MELPAR-A-GRAPH

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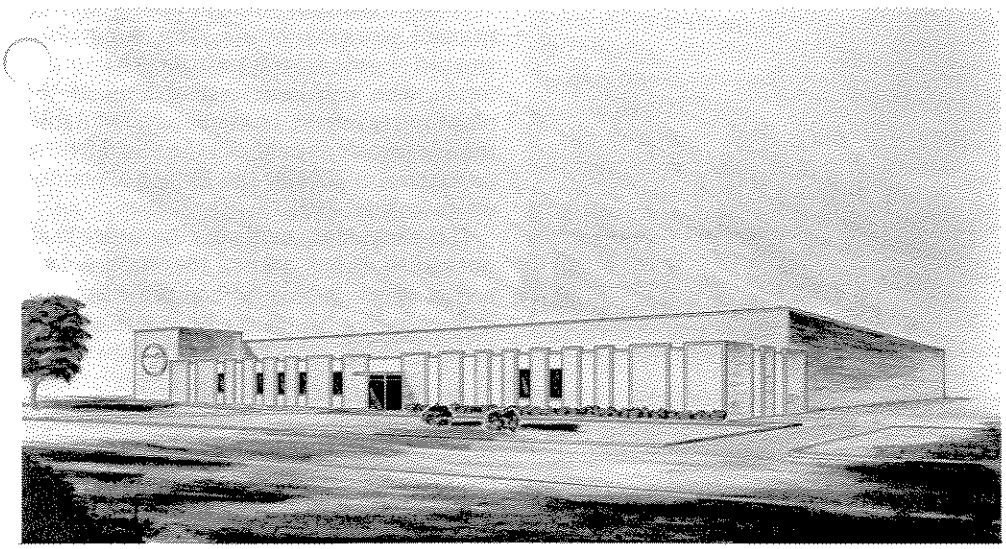


Artist's conception of new Environmental Test Laboratory. The architect is George A. MacDonald of Falls Church; the builder, Atlantic States Construction Corp.

GROUND BROKEN FOR NEW ENVIRONMENTAL TEST LABORATORY

Ground was broken June 5 for a new Melpar Environmental Test Laboratory (ETL). The modern building, to be located in the Ravensworth Industrial Park in Springfield, Va., will house equipment for simulating the extremes of temperature, vibration, shock, and other environmental conditions under which Space Age electronic and electromechanical systems must operate. The complete test facility will be valued at just over $1 million.

Designed primarily for support of Melpar contract work, the ETL will be able to perform environmental tests to most defense, federal, and standard test specifications. The laboratory will also be made available to companies without their own resources for testing. In fact, the new ETL will offer an industrial environmental testing service not now available in the Washington area.

The plant will be of masonry and steel construction and will have 22,000 square feet of floor space. Scheduled completion date is November 1. Eli Parrish will direct the laboratory.

Melpar Has Equipment, Experience

Melpar has been engaged in environmental testing of aircraft, missile, and space systems for over 12 years. In that time it has acquired a fine array of test equipment and a lot of experience. Most of the ETL equipment falls into one of two classes, dynamic simulation equipment or climatic simulation equipment, according to the kind of environment to which it subjects the items it tests.

The dynamic environments that can be simulated by the ETL are acceleration, vibration, and shock. For acceleration testing, the laboratory has a specially built centrifuge with a capacity of 15,000 G pounds. For vibration testing, both electrodynamic exciters and mechanical vibrators are available. With this equipment the laboratory can perform sine, random, and mixed sine-random vibration testing at high and low temperatures. For shock testing, both medium-impact and high-impact machines are available. In addition, the Company has bought a hydraulic shock and vibration machine.

(Continued on Page 3)

Melpar Small Business Program Praised

It is the policy of the Department of Defense to place a fair proportion of its purchase orders and contracts for supplies, research and development, and services with small business concerns and with concerns in labor-surplus areas. The Department encourages its contractors to follow the same policy, and it takes stock of their performance through monthly reports from the contractors and through periodic visits by a review team.

How closely Melpar's policy is in accord with DOD's is revealed in a letter from Defense Contract Administration Services Region (Pilot Test), Philadelphia, Pa. The following is an excerpt from the letter, which was addressed to Vice President and General Manager W. C. Purple:

This office wishes to acknowledge the splendid accomplishments of the Small Business and Labor Surplus Area Subcontracting Programs as conducted by your company. This was evident by the dollars and percentage of subcontracts and purchases awarded to small business as noted by Mr. John F. Malley of this office and Mr. C. Estes of the Richmond Regional Office, Small Business Administration, during their review of your facility on 19 May 1964.

Electron Gun Study Contract Awarded Company

Melpar announced recently the receipt of an Air Force contract to study the intersection of low-energy, monoenergetic electron and molecular beams, with regard to the optical excitation of air. A series of novel electron gun assemblies will be constructed in accordance with the results of the study.

The program is being undertaken for the Air Force Cambridge Research Laboratories, Office of Aerospace Research, Hanscom Field, Bedford, Mass. Principal investigator is Dr. Roger C. Jones, Research Associate on the staff of Dr. Paul Ritt, Vice President for Research.

Melpar West Virginia Corp. Gets $4 Million Contract

Melpar West Virginia Corp., a wholly owned subsidiary of Melpar, has been awarded a $4,050,336 fixed-price contract for 1235 infrared searchlight sets. The award was made by the Department of the Army, Engineer Procurement Office, Chicago, Ill.

Work will be done at plants of Melpar West Virginia Corp. located in Fairmont and Beckley, West Va. Both of these areas are designated as labor surplus. The company will substantially increase its work force at both plants.

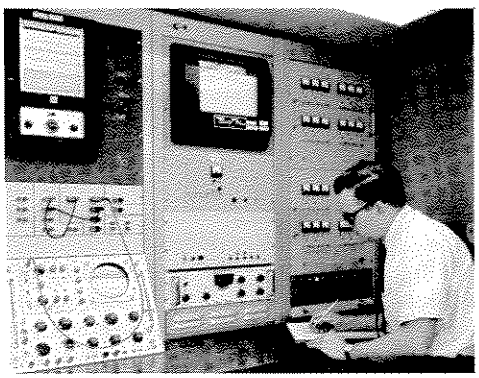
Meteorology on the Move

MOBILE RESEARCH ARRAY ADAPTS ITSELF TO WIDE RANGE OF FIELD STUDIES

Melpar has a new facility for meteorological research, believed to be comparable to the best systems available—and it's mobile. It is a completely self-contained data-recording system, designed to receive signals from a full array of instruments. At present it is being used in field trials of the "jungle canopy" meteorological study that Melpar is making for the Army (*Melpar-a-graph*, October 1963).

According to John O. Morton, principal investigator on the study, the system now records 40 separate outputs from wind and air temperature sensors, but it can be easily adapted to any sensor that gives an analog (variable voltage) signal. The usual method is to record each channel separately on parallel magnetic tape tracks; Melpar's new system puts all the signals on one track, a much more efficient method. The idea was suggested by John Mould and has been worked out by Loren Linstrom and Lee Herrington. All three are Research Division scientists.

Meteorologist Kenneth Benson with lab on wheels.



Lee Herrington at console of meteorological facility.

The main value of this new Company facility is that it enables Melpar to set up an elaborate meteorological research array very quickly and economically wherever there is an adequate road for wheeled vehicles. All that is needed is a small electric generator or convenient power lines. The recording system can easily be adapted to a wide range of field studies in atmospheric turbulence and diffusion, air pollution, and microclimatology.

Length-of-Service Pins Awarded at Luncheon

Employees marking service anniversaries with Melpar were guests of honor at a luncheon in the cafeteria of the Falls Church plant on June 17.

Clifford W. Ford of Program Management received the ruby-studded pin denoting 15 years service.

Ten-year pins were awarded to James G. Anding, Sam T. Dellinger, Carlos Dolinger, Carol S. Hess, Donald C. Hinchey, Margaret E. Hinton, William A. Huffman, Edward C. Johnston, George W. Koditek, Harold D. Potter, Charles E. Shattuck, Herbert H. Thompson, and Robert C. Wright. Also marking their tenth anniversary with the Company, but unable to attend the luncheon were Frank A. Deviny, Emmett L. Stratton, and James W. Swing.

Pins given in June brought the total number of 15-year pins awarded up to 30 and the number of 10-year pins to 280.

TIC Offers New Service

Do you find yourself victimized by the so-called "information explosion"? Do you feel that needed information is just beyond your reach? Are you spending precious time trying to find information which you know you have on file? In an effort to help you meet your information needs, the Technical Information Center will institute informal "technical literature awareness" sessions Tuesday afternoon at 2:30 P.M., during the month of July, in its Falls Church location.

The miniature Cook's tours will include fundamental instruction in the use of the library facilities, utilization of the most recent literature-searching tools, and as the pièce de résistance, a display of inexpensive information-retrieval systems designed for personal files. Since tours will be limited to small numbers of persons, please notify the Center if you wish to attend, by calling extension 2374.

SUPERVISORS' FORUM

This month Larry Shaw discusses the action a supervisor should take in the event of illness of, or injury to, an employee while at work.

If an illness or injury occurs during normal working hours, the supervisor should immediately notify the plant nurse, who will issue instructions. If the plant nurse is not immediately available, the supervisor should call the Chief Nurse on extension 2206 or the Paging Operator on extension 2101.

If the incident occurs during other than normal working hours, the supervisor's action depends on whether the employee is ill or injured, and on how seriously ill or injured he is, as outlined below:

A. Illness—not job related

(1) Minor illness: The supervisor has the employee cared for in the dispensary or first aid room in accordance with instructions posted on the wall of the dispensary concerning the use of first aid facilities. The visit must be recorded on Form Per-178 located in each facility. If the employee does not seem to be incapacitated for work he returns to his duties. Otherwise the supervisor permits the employee to return home by the most appropriate means.

(2) Acute illness, immediate medical attention or hospitalization indicated: The supervisor requests the guard to call (a) the Rescue Squad, (b) the emergency room of the hospital to which the employee is to be taken, and (c) a physician if so requested by the employee. The supervisor then notifies the employee's family.

B. Injury—occupational

(1) Minor injury: The supervisor has the employee cared for in the dispensary or first aid room in accordance with instructions posted on the wall of the dispensary concerning the use of first aid facilities. The visit must be recorded on Form Per-178 located in each facility.

(2) Serious injury: The supervisor requests the guard to call (a) the company physician, (b) the Rescue Squad, and (c) the emergency room of the hospital to which the employee is to be taken. If the employee's injury results in a hospital admission, the supervisor then notifies the employee's family.

The supervisor must inform the cognizant plant nurse or the Chief Nurse at the Falls Church Plant of all incidents which occur after regular working hours. This should be done on the morning of the next scheduled working day.

MESSING COMMENDED FOR FIELD WORK

Field Service Engineer William J. Messing recently completed a 21-month tour at Chiayi Air Base, Republic of China, where he serviced a Melpar-designed flight simulator. His contribution to the Air Force Section, Military Assistance Advisory Group, was noted in a letter from Lt. Col. John A. Salyards, Jr., Team Chief, who wrote:

> "His professional knowledge, diligence, and personal behavior have been of the highest standard and were a direct contribution to the success of this Advisory Team. Additionally, his ability to obtain and maintain rapport with the Chinese made him an exemplary representative of the American people."

Mr. Messing is en route to the United States for reassignment.

Ehlman, Sutherland Rescue Sailors

A fierce squall hit Washington on Sunday afternoon, May 17, and capsized 15 sailboats in the Potomac near Hains Point and Bolling AFB. Bill Ehlman of Personnel and Con Sutherland of Publications were returning from waterskiing in a 17-foot powerboat when they saw the sailors' predicament. They rushed to aid two harbor police boats in the rescue operations. Braving lightning and 40-knot winds, the two Melpar men made several trips to bring waterlogged sailors in to shore.

ETL (Continued from Page 1)

This should be in operation in the new building toward the end of the year.

For climatic testing, Melpar has seven chambers. Temperatures up to +800 degrees Fahrenheit and down to −100 degrees Fahrenheit, altitudes to 100,000 feet, and humidity up to 100% can be maintained in one or more of these chambers. A walk-in stratosphere chamber provides a means of testing large items under single or combined environments. One of the seven chambers is a salt-fog chamber, which can be used to determine the corrosion resistance of articles to be exposed to sea environments.

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Skowron, Brinkman Visit Plant

COMPUTER PICKS WINNERS OF TICKETS TO MELPAR NIGHT

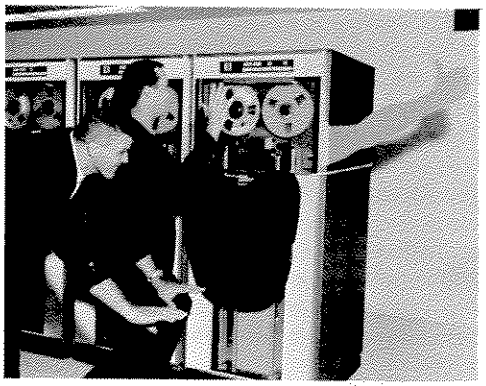
In keeping with the great American sport, hating the umpire is an acceptable pastime. In the case of non-winners of Melpar Night tickets, hate the mechanical umpire—our IBM 1410 computer.

Having no beer barrel handy, and wanting to get the most from our computer system, we turned the entire selection job over to the programmer types. They fed numbers, names, and assorted data into the computer for a random selection of winners.

Bill "Moose" Skowron and Eddie Brinkman, two of the Washington Senators who will square off against the New York Yankees on July 10, saw the 1410 in action. Paying a visit to the Falls Church plant in connection with Melpar Night, first baseman Skowron and shortstop Brinkman obligingly posed in the computer room with some of the first winners picked by the machine.

Like the rest of its kind, the 1410 is all brain, no heart; it did a completely impersonal job. Programmed to select names at random, it did just that. Then it printed out a list of the names it had chosen.

If the first person on the computer list had sent in a request for tickets, he got them; if he hadn't sent in a request, his name was crossed out. The second person on the list got the same treatment, as did the third, fourth, and so on until all the tickets were gone.



KILL THE UMPIRE! You didn't win tickets? You want to do a little complaining? Bill Skowron and Eddie Brinkman demonstrate how to get a rhubarb going. Bill motions "Safe!" while Eddie throws up his hands in utter disbelief at the ump's decision. The ump doesn't say a word, just rolls his big blue eyes.

The number of tickets given to employees totaled 1026. The May *Melpar-a-graph,* in announcing Melpar Night, said that only 500 tickets would be given. However, in the day or two following the announcement, requests for tickets poured into Personnel. Before half the requests were in, management saw the trend and bought an additional 526 seats.

SKOWRON, BRINKMAN CREDITED WITH ASSISTS. The two visiting Senators lent a hand by distributing tickets to some of the home team: Jim Fisher, Electronics Research Lab; Melvin Barrett, Duplicating Services; Bill Skowron; Eleanor Lavelle, Payroll; Eddie Brinkman; and Fred Lemon, Manufacturing.

Photos by Glittenberg

VIP: It All Adds Up

As you know from news articles and TV broadcasts, space-exploration and national defense items are being carefully reviewed to determine their value in overall national programs. The costs of these programs place a heavy burden on each of us as taxpayers. That is one reason why we should encourage and support efforts for optimum cost effectiveness. There are other, equally cogent reasons.

Here is a quote from a letter that President Johnson sent to defense contractors:

"It is my desire that you establish an affirmative program of cost reduction in the performance of Defense contracts, both those which you now hold and those which you may subsequently receive. If you already have such a program in being, then I call on you to accelerate, expand, and intensify this effort.

"I have asked the Secretary of Defense to take into account the accomplishments of contractors who successfully reduce the cost of Defense procurement, when making future source selections, and in determining profit and fee rates on non-competitive negotiated contracts."

Last month the *Melpar-a-graph* reported that Melpar contributed the highest savings in this five-state Defense Contract Administration Service Region in fiscal year 1964. We're proud of that accomplishment, and have pledged to President Johnson and Defense Secretary McNamara our continued and intensified efforts in cost reduction in the coming year.

Will Melpar benefit from your cost reduction ideas? Yes! As you can see, cost reduction will not only improve profits, but will maintain our high performance rating and enable us to obtain more business.

Will you benefit? You bet you will! Not only will you earn immediate Company recognition of your ideas, but by keeping the Company's rating high, you will contribute to your own opportunity for growth.

The Value Improvement Program gives you a chance to help your country, your Company, and yourself. Send in your ideas now!

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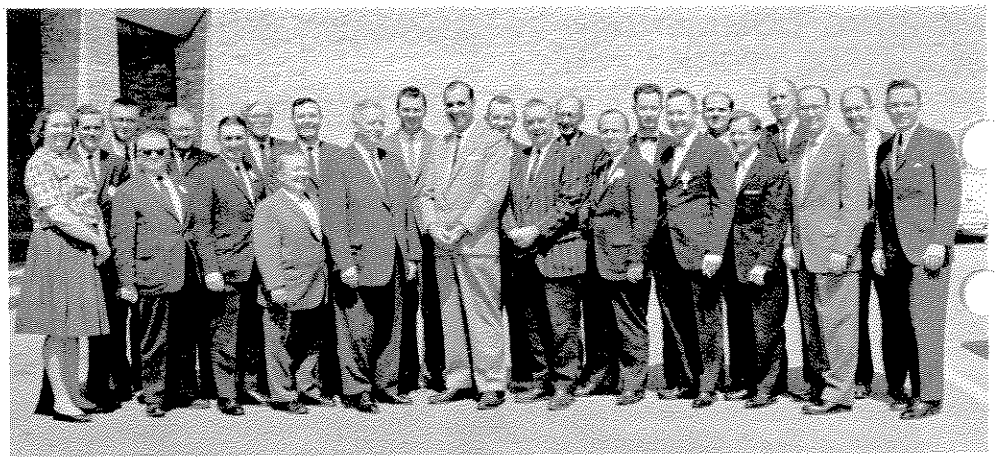
The following recently had suggestions accepted and so became eligible for the Value Improvement Suggestion of the Year award: Ted T. Cilley, Hamilton Cross, William E. Davis, Harold J. Eiler, Charles A. Funkhouser, Virginia MacMinn, Russell J. Owens, C. Eugene Perry, Carl E. Strawbridge, and Bernd Vossen.

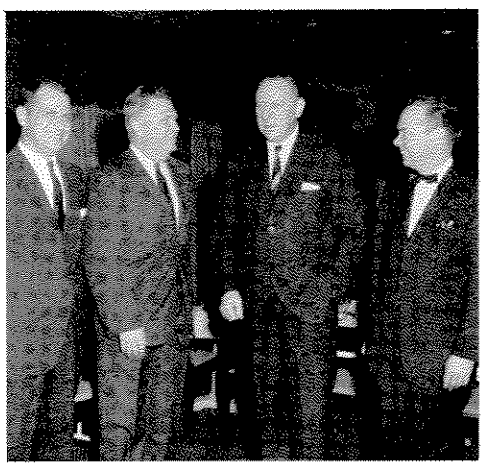


"PROJECT 60" TRAINING SESSION. These civilian employees of the Army, Navy, Air Force and Defense Supply Agency took part in a Department of Defense training session recently held at Melpar's Falls Church plant. They were taught procedures for implementing "Project 60," the consolidation of the contract administration services of DOD.

Heading the team of four instructors was Albert Bland (front row, sixth from left) of the Baltimore District Office, Defense Contract Administrative Services Region. Standing next to Mr. Bland, fifth from left, is John H. Adams, Chief, QA Branch, Melpar Plant Office of Defense Contract Administration Services.

On the Dais . . .

Dr. Gordon C. Blanchard and **Dr. Robert T. Foley** of the Research Division were co-authors with Paul S. May, formerly of Melpar, of a paper, "Biochemical Hydrogen Generators," presented by Mr. May at the Eighteenth Annual Power Sources Conference. The conference was held May 19-21 in Atlantic City, N.J. It was sponsored by the Power Sources Division, U. S. Army Electronics Research and Development Laboratories, Fort Monmouth, New Jersey.



FLYNN HONORED BY AFCEA CHAPTER. Edward C. Flynn (right), Melpar Engineering Services Representative, Fort Monmouth Office, was awarded a certificate for outstanding achievement as vice president in charge of programs for the Fort Monmouth chapter of AFCEA (Armed Forces Communications-Electronics Association) during 1963-64. He was also elected first vice president of the chapter for 1964-65. Shown at a recent meeting with Mr. Flynn are (left to right) Col. M. Werksman and Col. D. Langham of the Electronics Command, Fort Monmouth, and Robert Considine, writer for King Features Syndicate.

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S. Joseph Campanella, manager of the Electronics Research Laboratory, and **David C. Coulter** and Dr. James M. **Pickett** of the laboratory staff attended the meeting of the American Acoustic Society in New York City on May 6-9 and presented papers describing Melpar's studies in speech bandwidth compression and speech pattern recognition.

The papers were "Formant Tracking by Majority Weighting of Period Measurements," by Mr. Coulter and Mr. Campanella; "Predictions of the Course of F2 across Consonants," by Dr. Pickett and Mr. Coulter; and "Speech Recognition by Formant Pattern Matching in *N*-Dimensional Space," by Mr. Campanella and Paul Engler. Mr. Engler also is a member of the Electronics Research Laboratory staff.

These writers will be considered for the Melpar Author of the Year award.

GOING UP!

Best wishes for continued success to the following, who recently won promotion. The titles following their names are their new ones.

Lawrence E. Clifford, Junior Chemical Engineer; George K. Clouden, Methods Engineer; and Charles W. Sisk, Planning Supervisor.

George L. Testerman, Senior Technic Illustrator; R. Raynham Townsend, Programmer; and Eddie L. Toler, Senior Electrical Engineer.