MELPAR-A-GRAPH

Volume 7, Number 5 MELPAR, INC. • A SUBSIDIARY OF WESTINGHOUSE AIR BRAKE CO. **August, 1962**

MELPAR AWARDED $24 MILLION MM CONTRACT

Melpar has been awarded a follow-on production contract in excess of $24 million for high reliability circuit boards for the Minuteman ICBM by Autonetics, a division of North American Aviation, Inc., it was announced by Edward M. Bostick, Melpar President.

Dr. N. F. Parker, Autonetics Executive Vice President, Operations, said the award is believed to be the largest single subcontract ever awarded by Autonetics. It is directly related to the work Autonetics performs for the Air Force as the associate prime contractor responsible for the production of the inertial guidance, flight control and aerospace ground equipment for the Minuteman, said Dr. Parker.

Melpar was selected by Autonetics a year ago as an additional source for the boards after evaluation of proposals from major component makers throughout the nation. Since then the Company has steadily built up its production capacity and has been delivering the boards to Autonetics for the past several months.

The solid-fueled inertially guided Minuteman is scheduled to become operational the latter part of this year with first installations at Malmstrom Air Force Base, Montana, and Ellsworth Air Force Base, South Dakota. Some 800 Minutemen are already scheduled for emplacement at various bases throughout the nation.

Each Minuteman wing of 150 missiles will be dispersed over wide areas and concealed in underground silos. The missiles are expected to remain in operating condition for long periods of time,

(See Minuteman, Page2)

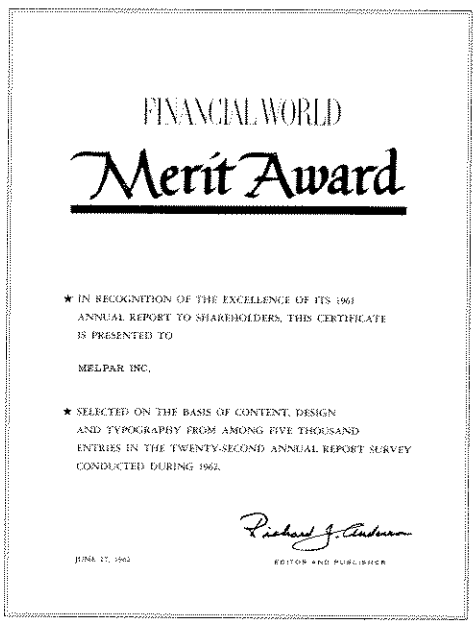
MELPAR'S WESTERN ENGINEERING LABS TO DEVELOP CROSS SPECTRUM COMPUTER

Western Engineering Laboratories, a division of Melpar, Inc., has received a U.S. Army Signal Corps contract to develop a versatile portable computer for use in detecting and locating point of impact of weapons or missiles. The device could also be used in the detection and location of explosions and noisy targets.

The cross spectrum computer will analyze acoustic pressure waves picked up by connecting microphones, to pinpoint impact area. It is designed to operate effectively under conditions of low signal-to-noise ratios such as noisy battle areas. It will also be rugged and portable enough for air transport by tactical close-support vehicles and for field use. Its output will be available at the operational site, eliminating the need for laboratory processing of recorded data, or bulky complex equipment, and will not require operators with engineering training.

On completion, the cross spectrum computer will be delivered to the U.S. Army Signal Missile Support Agency at White Sands Missile Range, New Mexico.

Melpar's Western Engineering Laboratories Division is located in Northridge, California under General Manager Arthur N. Corner.



FINANCIAL WORLD

Merit Award

★ IN RECOGNITION OF THE EXCELLENCE OF ITS 1961 ANNUAL REPORT TO SHAREHOLDERS, THIS CERTIFICATE IS PRESENTED TO

MELPAR INC.

★ SELECTED ON THE BASIS OF CONTENT, DESIGN AND TYPOGRAPHY FROM AMONG FIVE THOUSAND ENTRIES IN THE TWENTY-SECOND ANNUAL REPORT SURVEY CONDUCTED DURING 1962.

Richard J. Anderson

JUNE 27, 1962 EDITOR AND PUBLISHER

MELPAR WINS AWARD FOR ANNUAL REPORT . . . Melpar, for the second consecutive year, has been selected for a Merit Award by Financial World, weekly investment news magazine. The award was given "in recognition of the excellence of its 1961 Annual Report to shareholders . . . on the basis of content, design and typography from among five thousand entries in the Twenty-Second Annual Report Survey . . ."

Category winners will compete for Oscar-of-Industry trophy awards October 29th.

HOLIDAY

Hard working Melpar employees will have a three-day weekend to relax and enjoy the late-Summer weather during the first week of September. Labor Day—one of the Company's seven paid holidays will be observed on Monday, September 3rd this year. Employees are off September 1-3 and will return to work on Tuesday, September 4.

HRB-1 HELICOPTER SIMULATOR CONTRACT AWARDED TO MELPAR

Melpar has been awarded a contract by the U.S. Naval Training Device Center, Port Washington, Long Island, New York for the design, development, and production of a prototype, tandem-rotor helicopter flight trainer. The device will simulate the HRB-1 Helicopter for utilization by the U.S. Marine Corps. Vertol Division of Boeing Aircraft is producing the HRB-1 Helicopter primarily as a troop and equipment transport for assault missions.

The flight trainer will be housed entirely in a 40 foot van containing a fully instrumented cockpit, a flight instructor's control and monitor console, and a completely transistorized analog computer for the continuous solution of the equations of helicopter flight. All aircraft systems will be simulated and cockpit motion will be provided to generate complete proprioceptive stimuli. Aircraft sounds will be reproduced in agreement with existing flight conditions, and

(See Helicopter, Page 4)

MELPAR GETS AEROSPACE MEDICINE CONTRACT

The Aerospace Medical Division (AFSC), Brooks Air Force Base, Texas, has awarded Melpar a $39,968.00 contract for biological research to investigate certain problems in aerospace medicine. The research will be under the technical direction of Dr. Milton A. Mitz, Head of the Research Division's Life Sciences Section, with Dr. Frank L. Aldrich as the Principal Investigator.

Aerospace Medical Division USAF School of Aerospace Medicine is the Monitoring Agency.

MELPAR CITED FOR ACCIDENT PREVENTION

The Virginia Manufacturers Association has presented its Safety Award of Merit to Melpar for outstanding achievement in accident prevention during 1961. Melpar was selected to receive the award for having the lowest injury frequency rate within its industry and size group. VMA initiated the Safety Award of Merit in order to give recognition to companies that established outstanding safety records within their size and industry groupings, but due to their size would have little chance of going a full year without a lost-time injury.

The VMA safety award symbolizes the fact that we at Melpar are concerned with safeguarding the lives and limbs of our employees. However, according to Personnel Director (Mrs.) J. T. Lafrank, our current injury frequency rate of four lost-time injuries per million man-hours still leaves much room for improvement. We have, in the past, worked more than two million man-hours with *no* lost-time injuries and we can do it again if each of us will be safety-minded *all* the time. With everyone cooperating, we can exceed our previous Company record of 2,025,333 hours without a lost-time injury by Christmas. Think safety, the next injury could be yours.

MELPAR RECEIVES VMA SAFETY AWARD . . . Executive Vice President A. C. Weid, Personnel Director (Mrs.) J. T. Lafrank, and Safety Engineer S. E. Bush (extreme right) receive the Safety Award of Merit of the Virginia Manufacturers Association from VMA Director E. DeLong Bowman (third from left), who presented the award on behalf of the statewide Association.

Melpar earned the VMA's Safety Award of Merit for having the lowest injury frequency rate within its industry and size group during the 1961 calendar year. This is VMA's second highest safety award. In accepting the award for Melpar, Mr. Weid said that "good safety performance results from a cooperative effort and the efforts of our employees made this award possible."

Photo by Glittenberg

MINUTEMAN *(Continued From Page 1)*

"turned on and ready" for immediate action.

Melpar's Minuteman Division is headed by Manager Kenneth E. Schreiber, under the direction of William C. Purple, Vice President - Engineering and Manufacturing.

MM GROUP PERFORMANCE AWARD FOR JUNE-JULY ANNOUNCED

Minuteman Division Manager K. E. Schreiber has announced the selection of Mr. Charles Funkhouser's assembly group as the winner of the Group Performance Award for the June-July competition.

Due to the close competition, five other groups were commended for their unusually high showing for this period. These groups and their supervisors are: Programming and Planning under Mr. R. Earnshaw, Material Inventories under Mr. G. Greskovic, Documentation and Reporting under Mr. C. Mann, Material Handling under Mr. R. Markham and Assembly Training under Mr. W. Tilley.

WATSON PROMOTED TO COMMUNICATIONS DEPT. MANAGER

The promotion of Mr. M. G. Watson to Manager of the Communications Department was announced on 29 June by Mr. W. C. Purple, Vice President for Engineering and Manufacturing.

MR. M. G. WATSON

During his sixteen years of engineering experience in communications, Mr. Watson has specialized in information processing techniques. Among the technical assignments he has worked on during his career at Melpar are included the development of a synchronous teletypewriter terminal equipment; circuit design on radio-teletypewriter multiplex terminal equipment employing optimum detection techniques; Project Engineer on military teletypewriter multiplex equipment; Project Engineer for development of a shipboard and airborne data processing and transmission system including analog-to-digital and digital-to-analog conversion, information programming and operational net control; Project Engineer on a data processing and transmission system for an aircraft tactical tracking, reconnaisance and control system; and as a Section Head directed the development of a matched filter communication system.

Mr. Watson joined Melpar in 1950 after earning his BSEE at Texas Technological College. Beginning as a Junior Electrical Engineer, his career at Melpar bears testimony to the Company's policy of promoting from within the organization in recognition of outstanding technical and administrative performance. A member of Tau Beta Pi (electrical engineering honorary scholastic society), he is also a member of the Acoustical Society of America.

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Published by

MELPAR, Inc.

A Subsidiary of

Westinghouse Air Brake Co.

3000 Arlington Blvd. Falls Church, Va.

Editor ..... S. E. Bush—Ext. 2182

TECHNICAL PAPERS PRESENTED BY MELPAR SCIENTISTS

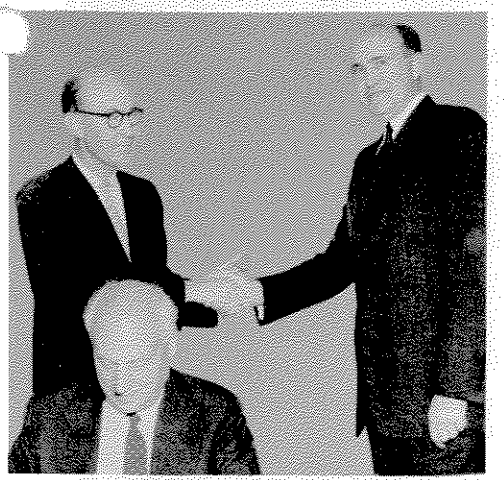
Several technical papers have been presented by Melpar scientists recently to different professional groups.

Dr. P. E. Ritt, Vice President-Research spoke to the Annual Meeting of Military Engineers on "Exploration of Extraterrestrial Bodies." Dr. Ritt reviewed the geopolitical as well as the purely scientific reasons for exploring extraterrestrial bodies and discussed some of the theories and problems to be investigated.

"Self-Organizing Models - Theory and Techniques" was the topic of a paper presented by Dr. E. B. Carne, Manager of the Advanced Computers Laboratory, to the National Aeronautical Engineering Conference (NAECON).

Two papers were presented to the Ohio State University - USAF Aeronautical Systems Division Symposium by Research Division scientists. A paper entitled "Electroforming as an Aid to Fabricating Dielectric Window Assemblies" was presented by Dr. J. L. Pentecost, Head of the Materials Science Laboratory and co-authored by Mr. J. Sayers, Branch Supervisor. The second paper entitled "Accurate Microwave Measurements of Dielectric Properties to Temperatures of 1,600° C." was presented by Physicist G. C. Zellner and co-authored by Dr. Pentecost, and Mr. L. K. Eliason, Branch Supervisor.

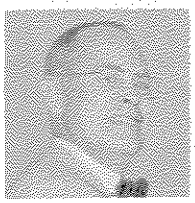
EMPLOYEE SERVICE PIN PROGRAM INITIATED



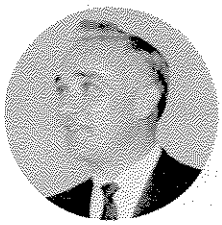
MELPAR'S OLDEST EMPLOYEES (IN YEARS OF SERVICE ONLY). . . Mr. B. H. Dennison (L), Technical Assistant to the Head of the Technical Staff is congratulated by Executive Vice President A. C. Weid (R) after receiving his 15 year Service Pin. Mr. Dennison's sixteen year association with Melpar spans nearly all of the Company's history. In front of Mr. Dennison is Mr. Thomas Meloy, Chairman of the Melpar Board of Directors and founder of the Company. During the ceremonies, Mr. Meloy and Mr. Weid had presented 15 year service pins to each other. Others with fifteen or more years of service are shown upper right.

Table photos at lower right are of our ten to ırteen year employees.

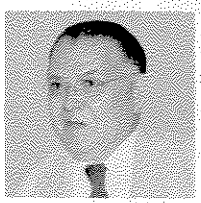
Photos by Glittenberg



Mr. J. W. Glover



Mr. E. A. Golden

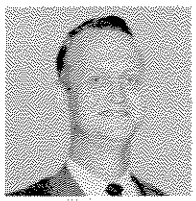


Mr. J. Farago

Mr. E. Bundy

Miss M. L. Kidd

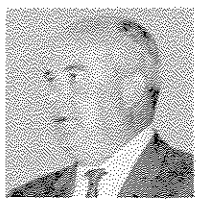
Mr. S. M. Sjosten



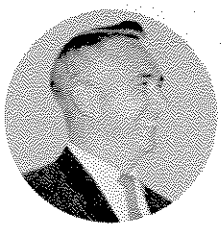
Mr. T. W. Nelson

Mr. R. H. Appel

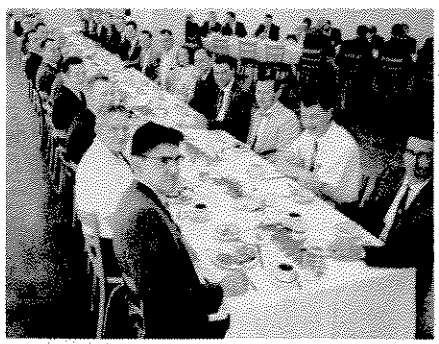
Mr. J. P. Chambers



Mr. R. T. Cosby



Mr. W. C. Purple



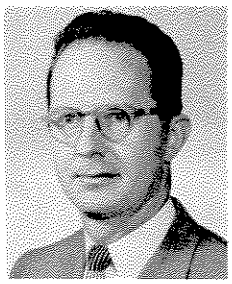
Melpar celebrated the inauguration of its Employee Service Pin Program on July 31st with a banquet feting all employees with ten or more years of service with the Company.

Congratulating those present on their faithful service during their long tenure with the Company, Executive Vice President A. C. Weid observed that "it is indeed gratifying to note that 166 out of approximately 500 employees who were with us ten years ago are still contributing to the successful growth of Melpar." Noting that 1,200 Melpar People have been with the Company five or more years, Mr. Weid said that "In a young and vigorous industry characterized by rapid change and equally rapid turn-over of personnel, Melpar is very fortunate to have such a large and rapidly growing block of experience upon which to base its present and future development."

All employees with six months to nine years service received the service pin to ich their length of service entitled hem on August 1st. According to Personnel Director (Mrs.) J. T. Lafrank, supervisors will present all subsequent service awards to employees on their individual anniversary dates.

MICHEL APPOINTED AS FIELD SERVICE DEPT. MANAGER

Mr. F. J. Michel has been appointed to the position of Field Service Department Manager according to Mr. W. C. Purple, Vice President for Engineering and Manufacturing.



MR. F. J. MICHEL

Mr. Michel joined Melpar as a Junior Mechanical Engineer during the Company's first year of operation and recalls working on the Company's first training device contract (the AN/APS-30 Trainer) in the former bicycle shop located in the District of Columbia which served as the site of the Company's first operations. He also recalls that it was receipt of a production contract for the AN/APS-30 that led to the Company's first move into expanded quarters in Alexandria, Va.

From 1946 to 1948 Mr. Michel worked on the design of drive mechanisms including an airborne radar pedestal, an automatic timing device, a calibrating mechanism, a truck-mounted telescopic mast, recorder drive mechanisms, and a magnetic fluid clutch. He left Melpar in 1948 to do graduate study at Columbia University, and returned in 1953.

As a Project Engineer after his return in 1953, he directed a mechanical group responsible for administration of a research and development contract on an airborne high-speed printer with start-stop type tape recorders and shaft digitalizers required to operate under extreme environmental conditions. Other project engineering assignments included the design of airborne servo mechanisms, an intervalometer, a complex plotting board, and recording tape handling equipment. Mr. Michel was also responsible for the electronic packaging of a major data handling system. Advancing to Head of the Mechanical Design Section and later the Peripheral Equipment Section on the Finder Program, he became System Manager for the installation and testing of Finder when it moved to field location and received a commendation letter from Convair for his management of this activity which was completed on-schedule and under-budget.

Graduating from City College of New York in 1944 with a BME, Mr. Michel received his MSME from Columbia University in 1949. He is a member of the American Society of Mechanical Engineers, Pi Tau Sigma, and Alpha Mu Epsilon.

GOING UP!

We are pleased to note the unusually long list of promotions received by Melpar People during June and July. They reflect not only an accelerating rate of Company growth, but achievement of the individual professional development that makes Company growth possible. Congratulations and keep up the good work!

Promotions include A. J. Andrews to Shop Foreman, L. Bademian to Principal Engineer, and G. S. Baker to Senior Engineering Services Representative.

A. P. Bannon advanced to Secretary, W. H. Boswell to Planning Supervisor, and J. R. Butterfield to Inspection Superintendent.

J. H. Carr moved up to Planning Coordinator, B. W. Castro to Executive Secretary, and J. R. Charlton to Inspection Foreman.

H. D. Childers was promoted to Senior Design Engineer, C. J. Cooper to Engineering Assistant, and W. F. Cowan to Planning Supervisor.

E. L. Cox stepped up to Production Control Supervisor, J. T. Critchfield to Senior Engineering Assistant, and W. T. Cullipher to Central Data Processing Supervisor.

W. E. Curry advanced to Planning Supervisor, C. W. Deuchar to Planning Coordinator, and G. E. Donohue to Inspection Supervisor.

K. E. Dreyer moved up to Inspection Supervisor; H. L. Dudley to Manager of Minuteman Reliability, and R. V. Gerace to Assistant Quality Engineering Supervisor.

J. R. Giamporcaro advanced to Chief Clerk, G. M. Greskovic to Planning Supervisor, and J. T. Griffith to Assistant Quality Engineering Supervisor.

J. F. Hilfiker was promoted to Chief Plant Engineer, C. H. Huether to Chemist, and O. T. Inge to Senior Physicist.

R. Jamison stepped up to Engineering Assistant, F. H. Jaynes to Head of the Fuze Laboratory, and R. H. Johns to Planning Supervisor.

S. Kissin advanced to Consulting Project Engineer, I. Krause to Planning Coordinator, and D. E. Lewis to Test Superintendent.

C. A. Little moved up to Senior Technical Illustrator, W. J. Lunglhofer to (Vendor) Quality Control Supervisor, and J. F. Luxford to Shop Foreman.

C. H. Mann was promoted to Planning Supervisor, J. J. Mayman to Senior Electrical Engineer, R. B. McAneney and J. E. McClelland to Quality Control Engineer, and W. McIntyre to Senior Electrical Engineer.

G. F. Miller stepped up to Principal Engineer, J. F. Murphy to Staff Secretary, and C. W. Norris to Senior Quality Control Engineer.

J. D. Novak advanced to Senior Planner, R. J. Owens to Test Supervisor, and P. L. Payne to Senior Mechanical Engineer.

R. S. Peck moved up to Production Control Supervisor, C. H. Pitts to Planning Supervisor, and G. E. Powell to Quality Control Field Engineer.

W. E. Scorgie was promoted to Technical Editor, J. S. Scovell to Quality Engineering Supervisor, and F. A. Serafin to Chemist.

B. E. Serrin moved up to Manager of Minuteman Production Control, E. L. Shull to Junior Engineering Assistant, and J. R. Shutt to Junior Chemical Engineer.

L. A. Snapp advanced to Secretary, R. J. Sorrell to Planning Supervisor, and P. E. Taylor to Head of the Antenna Laboratory.

R. T. Thomas stepped up to Inspection Supervisor, P. A. Thompson to Manager of Minuteman Quality Control, and B. G. Tregub to Principal Engineer.

J. P. Vachon was promoted to Head of the Technical Information Center, M. G. Watson to Manager of the Communications Department, and W. H. Welsh to Assistant Quality Engineering Supervisor.

C. B. White advanced to Field Buyer-Expediter, T. W. Woodward to Senior Planner, J. E. Worden to Planning Coordinator and R. G. Zelloe to Production Control Supervisor.

HELICOPTER

(Continued From Page 1)

a variety of environmental effects will be included to further enhance the realism of the simulation.

The Company has recently produced the simulator for the HSS-2 Helicopter. This was the first and is the only full-flight regime helicopter trainer in military service. The more complex tandem-rotor simulator for the HRB-1 will rely on the background achieved during development of the HSS-2 trainer and will demand still further advances in simulation design.

The design, fabrication and testing of the trainer will be accomplished under the direction of T. G. Walkinshaw, Manager of the Computer Department's Simulation Laboratory.