Treasurer R. T. Cosby is badly in need of a little information: no more than a name and a pay period. The information is desired to supplement a letter he recently received which sought to rectify an apparent payroll error.

The stringent regulations which govern the maintenance of corporate financial data make it impossible for him to record the transaction as it now stands, Mr. Cosby states. It also is possible that the individual's federal tax return may have been distorted. This could subject him to unnecessary and unwarranted inconvenience.

Mr. Cosby suggests that the desired information be given him, in confidence, over the telephone. Once received, it will be used to adjust the Company's internal accounting records and for no other purpose. Assurance of that statement is offered, without qualification, by Mr. Cosby.



JUST CHECKING, THAT'S ALL . . . Franklin Sarver, Arlington Division Set-Up Man in charge of Melpar's first automatic screw machine, 'mikes' a random sample of the output.

MURGATROYD MISFIT



Murgatroyd - this object is a dial telephone. It works like this ...

GOING UP!

M. M. Risdon, stationed at Bailey's Crossroads, has won promotion to Project Engineer. At Falls Church, three new Project Engineers are P. J. McCabe, L. H. Vining, and H. R. Gary.

Melpar-Watertown announced the promotion of E. J. Stevens and H. L. Erikson to Senior Engineer. D. A. Harrington is now Lead Duplicating Machine Operator, and J. A. Healy rose to Lead Procurement Planner. M. M. Brady was named Librarian.

In Arlington Division, W. M. Verbeck advanced to Engineer and J. W. Futch was promoted to Junior Engineer. J. T. Griffith also won promotion to Engineer. T. H. Lyon is now Lead Man in Shipping. T. F. Smith has risen to Procurement Planner. G. E. Smith has advanced to Clerk-Typist.

At Falls Church, R. E. Cormier has been promoted to Senior Cost Accountant. Appointed Test Supervisor was K. Schnoor. In Maintenance, J. E. Johnson was named Assistant Supervisor, and R. L. Herring advanced to Chief Electrician. J. C. Koval is now a Carpenter Group Leader.

V. S. Hagen, of Melpar-Boston, is Assistant Security Officer. At Bailey's Crossroads C. D. Wimmer rose to Lead Technician, while G. P. Fulton and J. P. Goza became Lead Spares Planners.

Two new 1st Class Light Assembly Task Leaders at Arlington Division are J. E. Bledsoe and C. L. Lowe. Both H. L. Kennebrew and D. S. Scott won promotion to Light Assembly Task Leader.

Four Falls Church men won promotion to Senior Engineer: M. Butler, R. D. Harrington, D. C. Coulter, and T. H. Moriarty, Jr. Advanced to Engineer was H. D. Vorhauer, while J. F. Crews rose to Junior Engineer. R. L. Riffe and F. L. Sechrist are now Senior Technicians.

L. W. Tice has been appointed Assistant Final Assembly Supervisor at Falls Church; named Lead Technicians were J. A. Reid, R. E. Perrero, and W. H. Weston.

In Accounting at Falls Church, W. V. Sitko became Assistant to the Comptroller. C. E. Perry was promoted to Section Planning Supervisor, while R. H. Johns rose to Senior Planner. W. B. Stephens was promoted to Buyer.

Also at Falls Church, D. S. Cole became Inventory Control Lead Man. R. J. Clark, R. C. Reid, and D. C. Allen won promotion to Junior Procurement Planner. A. L. Fristoe advanced to Scheduler. W. A. Burke moved up to Dispatcher.

IRE PANEL TOPIC IS THE ENGINEER IN MANAGEMENT

Some suggestions for making the transition from active engineering management to the field of administrative and policy level management, as applied to the modern type of research and development organization, were offered to the Professional Group on Engineering Management of the Boston Section, IRE, by Research Director T. P. Cheatham, Jr. during a panel discussion recently sponsored by the group.

Dr. Cheatham discussed various aspects of training for management duties,

B-58 TEST DEVICES WILL KEEP SYSTEMS WORKING

Paired consoles of special purpose equipment comprised Melpar's latest shipment to Convair-Fort Worth in furtherance of our role in the massive B-58 Hustler program. Described as 'programmer simulators', the devices will be used both in the laboratory and in the field to test many of the programming functions associated with our B-58 sub-systems.

Where malfunctions develop in the intricate chains of black boxes which go to make up the various sub-systems, the simulator equipment can be brought into play. Rather than taking the entire sub-system out of service, the errant component package is broken out of the chain and replaced while the simulators subject the culprit to a series of programmed inputs.

Self-contained display units, forming the outputs of the test gear, expose the performance of the package under test and diagnose its ailment. Quite aside from minimizing downtime on the sub-systems proper, the simulators will greatly expedite the actual troubleshooting and repair. The equipment was developed by Project Engineer Lawrence Lerner's under the immediate supervision of Senior Engineer J. E. Fleming.

SAFETY FILM PROGRAM SHOWS KEY ROLE OF HUMAN FACTORS

A series of six sound slidefilms entitled "Human Factors in Safety" has been scheduled by the Personnel Department for display at group meetings open to all the Company's supervisory personnel. The program, begun in April, will feature one film a month through September.

The series is intended to dramatize the human equation—the supervisor and his co-workers—as it aids or hinders the development of safe working habits. Action sequences, in 'live' or cartoon form, point up the fact that safety is nothing but a word unless it is believed in and practiced by the supervisor and worker alike.

and the use of such management techniques as joint committees and staff operations in achieving the desired goal.

Entitled "Is Engineering A Road To The Top?", the panel session included in addition to Dr. Cheatham, Dr. D. Sinclair of General Radio Company, R. A. Stauffer of National Research Company, and D. A. Eberly of General Electric.