

MELPAR-A-GRAPH

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Several Top-Level Organization Changes Made

W. Purple Heads Engineering, Manufacturing; Dr. Ritt Appointed New Director of Research



Vice President W. C. Purple



Dr. Paul Ritt

Several top-level organization changes including shifts in duties of two vice presidents and appointment of a Director of Research were put into effect by Melpar Management on October 24.

Former Research and Engineering Vice President C. B. Raybuck was named Vice President for Contract Management and Mr. W. C. Purple, Jr., named Vice President for Engineering and Manufacturing, according to Executive Vice President and General Manager E. M. Bostick.

Mr. Lincoln Brown was named Production Division Manager, reporting to Mr. Purple. Mr. Purple was formerly Vice President for Production.

Dr. Paul E. Ritt, Manager of the Physical Sciences Laboratory, was named Director of Research by Mr. Bostick. In his new capacity, Dr. Ritt will have staff cognizance over all Melpar research activities in addition to line responsibilities over the Physical Sciences Lab.

As Vice President for Contract Management, Mr. Raybuck will direct the activities of the Advanced Development Staff, Engineering Services and Contract Administration.

Former Chief Engineer R. S. Butts was named Technical Advisor to Mr. Bostick.

\$2 Million Contract Received

Melpar's Production Division has been awarded a contract in excess of \$2 million by Convair Fort Worth, a Division of the General Dynamics Corporation, for manufacture of airborne recording equipment for the B-58 Hustler aircraft, according to Executive Vice President and General Manager E. M. Bostick.

SPD's New Products Shown at Convention

Melpar's Special Products Department introduced two new commercial products to the electronics industry at the National Electronics Conference held in Chicago on October 10-12.

Both products—the UHF Bandpass Filter and the new line of MELPAK® Casting Resins—attracted considerable attention at the convention, according to SPD Manager E. H. Bradley.

A large, four-panel display exhibiting the Department's new products was shown at the convention. Messrs. B. H. Dennison, J. Frasca and D. Bier, all members of SPD, accompanied the exhibit to Chicago.

Since the convention, the Department has received over 300 written requests seeking additional information on several of the new products.

L. O. Gilstrap Gives Lecture On New Science of Bionics

Senior Member of the System Analysis Groups L. O. Gilstrap presented a talk on Bionics at the Evening Technical Lecture held in the Falls Church cafeteria on October 26.

At the meeting, Mr. Gilstrap discussed Bionics' adaptability to modern electronic devices and equipment and covered some of the problems being encountered with this new approach. He also discussed Melpar's progress in the field.

Speaker, subject and date for the next lecture will be announced soon.

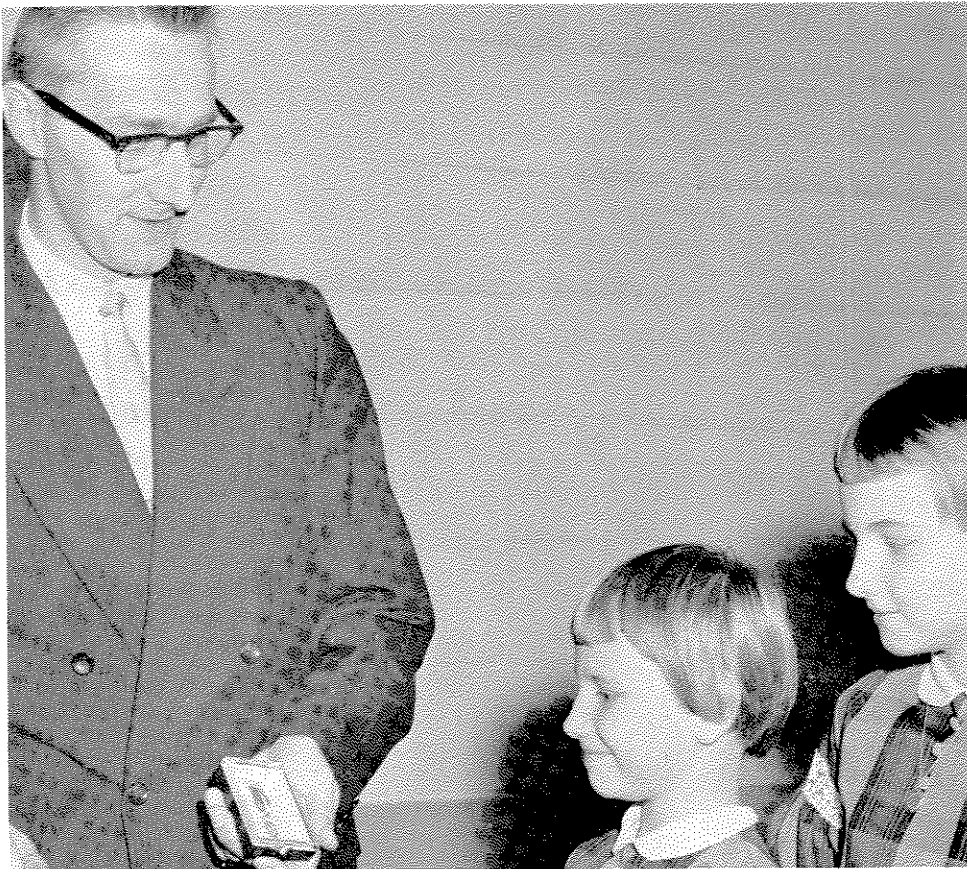
Holiday

Melpar will, as in the past, join the nation in observing the Thanksgiving Holiday on Thursday, November 24. Employees are, however, scheduled to return to work on Friday, November 25.

Melpar Conducting Studies On Hardened Antenna Sites

The Air Force Command and Control Development Division of the Air Research and Development Command has awarded Melpar a \$92,845.00 contract to conduct studies on Optimum Structures for Hardened Antenna Sites.

The project has been assigned to Project Engineer C. W. Morrow of the Company's Antenna Laboratory.



Melpar Mechanical Technician John E. Fuchs proudly shows his new Americanism award to his daughters Elizabeth (center) and Rosemarie. Mr. Fuchs received the national award from the Daughters of the American Revolution.

Melpar Technician John E. Fuchs Receives DAR Americanism Award

Probably the proudest Melpar employee these days is Mechanical Technician John E. Fuchs of the Leesburg Pike plant. Mr. Fuchs, a native of Germany and a naturalized U. S. Citizen, recently won the Daughters of the American Revolution's top national award for Americanism.

Mr. Fuchs received his award during a ceremony sponsored by the Elizabeth McIntosh Hammill Chapter of the DAR at the VFW Post Home in Mannassas, Va. on October 29.

The DAR's Americanism award is presented to naturalized citizens who show outstanding qualities, including trustworthiness, dependability, exemplary ideals and interests, leadership, patriotism and devoted love of our country. It has been five years since the coveted award was presented in the state of Virginia.

Mr. Fuchs came to the U. S. from Germany in October, 1953. He served two years with the U. S. Army and joined Melpar in 1956. He presently lives in Mannassas with his wife and two young daughters.



Filbuster, I'd like you to meet our new Naval Expert. . . .

Wakeford Co-Authors Book On Missiles and Spacecraft

Special Assistant to Melpar's Advanced Development Staff Ronald C. Wakeford is co-author of a new 411 page book entitled *International Missile and Spacecraft Guide*.

The book presents technical data and details on important rockets, missiles and space vehicles of the United States, Soviet Union, Great Britain, France, Sweden, Germany and other countries, according to a review in the October issue of *Electronic Equipment Engineering*.

Development of the missile as a military weapon and a research tool in the past 50 years is described in Mr. Wakeford's book, co-authored by the Chief of the Space Systems Information Branch Frederick I. Ordway, III and George C. Marshall of NASA.

The book is available from the McGraw Hill Book Co.

Kindley Presents Paper

Supervisor of Melpar's Physical Sciences Laboratory's Organic Chemistry Branch Lee M. Kindley presented a paper entitled "Organo Phosphorus Epoxides" at the Association of Paper and Pulp Industry Conference, held in Syracuse, N. Y. on Friday, October 19.

New Products Corner

(This is the eighth in our series of reports on new products being marketed by Melpar's Special Products Department.)

CERAMIC ADHESIVE

Developed primarily for bonding lightweight ceramic dielectrics like MEL-FOAM, Melpar's new Ceramic Adhesive is an excellent high temperature, water resistant cement for all-around ceramic to ceramic bonding. Other possible applications for the new material include potting of coils, resistors, etc., for thermal protection, and cementing furnace linings.

Super-strong Ceramic Adhesive cures at only 220°F and attains a progressively higher degree of mechanical strength with increased heating. During use, Ceramic Adhesive retains its superior properties without flaking or disintegrating in temperatures up to 2600-2700°F.

MELPAR-A-G-R-A-P-H

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Data Processing & Support Systems

Melpar Department Among Best in Computer Sciences

Melpar's Data Processing and Support Systems Department, the Company's top team in the field of digital and analogue computers, is one of the nation's best trained and experienced groups in engineering and development of data processing systems and simulation and training equipment.

The Department is managed by L. C. Wright and is composed of two different laboratories—the Ground Data Handling Equipment Laboratory managed by L. Lerner, and the Simulation and Training Systems Laboratory, managed by K. C. Streeter.

Over 125 Engineers compose the nucleus of these combined groups. They are, in turn, supported by nearly 50 drafting and clerical personnel. Another eighty persons are presently being used to furnish other services for the Department's current projects.

Headquarters for the Department are located at the Leesburg Pike plant. The GDHE Lab has over 35,000 square feet of floor space at LP and Simulation and has additional 24,000 square feet at the Shirley plant in which to conduct its operations.

Largest of the present GDHE Lab projects is the Finder system, a special purpose computer requiring 80,000 transistors and over a million feet of wire. This system—being built for the Air Force—is said to be the largest special purpose

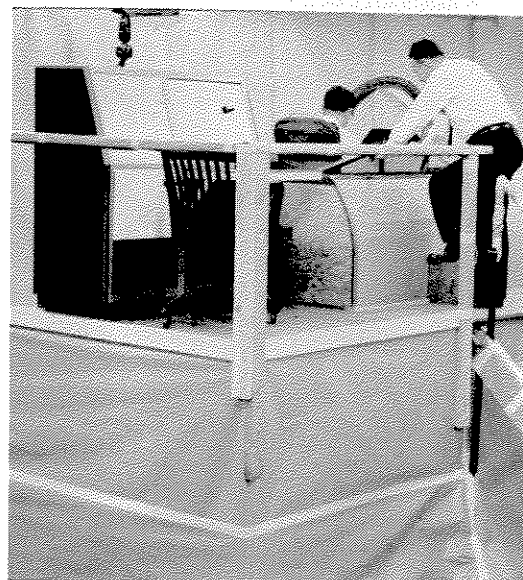
computer system ever built.

Other projects under development in GDHE include a Voice Data Processor for the Air Force and Ground Support Equipment for Finder. Projects such as Finder and its predecessor GIRDHS have provided excellent digital computer experience for the GDHE Lab.

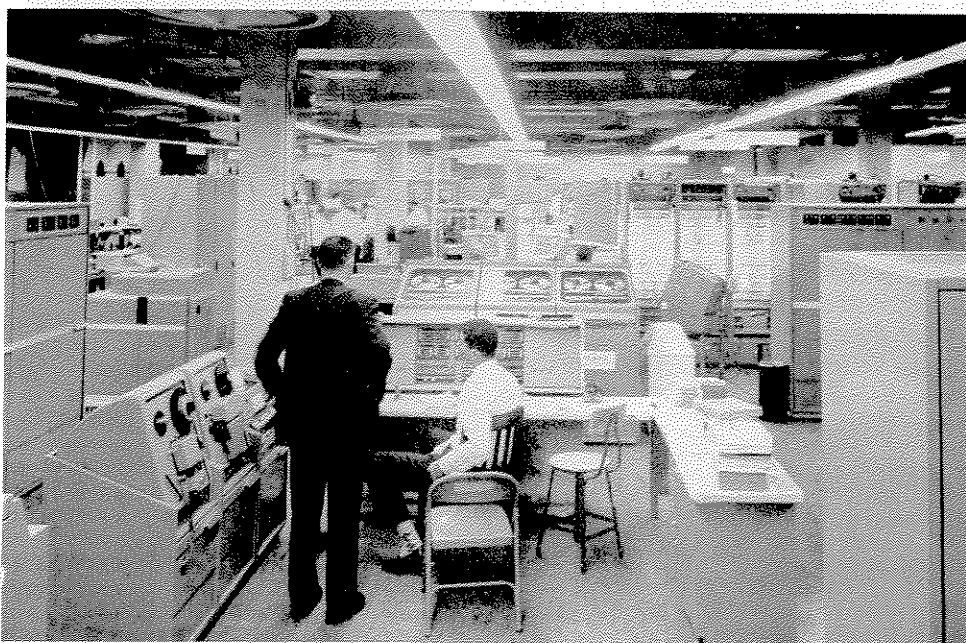
The Simulation Lab has a long and successful history in providing simulation systems and training devices for the military. Before its present projects—the HSS-2 Navy helicopter simulator, and trainers for the Bullpup Air-to-Surface missile, GAM 83 A/B—the Lab designed numerous equipments for the Navy and the Air Force. Included are the F-86, F-100A, F-101A, F-101B, A-4D and A-4D2N aircraft simulators.

The Lab recently delivered a classroom trainer for the HSS-2 and will soon deliver weapon system simulators for the same aircraft. The HSS-2 is the first complete helicopter simulator ever built and can simulate all the craft's modes of flight, as well as all of its systems.

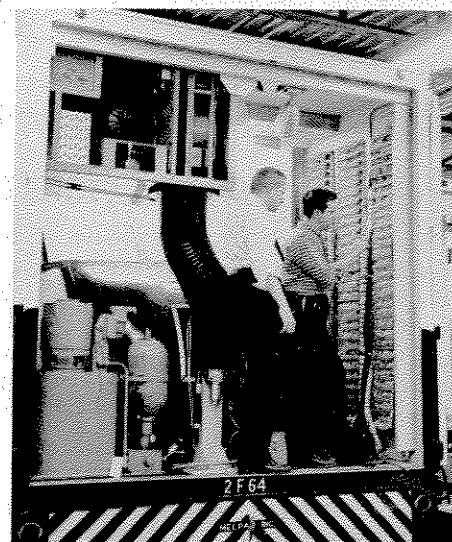
Under the newest of its contracts, the Simulation Lab is designing some of the first missile crew-training devices ever built—guidance and practice control trainers for the Bullpup. The Lab's operations are extremely flexible and the group is capable of handling simulation projects of any magnitude—from small jobs through complete weapon systems.



BULLPUP MOCK-UP . . . Two members of the Simulation and Training Systems Laboratory, Engineer Jean G. Charitat (seated) and Senior Engineer John E. Conant, work with a mock-up of a guidance and practice control trainer for the Bullpup Air-to-Surface Missile currently being developed by the Lab for the Air Force. The Bullpup trainer is one of the first missile crew training devices ever built.



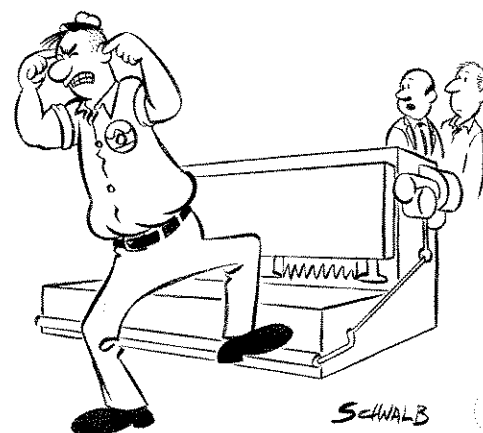
FINDER . . . This large assortment of computer racks is an integral part of Finder, a special purpose computer being developed by the Ground Data Handling Equipment Lab for the Air Force. Called the largest special purpose computer ever built, the equipment contains over 80,000 transistors and a million feet of wire. Among its capabilities, Finder stores over 33,000,000 bits of information.



HSS-2 HELICOPTER SIMULATOR . . . Senior Engineer Tom Alnutt (left) and Lead Wire Technician Andrew J. Andrews check out the circuitry in the HSS-2 helicopter simulator van. The simulator, being developed by the Simulation Lab for the Navy, is the first complete helicopter simulator ever built.

Photos by Norton

Mr. Symanoskie is presently serving as Chairman of the Engineering Documentation Section's committee on "Spring Mechanical Drawing Requirements," and Secretary for the "Grading Scales for Quality of Drawings" committee. Engineering Documentation is a sub-section of the Association's Production Techniques Division.



I'm afraid Limpwit just isn't cut out to operate a power shear!

Senior Engineer Keith D. McDonald of Melpar's Radiation Systems Laboratory presented a paper entitled "A Fast Response Matrix Switching Technique for use with an Electronically Steerable Array" at the IRE's Sixth National Symposium on Communication in Utica, N. Y. on October 4.