MELPAR-A-GRAPH

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

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ON THE LINE . . . Assemblers fashion the AN/DPN-48 Beacons soon to be used by the Regulus II Missile. Left to right V. L. Blanton, M. E. Kavanglopas, E. B. Edwards, Task Leader J. G. Garcia, L. E. Sager, G. E. Gilbert, Foreman N. J. Haines, and Ann Phillips. Photo by Tatroe

REGULUS MISSILE TO USE MELPAR TRACKING BEACON

Arlington Division's production of AN/DPN-48 Radar Tracking Beacons, an outgrowth of beacon work for the U. S. Army Signal Corps, will be increased under terms of a three quarters of a million dollar contract from Chance Vought Aircraft. The beacons will enable radar to track the retrievable Regulus II medium range missile currently in production for the Navy's Bureau of Aeronautics.

Called on for a substantial number of beacons, Manufacturing Manager Berge Thomasian has assigned the job to Project Engineer M. E. Hill of Section Head C. J. Rogers' section. Project planning assignment goes to W. R. Davis of E. M. Waro's Planning Section.

The Regulus II is a submarine launched missile with speeds in excess of Mach 1 and is powered by a turbojet engine with two solid propellant boosts. It is the fourth missile to utilize the tracking reliability of the DPN-48.

Arlington Division had previously delivered beacons to be used with Redstone, Vanguard and Jupiter missiles. Melpar also serviced the beacons 'on location' at Cape Canaveral, Florida prior to earth satellite launching attempts. Junior Engineers J. O. Pennington and J. E. Glover carried out that assignment.

ARLINGTON PURCHASES TO BE MADE BY NEWLY ESTABLISHED GROUP

Establishment of a group of purchasing employees to handle procurement for the Arlington Division was announced on May 14. Intended to provide more rapid acquisition of needed materials for production through day to day contact with Arlington's requirements, the group will continue to function as a part of Director C. K. Craggs' Purchasing Department.

Handling all material except overhead and Capital Equipment Accounts, the group consists of Buyers Harold Fox, W. D. Roy, A. C. Sorrell, H. M. Blair and V. L. Crawford along with Expedi- H. G. Swaim, W. T. Reynolds, Leo Conano and J. M. Stancill. M. R. Finnell will head the clerical staff assigned to Arlington Division activities. Other assignments will be made as the needs of the group dictate.

Jesse Morton Barnes
1912 - 1958

The formal obituary of Jesse Morton Barnes, who died in an automobile accident on Wednesday, May 21, has been recorded elsewhere. This closing entry is an attempted appreciation of an uncommon man, by one of his friends.

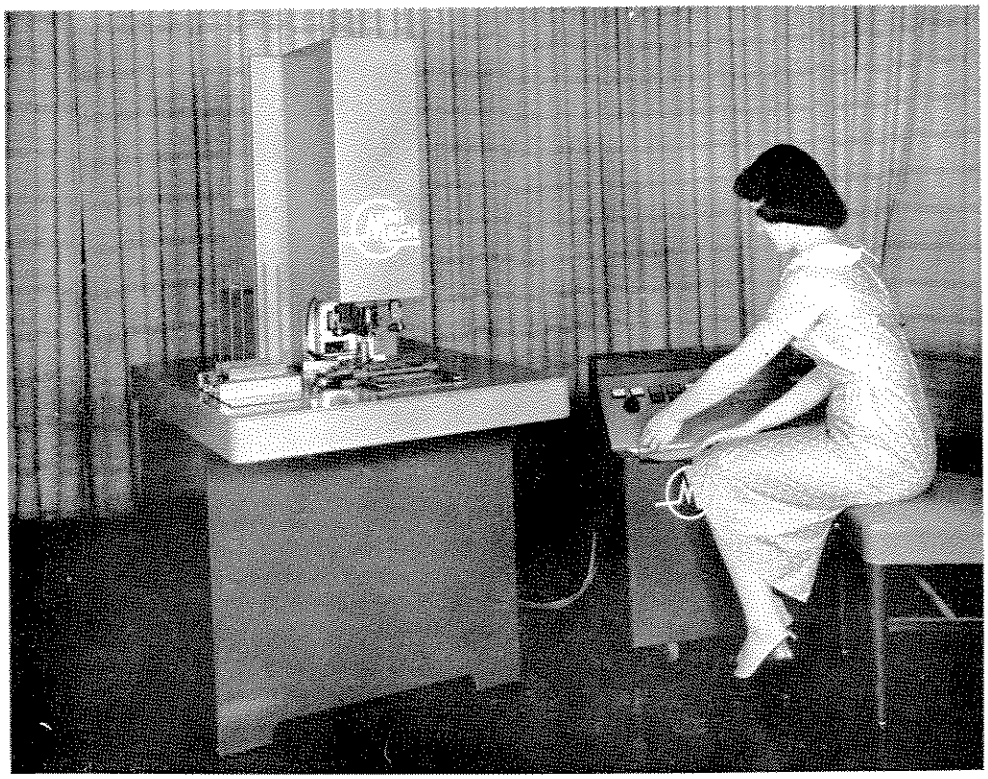
In 1949, there were 179 people in Melpar. To one of them, it often seemed that Marty Barnes was ten of them. We had no big company organization to lean on, and the pressures of growth churned up many strange tasks. Though we were ready and willing to tackle them, often we were not able. We didn't have the tools, or we didn't have the skill. But we always had Marty.

Marty could find it or build it or improvise it, or get the job done without it. Whatever the day or the hour—if the need was there, Marty Barnes was there. Now at last, Marty has had to do something he never willingly did. He's had to down tools and call it a day.

CONFERENCE HEARS BOSTON MEN

Mr. Robert E. Marcille and Mr. A. L. Fullerton, Jr., of Melpar-Boston were invited participants in a recent Measurement Technique Conference convened by the Joint Spectrum Evaluation Group of the Joint Communications Electronics Committee of the Joint Chiefs of Staff.

At this conference, Mr. Marcille presented a talk on the application of a computer model to spectrum interference problems, and Mr. Fullerton presented a talk on the purpose and progress of Project MONMOUTH, an analysis of the army of the future.



PICK A CARD . . . R. D. Springer shows the simplicity of the punched card operation designed into the Mini-Mech system in this scene from the movie made as part of the final report to the U. S. Navy. Normally Mrs. Springer acts as Secretary to Section Head C. M. Volk.

PROGRESS REPORT SHOWS GIRDHS SYSTEM AT BXR

Scenes of the GIRDHS system prior to its shipment was the highpoint for 586 Bailey's Crossroads Plant employees viewing the 10th in a series of motion picture progress reports on the B-58 Bomber system. The film, shown only to employees possessing proper security clearances, covered the period from July 1 to December 31, 1957.

Color footage taken by Senior Photographer R. K. Sakamoto and Photographer L. L. Tatroe of the Falls Church photography laboratory showed the GIRDHS system undergoing final test just before being crated and packed last December. Additional scenes showed the system arriving and being unloaded at the Convair Fort Worth Plant.

The film was made available to Melpar by Convair, prime contractor for the supersonic bomber system, at the request of Field Engineer C. A. Stiles, who first viewed it at Fort Worth. Staff Assistant R. C. Sergeant arranged the hourly showings at the Bailey's Crossroads Plant.

REGISTRATION COMPLETED FOR SUMMER COURSES

As the MELPAR-A-GRAPH went to press, 36 employees had registered for in-plant courses to be conducted this summer. It is expected that approximately 35 more enrollments will be effected by the time registrations close. The classes, all of which will begin by June 10th, are offered under the terms of Melpar's Tuition Reimbursement Plan.

Four courses will be offered: College Algebra and Trigonometry by the George Washington University; General Chemistry by American University, and a Graduate course in Transistors by the University of Virginia. In addition to the in-plant courses a substantial number of employees will enroll in courses offered at local universities and technical schools.

Courses to be offered during the fall term will be announced during August. Application for tuition reimbursement must be made prior to registration and must be approved by the individual's supervisor and the Personnel Director.

If you've lost your Melpar Parking Sticker or sent it to the laundry you had better make arrangements with the Security Office, Falls Church Plant, extension 288, to obtain another, because—after June 6, 1958 all cars must display a sticker to park on the Company's parking lots.

PHOTO LAB SHOOTS MINI-MECH FILM

Had you ventured into the main conference room of the Falls Church Plant during the week of May 12th you probably would have thought that the door led to a Hollywood movie studio. Inside, a mass of lights, wiring and photographic equipment was on hand to shoot Melpar's color production of Project Mini-Mech, part of the final report to be submitted in connection with a Bureau of Ships contract.

Mini-Mech, an automated device for the assembly and positioning of components on printed circuit boards, was put through its paces while both regular and slow motion cameras recorded the action.

The film, showing all phases of Mini-Mech's assembly cycle, was photographed by Senior Photographer R. K. Sakamoto after he and Engineer J. A. Williams had planned and checked the shooting sequence from a script prepared by Project Engineer in Charge J. A. Hohos, Project Engineer A. A. Lawson and Senior Engineer Ralph Taynton. Editing the 1200 feet of film into 15 minutes of exc[illegible] action was done by Mr. Taynton after the film had been processed and developed by the Falls Church Photography Laboratory.

Letter to The Editor

Dear Sir:

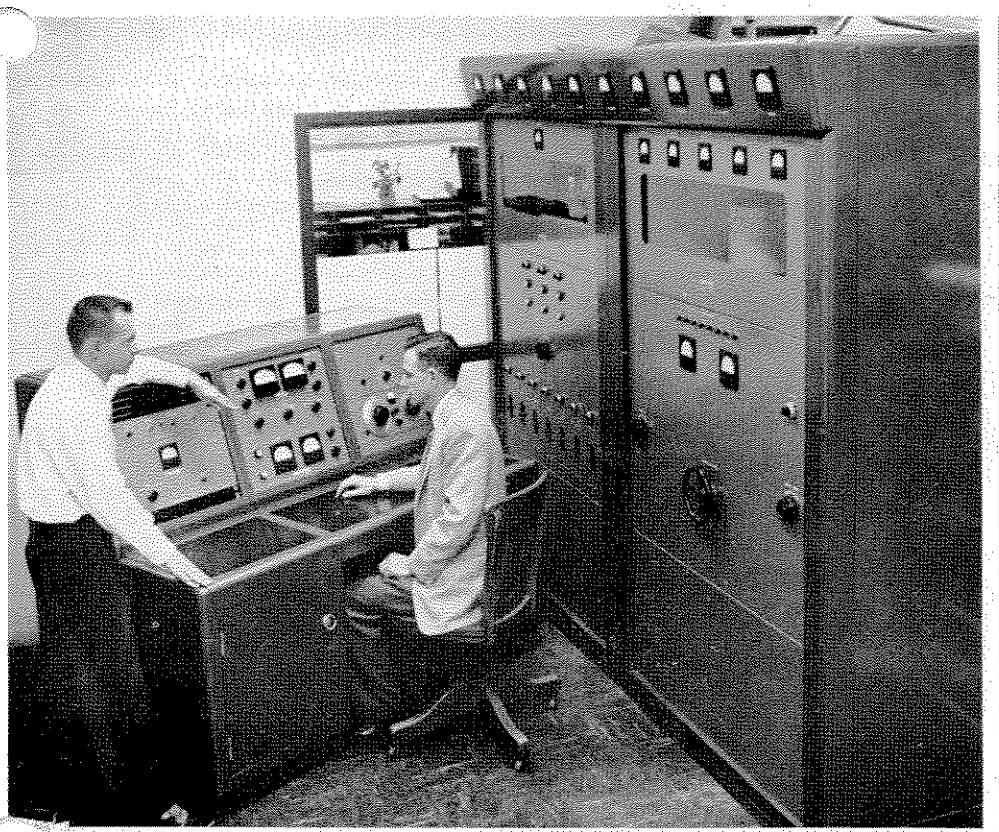
With reference to your story concerning the request for snake bite kits, please be informed that for the past two and one-half years members of Melpar's Tucson staff have carried snake bite kits when working in the field. Luckily, the Arizona rattlesnakes can't stand the desert heat in the daytime hours and prefer to come out only at night, therefore, it hasn't been much of a problem.

Tell Mauller's group not to worry about mountain lions either as the Tucson crew found out a long time ago that mountain lions are afraid of people!

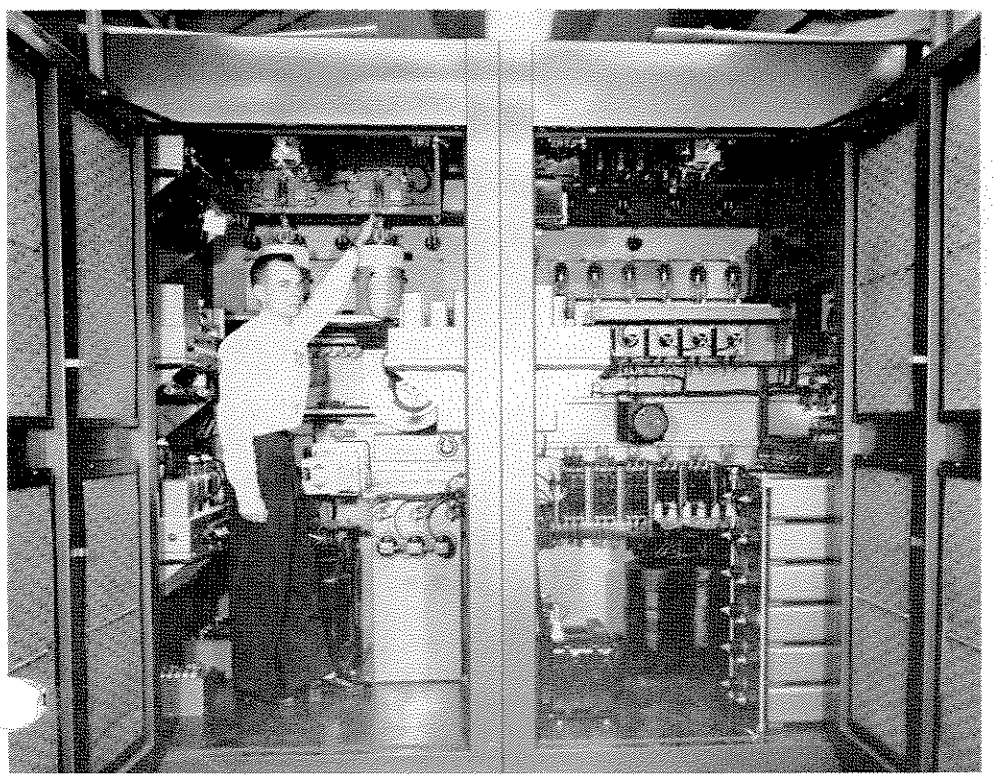
J. E. Swafford
Project Engineer
Melpar Tucson

Editor's Note: Fine! Now if somebody will tell the mountain lions . . .

QC TEST LAB ADDS AUTOMATIC SYSTEM



PUSH THIS BUTTON . . . Instructions are given to Assistant Test Equipment Calibration Supervisor L. E. Evans by Mr. James Sturges of the Ling Electronic Corporation, manufacturers of the test equipment. photo by Tatroe



WALK RIGHT IN . . . The accessibility of major components in the cabinet is shown by Mr. Sturges as he points out one of the two 10 Kilowatt power output tubes used in the unit. Interlocks on the cabinet doors and a discharge rod are two of the many safety features. photo by Tatroe

Installation of an automatic electronic vibration testing system in the Falls Church Environmental Test Laboratory, at a cost of $35,000, was completed recently when a Ling Corp. electronic amplifier was installed.

Providing for automatic regulating and cycling where previously only manual control had been possible, the system is evidence of the Company's continued effort to provide the finest test facilities available.

The amplifier has a power output of 22,000 watts and will drive an M/B vibrator machine to its maximum force output of 3,500 pounds. The automatic cycling controls will sweep through the vibration frequency range from five cycles per second to 2,000 cycles per second at any desired sweep rate between one minute and one hour.

The system controls both displacement and acceleration delivered to the test package automatically and corrects for resonant surges almost instantaneously, thereby preventing overtesting or damage which might occur through the natural reaction lag time of the most skillful test operator.

The servo control system is controlled by four different test signal monitoring channels and selects and operates from whichever one of the four input signals is the most important limiting control at that instant.

Thus an engineer will be able to determine the reaction of various components to normal operating vibration environment and the effect of a loose rivet here and a cold solder joint there—an important part of proving the reliability of production units as well as providing a tool to aid research and design development.

The system, consisting of two cabinets and a single position control console was shipped from California uncrated and after arriving at the Falls Church plant was placed in the Environmental Test Lab.

On the second day after delivery the system was operating, due in large measure to speedy completion of major wiring installation work by Electrician Group Leader P. H. Hiers along with Electricians J. E. Glover, W. O. Thomasson and L. A. Hatch of Assistant Maintenance Supervisor R. L. Herring's Electrical Construction group.

MURGATROYD MISFIT by dick prescott

GOING UP!

D. C. Cleckner has been promoted to Section Head in Charge. He came to Melpar in October, 1956 from Goodyear Aircraft Corp. Previously, Mr. Cleckner had been Vice President and Treasurer of Antenna Research Laboratory, Inc. and was affiliated with the Ohio State University Research Foundation.

K. L. Hastings has been promoted to Assistant Director of General Services; in addition to his current duties, he will temporarily assume responsibility for maintenance activities previously assigned to the late J. M. Barnes.

C. S. Blackson has been promoted from Senior Engineer to Project Engineer at Columbia Pike. F. E. Peake, of Falls Church, was promoted from Senior Engineer to Project Engineer. D. J. Grumbley is now a Senior Accounts Payable Clerk.

J. R. Jones has been promoted from Spares Planner to Senior Spares Planner at Falls Church, while J. H. Puerner advanced from Junior Engineer to Engineer. At Arlington, R. C. Earnshaw moved to Staff Assistant to Manufacturing Manager. D. J. Dunbar and T. W. Tunney have been named Senior Engineer and J. J. Wolfe advanced from Technician to Junior Engineer, while R. E. Davis was promoted from Planner to Senior Planner.

Promoted from Electro-Mechanical Inspector Group Leader to Quality Assurance Inspector and moving to the Arlington Plant was G. Hibner, formerly of Falls Church. A. D. Steele advanced from Junior Engineer to Engineer.

Arlington promotions include J. S. Zupancic and G. R. Hays from Junior Engineer to Engineer while L. G. Mull and P. C. Piraneo, both of Bailey's Crossroads, moved from Junior Engineer to Engineer.

C. F. Wojtunik, of Columbia Pike, and W. F. Vivori, of Falls Church, advanced from Engineer to Senior Engineer. J. M. Hadley has been promoted from Junior Engineering Assistant to Engineering Assistant. At Columbia Pike, J. T. Murray and W. Metzger rose to Senior Engineer from Engineer, while H. J. Martin, of Bailey's Crossroads, has been promoted to Section Planning Supervisor from Planning Coordinator.

Named Test Supervisor at Falls Church was J. Lee. E. M. Starkey rose to Secretary from Clerk Typist and R. T. Thomas was promoted from Electro-Mechanical Inspector 1st Class to Electro-Mechanical Inspector Group Leader. A. L. Hudgins moved up to Experimental Machinist from Machinist A.

Promoted to Junior Planner were: J. M. Birmingham and F. T. Hennigan, along with M. M. Scott. F. G. Mahoney moved to Wire Technician 1st Class.

Bailey's Crossroads promotions include: G. F. Wagner, to Senior Planner; T. E. Stirewalt, to Senior Spares Planner; and J. P. Goza, to Senior Spares Planner. J. G. Merritt and A. B. Otis, of Arlington, rose from Planner to Senior Planner.

J. E. Proctor is now a Senior Planner and G. E. Campbell rose to Planner. F. A. Haag has been promoted to Lead Stock Clerk while R. F. Lentz advanced to Sheet Metal Man 1st Class. D. C. Lewis and W. N. Balderson have been promoted to Senior Technician.

Chem Lab Paper Draws Exceptional Interest

A need for specialized kiln equipment, created by our increasing use of high refractory materials, has been filled by the Falls Church Chemistry Laboratory by their design and construction of an oxygen-acetylene fired kiln capable of maintaining precise temperature control up to 4000 degrees Fahrenheit.

Details concerning design and operation of the kiln were divulged in a paper authored by Section Head P. E. Ritt, Project Engineer J. L. Pentecost and Ceramicist Z. A. Post and given at the American Ceremic Society Convention held in Pittsburgh, Pennsylvania on April 30, 1958. All available reprints were immediately commandeered by audience members; since that time the mail has brought daily requests for additional information and reprints. The paper will be reported in the 'Bulletin of the American Ceramic Society.'

The kiln, constructed with a zirconia lining, has a firing chamber 7″ x 7″ x 11″ half of which is maintained at a uniform temperature. The temperature control system utilizes a motor driven shutter which is proportionally positioned so as to control radiation losses from the furnace, rather than from the fuel input. The temperature is sensed within plus or minus 5 degrees at any point from 3000 to 4500 degrees Fahrenheit.

A kiln capable of maintaining such high temperatures was constructed with a two-fold purpose. First, it was necessary to sinter pure oxide ceramic materials at temperatures up to 4000° F in an oxidizing atmosphere; and second it was necessary to make some electrical and physical measurements of the sintered samples at the high temperature.

BALLARD DESCRIBES ATC SIMULATION

Methods and equipment for the simulation of air traffic control problems were described to the Washington Chapter of the Air Traffic Controllers Association by Melpar Project Engineer A. H. Ballard. Mr. Ballard discussed the demand for air traffic control we face today, and projected the problem into the fast approaching jet age; the techniques of electronic simulation were put forth both as training aids and as a means of anticipating traffic control needs before they become reality.