MELPAR-A-GRAPH

Volume 7, Number 4 MELPAR, INC. • A SUBSIDIARY OF WESTINGHOUSE AIR BRAKE CO. July, 1962

FIRST HALF ORDERS TOTAL $20 MILLION

MELPAR WINS AWARD TO DEVELOP MICRO—ELECTRONICS FABRICATION TECHNIQUES

Melpar has announced the receipt of a $68,511 contract from the U. S. Army Signal Supply Agency for research leading to the development of a practical method for the planar interconnection of discrete parts and solid circuit devices to form micro-circuits.

According to E. M. Bostick, Melpar President, applied research under the new contract will advance the state of the art in micro-miniaturized electronic fabrication methods to an intermediate stage between the contemporary soldering of components to module boards and the ultimate fabrication of complete systems from solid and thin-film circuits. The new fabrication method to be developed will utilize micro-miniaturized parts and components such as transistors as well as solid and thin-film circuits.

H. E. Culver, Supervisor of the Molecular Systems Branch of Melpar's Physical Electronics Section headed by Dr. Charles Feldman, will direct this program. Technical supervision will be provided by the U. S. Army Signal Research and Development Laboratory, Fort Monmouth, New Jersey.

MELPAR SUBSIDIARY GETS $1.5 MILLION CONTRACT

Television Associates of Indiana, Inc., a subsidiary of Melpar, Inc., has received a follow-on contract for over $1.5 million for engineering services to complete the communications network linking Turkey, Iran and Pakistan. The contract was awarded by the State Department's Agency for International Development (AID).

Known as the CENTO Regional Telecommunications Project, the system is part of the economic program of the Central Treaty Organization, successor to the Baghdad Pact. The 600-channel communications system will be the longest contiguous microwave network in the world, traversing the widely diversified terrains of mountains, plains and deserts to link Ankara, Teheran and Karachi.

The system is scheduled for completion in 1964 at a total cost of $18 million to be financed through AID and regional member governments. The engineering design has been completed and installation of equipment is currently underway.

TAI, using a unique aerial radar method of surveying the route for the original CENTO Project as part of the Baghdad Pact Telecommunications Project, was later awarded a contract for the engineering and design of the network. The present contract for the follow-on engineering services is an extension of this original design work.

(See TAI, Page 2)

SUPERVISORS BEGIN SECOND PART OF MANAGEMENT DEVELOPMENT COURSE

Melpar supervisors began Section II of the Management Development Course during the week of 25 June. This section of the course deals with the Techniques of Supervision and is being presented by Melpar's Training Coordinator, W. F. Fenton. The Management Development classes will discuss the problem solving, planning, organizing, controlling and directing functions and techniques of the manager, according to Mr. Fenton, and emphasis will be placed upon class participation.

In announcing the offering of the Management Development Course which began in January, President Edward M. Bostick emphasized that every one of Melpar's managers and potential managers must be competent to undertake a most important job—the training and development of subordinates.

ORDERS EXCEED SALES BY $3 MILLION

Orders placed with Melpar during the first six months of 1962 totaled over $20 million, according to President E. M. Bostick. This is a consolidated figure including orders placed with the company's subsidiaries, Television Associates of Indiana and Melpar-Fairmont. Mr. Bostick said that this represents a 30% increase in new orders over the same period of 1961 and observed that orders exceeded sales by $3 million during the first half of 1962.

SIMULATION STUDY ASSIGNED TO COMPUTER DEPARTMENT

Melpar has received a research contract from the U. S. Naval Training Device Center, Port Washington, New York, entitled "Study, Equations of Motion of Vertical/Short Take-off and Landing, Operational Flight Weapon System Trainers." The contract is under the technical direction of the U. S. Naval Training Device Center Staff Engineer, Carmine C. Castellano, and has been assigned to the Computer Department's Simulation Lab. The new contract involves studies into the equations of motion and the aerodynamics in flight trainers for Helicopter, VTOL, and STOL aircraft. The objective is to standardize and simplify the mathematical models used for flight trainers for such aircraft.

The research involves a systematic analysis of axis systems, basic dynamics, and aerodynamic coefficients. Digital simulation studies are anticipated to aid in the simplification of the equations of motion and verification of the validity of results.

This eleven-month study will result in reports which will serve as guides to the entire training industry. Melpar Senior Engineer J. R. Toler and Electrical Engineer W. McIntyre of the Simulation Laboratory's Preliminary Design Group will conduct the study under the direction of Project Engineer F. E. Papin.

GOING UP!

Promotions include A. Abbott and O. O. Alderman to Junior Electrical Engineer, L. G. Ambrose to Electrical Engineer, and L. A. Barnes to Senior Electrical Engineer.

R. E. Britton advanced to Senior Technical Writer, D. C. Coulter to Principal Engineer, and J. E. Crapp to Storekeeper.

D. B. Druva moved up to Junior Electrical Engineer, C. L. Ennis to Inspection Foreman, and H. R. Evans to Maintenance Supervisor.

C. Evanto was promoted to Junior Electrical Engineer, J. J. Fanto to Field Service Engineer A, and M. Garrod to Senior Research Engineer.

V. G. Gedmin advanced to Project Engineer, J. C. Goan to Senior Chemist and W. W. Gunn to Technical Editor.

D. E. Hagee moved up to Assistant Supervisor of Central Data Processing, B. F. Hale to Methods Engineer and K. Hepburn to Assembly Supervisor.

A. J. Hiener was promoted to Senior Electrical Engineer, J. F. Hilfiker to Chief Plant Engineer, and J. J. Hillman to Physicist.

R. D. Hoopes advanced to Senior Electrical Engineer and F. J. Klenofski to Custodial Foreman.

P. R. Kupstas moved up to Test Engineer, C. B. Lape to Junior Engineering Assistant, and K. McMichen to Inspection Foreman.

W. A. Meyer was promoted to Principal Engineer, S. W. Minichiello to Central Files Supervisor and L. J. Moshetto to Shop Foreman.

A. M. Pecone advanced to Senior Planner, C. N. Price to Engineering Assistant, and K. G. Schnoor to Test Supervisor.

J. L. Shipelleti moved up to Engineering Design Assistant, T. V. Slominski to Senior Electrical Engineer and C. E. Smith to Field Service Area Representative.

C. F. Strawbridge was promoted to Maintenance Foreman, G. R. Swain to Senior Administrative Assistant and A. A. Thompson to Junior Test Engineer.

R. L. Thwaite advanced to Maintenance Foreman, N. C. Toy to Junior Electrical Engineer, and B. M. Tyler to Custodial Foreman.

O. B. Van Blaricon moved up to Senior Design Engineer, R. W. Vass to Central Data Processing Supervisor, and G. C. Walker to Field Service Engineer B.

K. R. Werner was promoted to Test Engineer and R. D. West advanced to Stores Supervisor.

Locking The Barn BEFORE The Horse Is Stolen . . . One of the five "workshop groups" formed during the last two sessions of the Management Appreciation Value Engineering Course is shown above applying Value Engineering techniques to a fuze chassis. The purpose of the workshop was to show Engineering Supervisors how Value Engineering can be applied to design programs with resulting cost conservation. Shown standing left to right: G. F. Shea, Vice President of Plant Management and Maintenance Company; T. L. Alnutt, Jr., Project Engineer; H. R. Gary, Project Engineer; and E. A. Golden, Technical Assistant for Value Engineering to the Head of the Technical Staff. Seated left to right: J. Caballero, Head of the Electronic Countermeasures Laboratory; and R. W. Backora, Project Engineer.

MELPAR MANAGERS STUDY VALUE ENGINEERING

The Company recently sponsored a one week Management Appreciation Value Engineering Program for managers and other management personnel, according to Mr. W. F. Fenton, Training Coordinator. Forty management people were selected to attend the ten hour course. The purpose of the course was to re-emphasize the techniques employed by the Value Engineering Group under Mr. M. J. Fivel, Head of the Engineering Division's Technical Staff.

Value Engineering is a creative study of every part and material for purpose of reducing cost and improving quality. It is applied through an objective appraisal of a system or product from the standpoint of specification, design, and manufacture— directed toward the attainment of the **required** parameters of performance, reliability, and maintainability at the lowest overall cost. Value Engineering emphasizes the dollar criterion in the design equation.

According to Mr. E. A. Golden, Technical Assistant to Mr. Fivel, a greater emphasis on Value Engineering is becoming a "must" for companies expecting to retain or increase their volume of Defense business. He said the Armed Forces are becoming increasingly cost conscious as they move into the space age, and many future military contracts will include Value Engineering incentive clauses. Mr. Golden is Chairman of the Engineering Division's Cost Conservation Committee.

TAI (Continued from Page 1)

William H. C. Hall, headquartered in Ankara, is TAI's program manager for the project which is under the supervision of the U. S. Economic Coordinator for CENTO Affairs in Ankara, John W. McDonald, Jr.

Television Associates, with main facilities in Michigan City, Indiana, is an international leader in the communications engineering field.

MELPAR-a-graph

Published by

MELPAR, Inc.

A Subsidiary of
Westinghouse Air Brake Co.

3000 Arlington Blvd. Falls Church, Va.

Editor ..... S. E. Bush—Ext. 2182

THE CASE OF THE FASHIONABLE HEEL

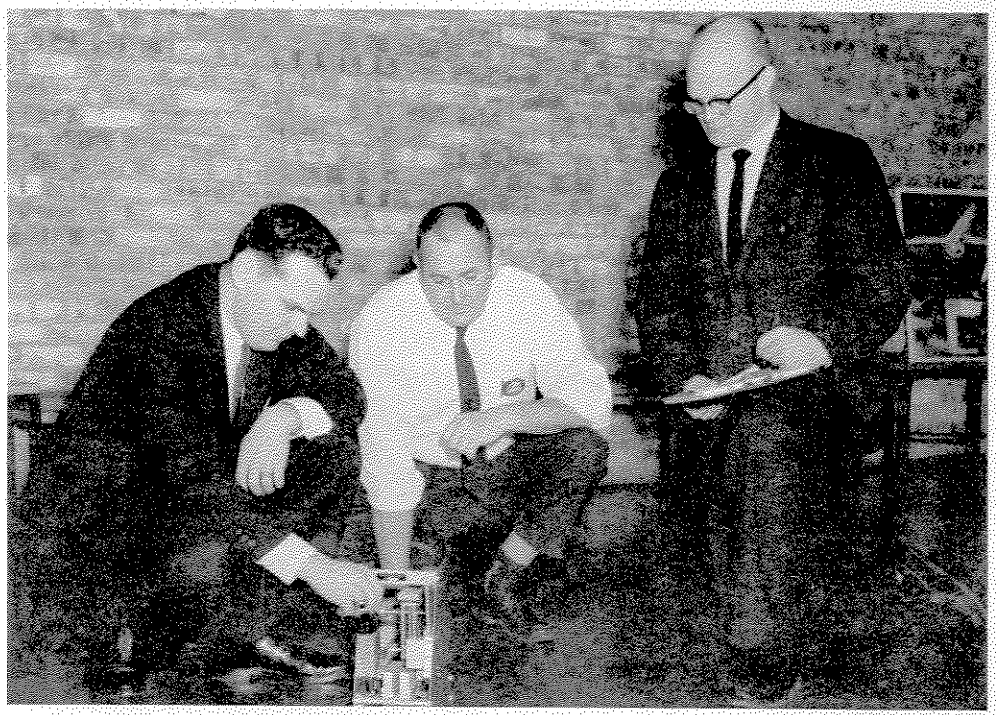
Interesting Data—Especially for Women

Did you know that a woman weighing 125 lbs., whose heels measure three-eighths of an inch in diameter, is applying a pressure of approximately 1,150 lbs. per square inch to the floor with every step? Like miniature pile drivers!

Is it surprising then, if we tell you that, contrary to popular opinion, it is the ladies' spike heels rather than slippery floor surfaces that are the most frequent cause of falls and slips, especially when the heels begin to wear down? (We are advised that these heels must be replaced frequently.)

Also—

Have you considered what this type of concentrated force does to the rugs in your home? Perhaps you've noticed little bits of loose pile? Are fashionable heels worth the risk . . . and cost?



SO THAT WE MAY WALK IN SAFETY . . . Melpar's floor surfaces are tested for safe traction by (left to right) Mr. M. J. Gordy, Liberty Mutual Insurance Co. Safety Engineer; Mr. J. S. Young, Plant Engineer; and Mr. S. E. Bush, Melpar Safety Engineer. The traction meter shown above is used periodically to insure that a safe coefficient of friction is maintained on all floor surfaces. As a result of the initial tests with this meter, Plant Engineering has revised their floor maintenance procedures in order to assure safe traction on all floor surfaces in the Company.

S. H. COTTON FIRST TO EARN M. S. UNDER TUITION REFUND PROGRAM

Wednesday, June 6, 1962, was a "red-letter" day in the life of Senior Electrical Engineer Simeon H. Cotton, for on this date he donned his academic hood and received his Master of Science in Engineering from George Washington University. This was also an auspicious occasion for Melpar as well, since Mr. Cotton is the first employee to complete all of his graduate course work for the Master's degree under the Melpar Tuition Reimbursement Plan. When interviewed, Mr. Cotton said that he doubted whether he could have earned the degree without the financial and moral support of the Company. He is especially appreciative of the support he has received from his supervisors.

Mr. Cotton's thesis for the MSE dealt with digital simulation and is entitled "An Analysis of Certain Navigational Aids Systems for Digital Operational Flight Trainers." He said his course work for the MSE has had and will continue to have direct application to his work in the Simulation Laboratory of the Computer Department.

Mr. Cotton joined Melpar in July 1957 on graduation from Duke University with a BSEE and began his graduate study at G.W.U. in the Fall of 1957. He is currently making the necessary arrangements to continue his graduate study beyond the Master's degree this Fall.

GREGG WINS MM I-PEP AWARD

Mr. John B. Gregg, Mechanical Inspector with inspection duties in the Minuteman P-C Fabrication Shop, has been selected by Minuteman Division Manager, K. E. Schreiber for the April-May Individual Performance Evaluation Program Award (I-PEP). One of the three suggestions submitted by Mr. Gregg during the month of May has been accepted and two are still being evaluated. All three suggestions show promise for substantial cost reduction and improvement of reliability.

In nominating Mr. Gregg for the I-PEP Award, Inspection Foreman G. E. Donohue said that he is "one of first Minuteman Inspectors and has consistently shown a diligent and conscientious attitude toward his work. His formal suggestions are only a part of what he has contributed toward making the Minuteman program a success."

Candidates for the I-PEP Awards are nominated by their supervisors on the basis of the candidates' performance and suggestions leading to the improvement of reliability and reduction of costs. To date, 59 suggestions have been submitted and 25 percent of these have already been accepted and implemented. A large percentage of the remainder are still being evaluated.

EMPLOYEES REPAID $7,526 FOR STUDIES

Educational assistance payments to Melpar employees for the 1961-62 academic year as of July 1st, totaled $7,526.38. Personnel reports that these payments were for approved courses completed under the Melpar Tuition Reimbursement Plan. Under this plan adopted by Melpar in September 1956, employees who successfully complete prior approved courses in a scientific or technical field are reimbursed half of the cost of their tuition by the Company.

Total payments by Melpar to employees since the beginning of the six year old Reimbursement Plan amount to $98,983.00.

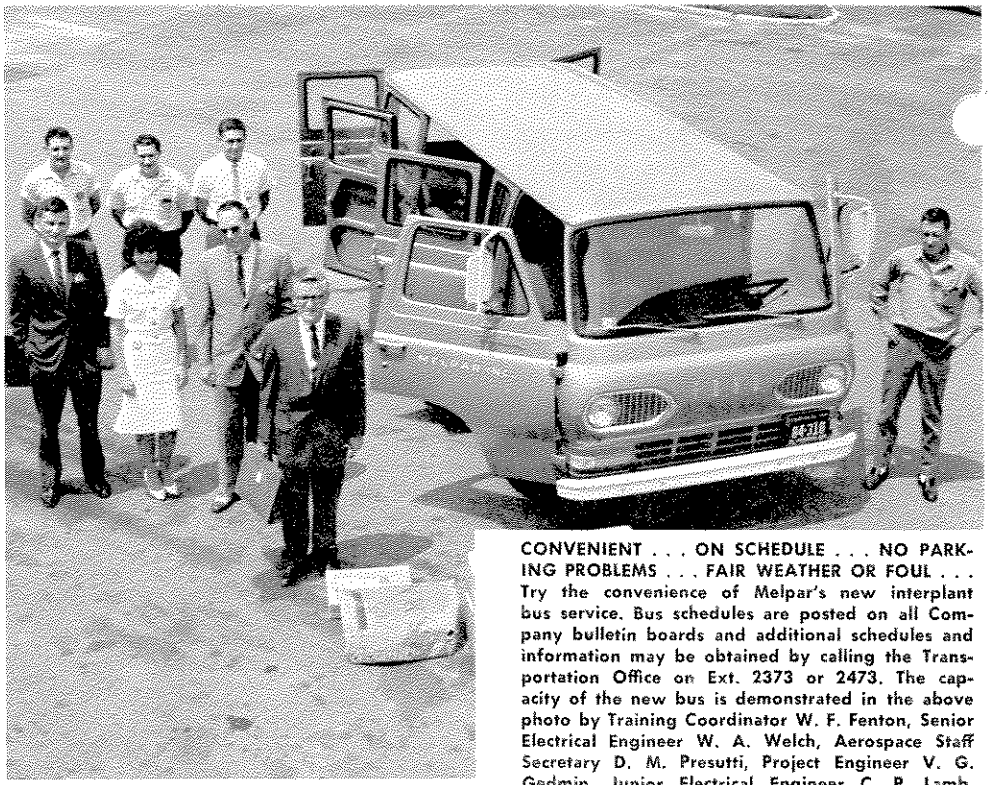
COLE ELECTED PREXY OF D. C. RESERVE OFFICERS ASSOCIATION

Ralph I. Cole, Director of WABCO's Government Service Office, was elected President of the District of Columbia Department of the Reserve Officers Association at the R. O. A.'s Annual Convention held May 5th at Fort McNair.

With 1,800 members in the D. C. Department and 62,000 members nationally, the Association is spokesman for the nation's reserve officers and serves to make the reservists more effective.

"DELIVER IT TO THE GUARD POST AT LP-5" . . . Plant Engineering Secretary Hazel Gainey tells Melpar Bus Driver R. Rose. While Melpar's efficient interplant mail service is always available on a regular schedule for routine delivery of correspondence and light packages, it is sometimes necessary to get a report, memo, or fragile package to another plant by hand-carrying it. The new Interplant Bus Service is ready and willing to perform this service for you.

Photo by Glittenberg



CONVENIENT . . . ON SCHEDULE . . . NO PARKING PROBLEMS . . . FAIR WEATHER OR FOUL . . . Try the convenience of Melpar's new interplant bus service. Bus schedules are posted on all Company bulletin boards and additional schedules and information may be obtained by calling the Transportation Office on Ext. 2373 or 2473. The capacity of the new bus is demonstrated in the above photo by Training Coordinator W. F. Fenton, Senior Electrical Engineer W. A. Welch, Aerospace Staff Secretary D. M. Presutti, Project Engineer V. G. Gedmin, Junior Electrical Engineer C. P. Lamb, Senior Technician W. L. Thresher, Expediter R. T. Stephon and standing to the right of the bus is J. Caldwell, Driver.

Photo by Glittenberg

COMPANY INAUGURATES INTERPLANT BUS SERVICE

Melpar christened its new Ford Falcon buses on 18 June and put them immediately to work transporting passengers and parcels between the main plant at Falls Church and the branch plants at Leesburg Pike, Hardin Street, Bailey's Crossroads and Shirley Highway. The new bus service is rapidly building a reputation for its convenience and promptness (to date, it has always been on schedule).

Mr. R. L. Brewster, Assistant Program Coordinator at the Hardin Street Plant was especially impressed with the convenience of the bus service when he used it to attend a Bid Committee Meeting at the Falls Church Plant on a recent rainy day. Mr. Brewster noted that delivery at the Main Lobby Door eliminated the usual search for a parking space within a "country-mile" of the building and thus arrived at his destination dry and comfortable. He says that his only suggestion for improvement of the service would be the installation of Marilyn Monroe-type hostesses serving coffee and sandwiches. Your suggestion is being considered, Mr. Brewster!

Not only does the new bus service eliminate parking problems for interplant passengers but can avoid some trips entirely when expeditious delivery of "hand-carried" packages is involved. It is only necessary to give the package to the driver and arrange for someone to pick it up at its destination.

At least one bus leaves Falls Church and all Branch plants except Shirley Highway during each hour between 7:45 A.M. and 4:45 P.M. The bus makes six stops at Shirley Highway during the day beginning at 8:30 A.M. and ending at 4:25 P.M. Bus schedules are posted on all Company bulletin boards and additional copies are available from the Transportation Office by calling extension 2373 or 2473.

All employees having business in other plants are encouraged to utilize the new bus service whenever practical.

FIRST PERMANENT G-PEP AWARD PRESENTED . . . . Minuteman Division Assistant Manager J. W. Hall (right) presents the April-May G-PEP Award to Mr. R. A. Markham (left), who received it on behalf of his Material Handling Group. Winner of the G-PEP Award for the third time, the Materials Handling Group has been given permanent possession of the award plaque for display in their area.

FIRST PERMANENT AWARD OF G-PEP PLAQUE WON BY MM MATERIALS HANDLING GROUP

Minuteman Division Manager K. E. Schreiber has announced the selection of Mr. Richard Markham's Material Handling Group as the winner of the Group Performance Award for April-May 1962 and the G-PEP award plaque now becomes a permanent fixture for display in the Materials Handling Area. According to the rules of the G-PEP competition, whenever a Minuteman group is selected for the G-PEP Award three times, the group is given permanent possession of the then-current plaque. Mr. Markham's Materials Handling Group was selected previously for the G-PEP Award in the November and December competitions of last year.

Mr. Schreiber commended five other Minuteman groups for their unusually high showing in the close competition and standings during the Aprli-May 1962 evaluation period. These groups and their supervisors are: Test Equipment Fabrication under Mr. R. D. Cathell, Component Test under Mr. K. W. Friend, Printed Circuit Board Assembly under Mr. C. A. Funkhouser, Raw Board Machining under Mr. I. N. Keen, and Assembly Training under Mr. W. G. Tilley.