MELPAR-A-GRAPH

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

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ACCEPTANCE TESTS DUE TO START ON WATERTOWN UNIT

Melpar-Watertown will transfer its Digital Dynamic Tester T-9 to Watertown Arsenal for acceptance tests shortly. When finally installed at Aberdeen Proving Ground in Maryland, the T-9 will provide rapid and thorough test and evaluation facilities for a wide variety of weapons. The time required to conduct many such tests will be reduced from days or weeks of flight to but a few minutes of computer operation.

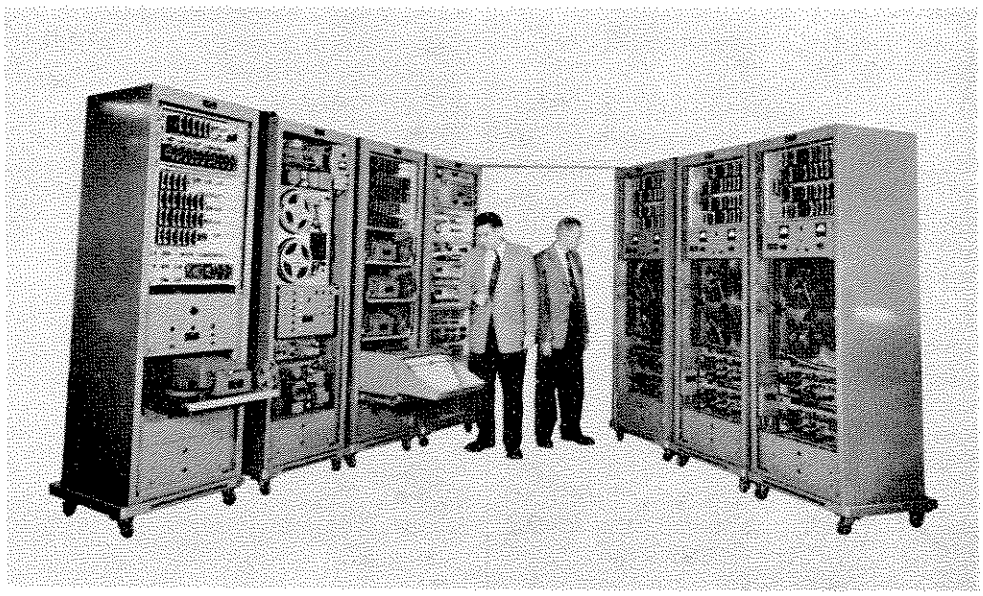
The Dynamic Tester stands as a truly realistic check-out facility for complete anti-aircraft fire control systems, missile guidance systems, and missiles themselves. The Tester incorporates a highly accurate magnetic tape storage system capable of applying typical courses for any foreseeable target types. High performance digital servos transform the stored problems into precise shaft positions which program the weapon undergoing test.

The developmental program carried on by Melpar-Watertown, resulting in the T-9 Tester, was begun several years ago in a design competition sponsored by Army Ordnance. According to Watertown Plant Manager Anthony Abate, "when we were invited to enter the design competition, we knew very little about dynamic testers; as a result, we weren't handicapped by preconceived notions and were able to come up with a new and better way to do the job".

Once begun, the T-9 program steadily increased in scope and complexity. A family of accessories was designed to augment the basic tester, enabling the programming of weapons at almost any level. Now, problem courses can be inserted into the computer, the antenna servo, the radar receiver, or the waveguide.

Beyond that, the Digital T-9 eventually will be superseded by Melpar-Watertown's Analogue Dynamic Tester T-12. In this analogue version, drastic reductions in size, weight, and complexity are being achieved with no sacrifice of performance. The T-12 will serve both as a laboratory tool and field check-out facility. With it, operational weapons may be checked and maintained in a state of readiness without a demand for actual targets or firing ranges.

Since its inception, the Dynamic Tester program has been under the supervision of Section Head Fred Benkley. Project Engineer Chester Stern, long identified with the digital model, is responsible for that phase of the work, while Project Engineer Robert Gordenstein leads the Analogue Tester development. The entire program is under the technical supervision of Frankford Arsenal on behalf of Army Ordnance.



A LAST LONG LOOK *at their Digital Dynamic Tester T-9 is taken by Project Engineer Chester Stern at left, and Section Head Fred Benkley. Read clockwise, the consoles comprise a Tape Conversion Group, Storage Group, Error Recording Group, Power Supply and I-F Insertion Group, Electronic Generator, and Dual Coordinate Groups.*

HOLIDAY WORK SCHEDULE

After a three-day holiday beginning tomorrow, December 30, Melpar plants will re-open Wednesday, January 2. Work days are then scheduled through Saturday, January 5. On Monday, January 7, Melpar resumes its regularly scheduled five day week.

KELLEHER, BERGMAN NAMED VA. U. GRADUATE ADVISERS

Falls Church Section Heads K. S. Kelleher and C. E. Bergman have been approved as Graduate Advisers by the University of Virginia. As Graduate Advisers, Dr. Bergman and Mr. Kelleher are enabled to draw up recommended study programs for individuals seeking acceptance as graduate candidates by the University. Lacking such in-plant advisers, applicants necessarily would have to journey to the University for campus consultation.

Graduate candidates now attending in-plant courses at Melpar are advised, in a letter from Virginia's Dean L. R. Quarles, that "no graduate credit is granted for any course completed before (your) program of studies is submitted . . . to the University".

The next registration for undergraduate and graduate study in in-plant classes taught at Melpar by both The George Washington University and the University of Virginia will be held during the week of January 21.

OPINION

This (of course) is a New Year's message. The by-laws of the Association Of People Who Write Editorials require that certain specified dates on the calendar, such as New Year's Day and National Save That Tree Day, be properly memorialized.

But this time, the trusty old phrases stick in the throat.

We venture into a new year, not called but driven. Once, history walked. (It took a long time for Hannibal's elephants to cross the Alps.) No so today. A mile is not a mile at 1400 mph. It's the flick of an eyelid. History is made today like a shock wave. And men make it.

That business in the copybooks about 'men don't make history; history makes men' is best forgotten. When one man's word of command may spit loose megatons of power in the raw—that man can make history.

Perhaps to a greater extent than we are quite willing to admit, we control our own destiny. Often, there is a refuge in bewailing implacable fate. But fate may just possibly be indifferent rather than implacable.

The world we know as free is in a stressful time; in some respects, more so than in the early '40's when the only word worthwhile was Action. Now, we have need of thought's lonely labor. Our posture as individuals goes largely to make up our posture as a nation. Need we bow to history?

Things were dandy in '56 and people in the know say that Detroit will do just fine in '57. It should be a happy new year. Provided that nobody rocks the boat. Things will just have to go along the way we want them to. If it turns out that way, good; history will be made in department store sales.

But it will be well for us—just you and I, and those around us—to take careful note of the purpose we serve. We are helping to write the next edition of history. Take one last look at chapter 56, and add a little something extra for chapter 57. It will make better reading, later.

READY, SET . . . *The photographer took this view of Melpar-Watertown's brand-new quarters on the third floor of the Galen St. building at night, before it became all cluttered up with people. The move of Watertown's electrical engineering personnel, along with the Library and Technical Writing, into this area opened up welcome space on lower floors for the expansion of the assembly area, storerooms, and service operations.*

MELPAR PHOTO LAB OFFERS COLOR FILM PROCESSING

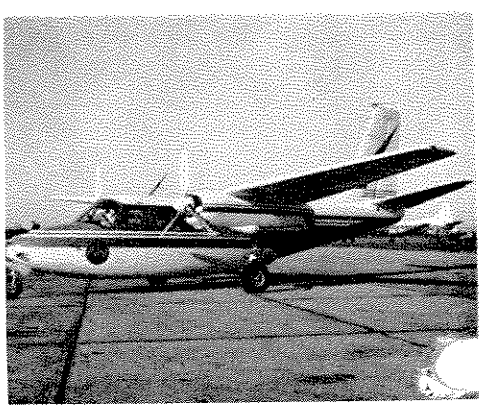
Melpar's Photographic Laboratory, Technical Writing at Falls Church, now is equipped to process color photography in all phases, including the development of motion picture film and the production of color prints from transparencies.

Richard K. Sakamoto and Lyle L. Tatroe, photographers, are enrolled in an extensive course in color photography and processing being taught by the Armed Forces Institute of Pathology. Of particular relevance to Melpar's work is the fact that many highly classified contracts call for color photography which cannot be turned over to commercial photo laboratories. Such work can now be handled in its entirety by the Company's Photographic Laboratory.

The most modern type of color processing tanks and color film drying equipment is being installed in the laboratory, supplementing equipment already on hand. The result will be one of the best color processing laboratories in the Washington area.

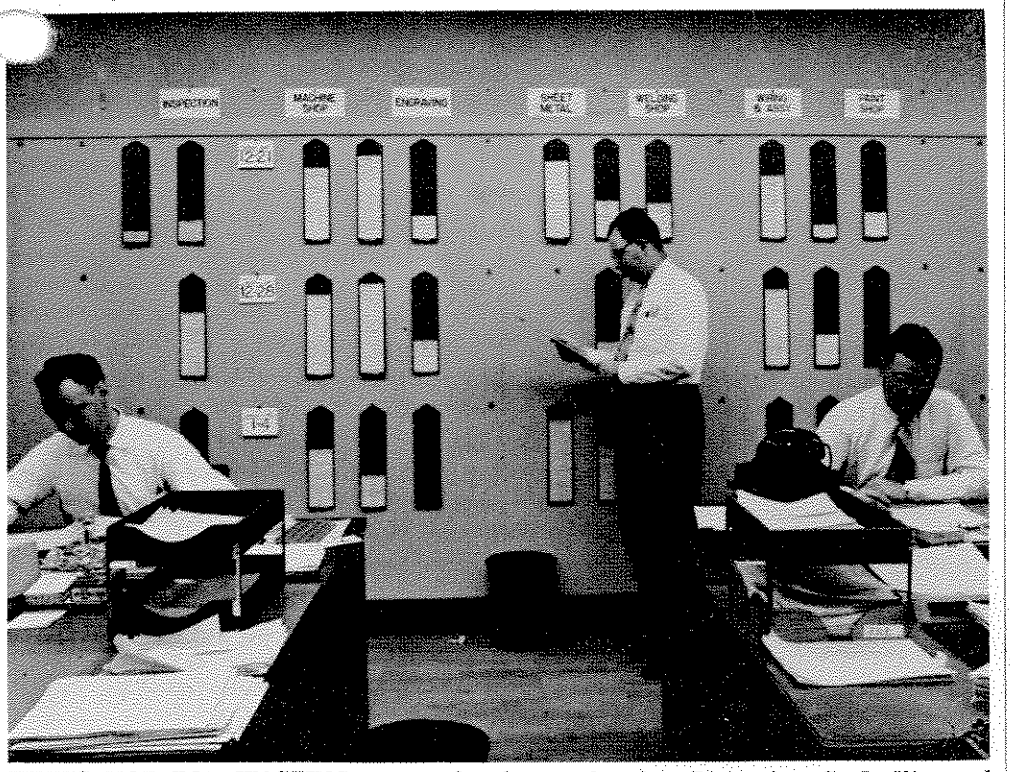
FIRST YEAR LOG OF COMMANDER IS 163,000 PASSENGER-MILES

Pilot S. G. Fisher has estimated that the Company's twin-engine Aero Commander flew in excess of 163,000 passenger-miles during its first year of operation. Company personnel who have ridden the airplane to points as familiar as Rome, N. Y. (Griffiss AF Base) or as unfamiliar as Ozark, Alabama (Army Aviation Headquarters) have no estimate of the time and travel trouble saved them by it—but the consensus is that no company is complete without one.



MELPAR'S THE NAME *gracing the hull of the Company's Aero Commander, all decked out in a sparkling color scheme derived from our Company insignia.*

Everything Is Scheduled - Almost At Once



TIME'S NOT FOR WASTING . . . *In the usual order, Dispatcher G. J. Kite and Lead Schedulers D. L. Butcher and O. C. Boyd study ways and means of scheduling ...s Church shop facilities down to the hour and up to the minute.*

There is a legend that goes like this. Once upon a time, a chassis started life as a piece of flat sheet metal. It got bent and punched and drilled and fitted out with components drawn from the four corners of the world. It was equipped with machined parts of marvelous ingenuity. At last, it was wired and tested and delivered to an Engineer. Said the Engineer, "my gracious. I didn't need this until next week".

The staff of the Project Services Group at Falls Church professes not to believe this legend. But they're working toward making it come true. They also are working on a method of containing a quart of water in a pint jar.

The Group's shop loading and scheduling functions, under Scheduling Supervisor G. T. Klop, have the aim of keeping men and machines producing at a constant pace while at the same time meeting the delivery dates established by engineering groups developing an imposing variety of widely varied gear.

To do it, each operation for each work ... is estimated for required time. Guided by those delivery dates, the orders are loaded into the available time bands of the shop facilities. If a facility is loaded to a capacity limited by available men or equipment, the projects whose work orders just won't squeeze into a given week are notified by telephone of the best delivery date foreseeable.

By such constant communication, projects often are able to re-shuffle their requirements in detail and thus get maximum utility from the available time. Because the pace of an R&D operation is not exactly as prosaic as that of a bottle-filling plant, the mechanics of control in Project Services are kept as simple as possible; flexibility is the criterion.

Card strips containing the essential information of a work order are maintained in visible index trays. An inviting expanse of blank wall became, by virtue of some printed title cards and some hooks, a scheduling board. Each Friday, Dispatchers up-date these trays and identical ones maintained in the shops; completed work, or work unavoidably delayed is removed and replaced with new tasks.

The mechanical devices are there, of course, but stressed above all in Project Services is communication. Keeping the projects aware of the shifting workloads in the shops, and keeping the shops aware of the changing needs of the projects is the day in and day out endeavor.

PLAN AHEAD!

The Company's Pension Plan rolls open—and close—on January 1, not to open again until July 1.

Today, Saturday, December 29, is the deadline for joining the Plan for the current period.

If you have completed six months service prior to January 1, you are eligible for the Plan. Pension Plan booklets and acceptance cards are available in the Personnel offices and at all entrances to all plants. Get yours. Fill out the card. Turn it in. Put your present to work on behalf of your future.

PLAN AHEAD!

Ralph I. Cole, Manager of Military Project Planning, *is pictured with Lt. Col. Willard W. Moseley at his left and Brig. Gen. H. C. Donnelly at his right. Colonel Cole was one of a group of USAF Reserve officers briefed by General Donnelly and his staff at Supreme Headquarters Allied Powers, Europe, near Paris, France, during the Reserve officers' two week duty tour of USAF bases in Europe.*

MURRELL ACTIVE IN QC SYMPOSIUM

R. C. Murrell, Supervisor of Quality Control, is engaged as Chairman of the Registration Committee for the 3rd National Symposium on Reliability and Quality Control in Electronics. The symposium is to be held over a three day period, January 14 through 16, at the Hotel Statler in Washington.

Mr. Murrell represents the IRE in the symposium arrangements; the event is co-sponsored by the ASQC, RETMA, and the AIEE. The volume of advance registration indicates that the 1957 symposium has excited greater interest in the electronics industry than has any previous similar gathering.

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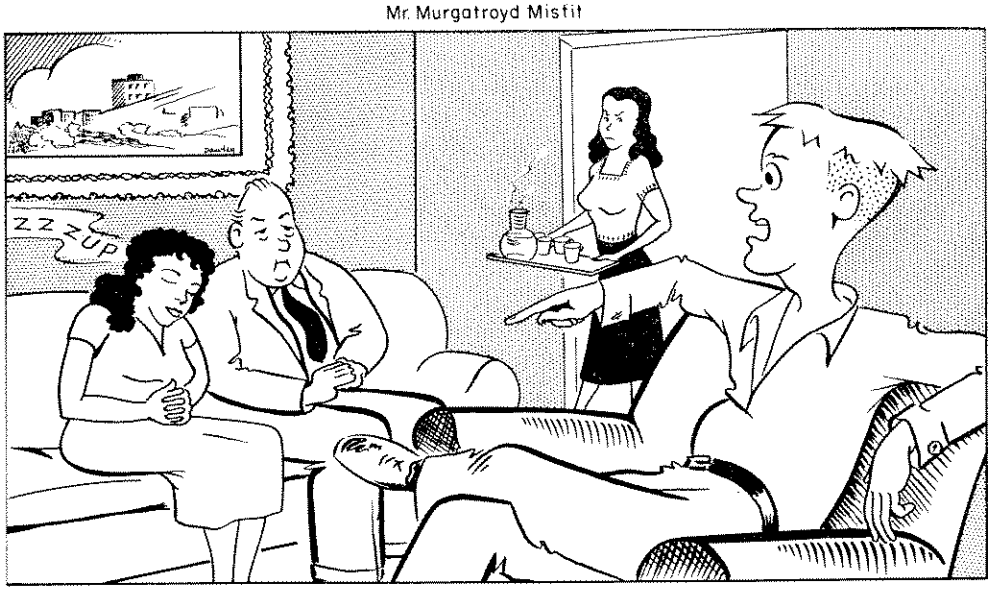


If you know as much as you say you do - don't say it!

GOING UP!

The appointment of Leonard Kings as an Engineering Section Head at Falls Church was announced recently. Mr. Kings was a Project Engineer.

Charles Parker, of Arlington Division, advanced to Project Engineer. Two new Senior Engineers there are E. L. Clevenger and G. M. Stewart.

At Melpar-Watertown, J. J. Powers was promoted to Design Engineer.

At Falls Church C. B. Christie and D. B. Boyce moved up to Senior Engineer. F. D. Green rose to Junior Engineer. R. D. Hoopes moved to Engineer.

In Quality Control R. W. Baker was promoted to Engineer. A. Lee advanced to Electro-Mechanical Inspector Task Leader 1st Class, and W. Upchurch rose to Mechanical Inspector 1st Class.

F. E. Boyko, of Falls Church, was promoted to Design Engineer. P. K. Monaghan is now a Senior Draftsman. Former Technicians E. C. Stinson and G. A. Gould moved up to Senior Technician. J. P. Woodson was promoted to Senior Mechanical Technician. R. L. Brenneman was named Chemical Technician Leadman. T. R. Davis is now a Senior Technical Writer, and R. MacMahon rose from Cataloguer to Technical Writer.

L. C. Koneczny became Receiving and Identification Lead Man at Falls Church. In Accounting, M. S. Edmundson was promoted to Junior Accountant.

In Arlington Division, H. L. Grant moved up to Senior Planner. In Quality Control at Arlington, A. R. Valliere Jr. was advanced to Junior Engineer. L. Edwards is now a Mechanical Inspector 1st Class, and E. W. Burns is an Electro-Mechanical Inspector 1st Class. E. L. Daake was promoted to Line Inspector Task Leader 1st Class.

CONVAIR PREDICTS SUCCESS FOR B-58

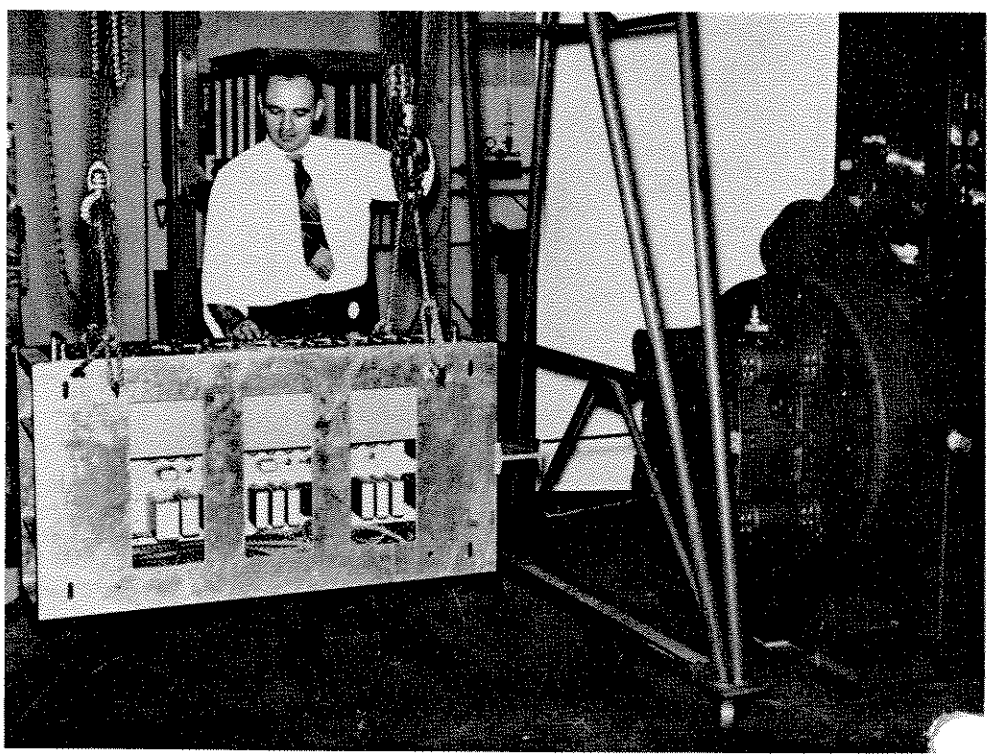
Melpar's research and development effort on electronic sub-systems associated with the B-58 Hustler has engaged hundreds of its people for several years. When news of the airplane's successful first flight was officially released, our congratulations were sped to those at Convair Fort Worth responsible for this newest weapon in the country's air arsenal.

The following letter has been received from August C. Esenwein, Vice President of Convair, addressed to Melpar Vice President A. C. Weid . . .

Dear Mr. Weid:

Your recent congratulatory message on the first flight of the B-58 airplane was sincerely appreciated.

With this major milestone behind us, our efforts will be placed on obtaining sufficient flight data to permit early evaluation by the USAF of desirability of procuring the airplane for inventory. We are confident that the flight data will be in keeping with our predictions and that the USAF will see fit to ord production quantities . . .



HOLD IT . . . *The weight and bulk of this loaded cabinet made it less than safe for conventional mounting on the heavy duty vibration table at the Falls Church Environmental Lab. With the vibration table swung from horizontal to vertical position, R. M. Marshall is able to position the equipment for vibration test with little risk of having it undergo an unscheduled drop test.*