MELPAR-A-GRAPH

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

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TWO PLANTS EXPAND FLOOR SPACE

Cambridge Man Describes Work Of Computer Section There

"The Services That a Central Computing Facility Can Render" was the theme of the featured talk given at Melpar's mid-December Technical Seminar by Lawrence Rosenfeld of the Cambridge plant. Mr. Rosenfeld heads the Operations Research and Mathematical Services group at Melpar-Cambridge.

The group was formed to program a wide variety of complex data handling problems for processing on virtually any one of today's so-called "electronic brains". Representative problems outlined by Mr. Rosenfeld ranged from tasks involved in production scheduling and stock market trend analysis, to gambling strategies.

Melpar-Cambridge has ordered a Type 650 Computer from International Business Machines Corp. While awaiting delivery of its own unit, Mr. Rosenfeld's group has access to a number of similar machines available on a rental basis.

CLARKE WILL ADMINISTER GFE

In a move to insure fulfillment of the Company's obligation to safeguard Government property under all circumstances, F. H. Clarke has been appointed Government Furnished Property Administrator.

The Company frequently receives equipment from its military customers for use on or installation in equipments developed and produced under government contracts. In many instances, such "GFE" consists of complex, expensive products. Whatever its cost, possession of such an item places a serious responsibility upon the Company and upon all employees concerned with its handling or use.

A detailed procedure (CA—1) covering the receipt, care, and disposition of GFE has been issued and forms the charter under which Mr. Clarke will work. He is ready to aid affected personnel in the application or interpretation of the procedure at any time.

FIRST CLASS . . . *Instructor R. D. Elbourn conducts one of the first of a series of accredited college courses sponsored by George Washington University and the University of Virginia at the Falls Church plant. The subject here is "Modern Computing Machines".*

ARLINGTON, FALLS CHURCH INCREASED 75,000 FEET

A familiar story—Melpar on the move again—is being enacted almost simultaneously in Arlington Division and in Falls Church. The rising tempo of activity in both locations, with no sign of slackening in the foreseeable future, has led to the leasing of an additional 25,000 foot building for Arlington Division and the fitting-out of 50,000 feet previously used for storage in Falls Church.

Approximately 125 people in Administration, Engineering, Planning and Control, and Technical Services will shift from building "A" into Arlington's new quarters. The 12,000 foot area thus opened up is to be largely given over to expanded assembly operations.

At Falls Church, J. L. Clark's Flight Simulator section will relocate in the newly equipped area on the Lower Level East. The new space is heated and air conditioned through additions to the air handling equipment originally installed in the building. Painting, flooring, and lighting also correspond to specifications for the original construction.

As a safety measure, in view of the expected heavy occupancy of the new space, outside staircases leading to ground level are being installed at the north and east sides. Access to the emergency exits will be possibly only from inside the building.

Completing the sequence of moves, R. E. Miller's section, engaged in system development work for Convair's B-58 supersonic bomber, is scheduled to expand into the vacated area in the Lower Level West.

Campanella Talks at Penn

J. S. Campanella, of H. M. Williams' Engineering Section at Falls Church, attended the 12th Underwater Acoustic Symposium held in November at the University of Pennsylvania.

Mr. Campanella addressed the symposium on the subject of "Effectiveness of Range-Rate and Aspect Data on ASW Fire Control Accuracy".

OPINION

The New Year coming reminds us that Melpar, Inc. is entering its tenth year. We all are familiar with Melpar's achievements in those years . . . number of employees up from 50 to 1800 . . . floor space up from 12,000 feet to 500,000 feet . . . more than 300 contracts completed. . . .

Material accomplishments are easily tabulated "for the record". But often difficult to define and tabulate are the reasons behind such achievements. How did we get that way? What's the formula?

We believe certain fundamental ingredients can be isolated and named. There is the careful selection of personnel which Melpar has always stressed—at whatever the cost in effort and in advertising dollars. We believe this policy has brought our Company a first-rate staff on all levels.

There is the constant plowing back of earnings, to finance more and better equipment, larger and better working quarters. So firmly has this policy been adhered to, that neither of the two interests which have owned Melpar ever has withdrawn one penny of "profit" in dividends.

As essential to an organization's success as its long-term policy, is its day in and day out operation. A successful company is the result of thousands of correct decisions made through the days and years by everyone on the team —not just the executives.

Most of these decisions are unspectacular. But some few stand out. Consider the decision of one group of Melpar people to reject a union bid to do their bargaining for them. And management's decision to go all out to win the multi-million dollar MSQ-1A contracts.

Both decisions have meant much to Melpar. One preserved our identities as people, individuals working co-operatively. The other created hundreds of new jobs in a new field of work. And yet—management had not the power to make the first decision, and only they could have made the second.

In simple fact, this Company of ours is a team effort. And **that's** our "secret formula" for success. It has brought us far in these ten years; it will take us onward in the coming years.

LONG SHOT . . . *The target is eight miles distant, and this sighting is only a preliminary move in pinning it down. Melpar engineers Glenn Stewart and Jesse Baldwin, with Charles Maddox, Silver Spring (Md.) surveyor, are seen here at the MSQ-1A test site.*

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Smith Speech Wins Notice At Meeting In Atlanta

More than usual interest has been aroused in professional circles by a lecture given by B. D. Smith at the IRE Instrumentation Conference held in Atlanta, Georgia, in late November. Entitled "An Unusual Electronic Analog-Digital Conversion Method", the discourse has brought many requests for transcript copies in advance of normal publication in the proceedings of the sponsoring Professional Group.

Mr. Smith is Staff Assistant to the Vice-President and Chief Engineer, C. B. Raybuck, and is based at the Falls Church plant.

AF ACCEPTS CONTROL SYSTEM DESIGNED AND BUILT HERE

Capable of taking a pilotless multi-engined bomber off the ground, controlling its flight over a range of several hundred miles, and landing it, Melpar's AN-DRA/2 Remote Flight Control system recently was accepted by the U. S. Air Force.

Itself air-borne, the Flight Control system is operated from a "mother ship" and from that vantage-point exerts its control over the complex pattern of flight of its "slave ship".

Designed and developed by Melpar under a contract with Wright-Patterson Air Force Base in Dayton, Ohio, the AN-DRA/2 in its final stages was under the direction of R. F. Thiem, project engineer in R. E. Williams' section at Falls Church.

NO HANDS . . . *Bombing plane rides high and far, but with no pilot, when controlled by Melpar's AN-DRA/2 Remote Flight Control system—shown here by Hideo Ihara, Falls Church.*

Lawson Forming IRE Group For Production Methods

An organization meeting of the Washington Chapter, Professional Group on Production Techniques (IRE) has been scheduled for January 26, 1956, at the National Science Foundation, 1520 H St., N.W. The meeting will get under way at 8 p.m., with A. A. Lawson, Falls Church Project Engineer, acting as chairman.

Named Organizer of the proposed group some months ago, Mr. Lawson has been pressing a membership drive with the aid of an organizing committee which included Sidney Levine, of Falls Church Engineering.

The new Group will be concerned with the principles and techniques involved in new manufacturing processes, assembly technics, etc.; and with the growing field of automated manufacture or assembly.

READY TO GO . . . *to places where the getting's not easy. Melpar's new Aero Commander will air-lift Company representatives to customers' doorsteps the country over.*

MELPAR PLANE FLIES REPS NATION-WIDE

6-PLACE CRAFT SPEEDS CUSTOMER LIAISON

Melpar representatives summoned to technical conferences frequently are arriving right on the customer's doorstep—delivered there in the Company's newly purchased airplane. Called the "Aero Commander", the twin-engine craft has a range of 1,000 miles and a cruising speed of 200 mph. The airplane carries six passengers and the pilot, and is completely equipped for instrument flying.

Manufactured by Aero Design and Engineering Co. in Oklahoma City, Oklahoma, the Aero Commander is widely used for business and private flying. Indicative of its standing in the industry is the fact that it has been chosen for short-haul transportation by President Eisenhower.

The Company expects to benefit in many ways from the operation of its own aircraft. With its customers distributed nation-wide, many of them on military bases far from the path of commercial travel, use of the Commander will enable the Company to maintain frequent technical and contractual liaison with them.

Distinct savings in travel time, and new freedom in scheduling meetings without regard to public time-tables already are noted by Melpar men using the Commander. A recent hurry call from Republic Aviation in Farmingdale, Long Island, saw a group of our engineers and engineering service representatives leave Washington National Airport at 9 a.m., fly to Republic's own field, transact the business at hand, and arrive back at their desks by 3 p.m.

The Commander is piloted by S. G. Fisher, who came to Melpar from Allegheny Airlines. In addition to long experience in commercial aviation, Mr. Fisher served with Army Aviation in the Pacific Theatre during World War II and in the Korean conflict.

New Courses Added In Study Program

Three additional engineering courses at the college level are being organized by the Company in the expanding off-campus educational program conducted at the Falls Church plant by George Washington University.

Registrations will be made on February 3, 1956 for "Vector Analysis", the first of two semesters in "Elements of Electrical Engineering", and the first of two semesters in "Advanced Network Theory". T. L. Wood, Personnel Department **(Falls Church Ext. 287),** is coordinating the program on behalf of the Company.

More than 60 Melpar men now are enrolled in twice-weekly classes in "Modern Computing Machines" and in "College Algebra". Interest in "Modern Computing Machines" has been so widespread that the course will be repeated at the expiration of the current semester. Registrations for this course also are scheduled for February 3.

Looking to extend the value of the program still further, in view of the savings in money and in time made possible by off-campus instruction, Mr. Wood now is endeavoring to establish classes in Arlington Division. The first course contemplated there is College Algebra, for which a minimum enrollment of 15 students is required.

CLOSE TOLERANCE SURVEY MADE TO FIX MSQ-1A TEST DISTANCE

The distance between a point on a concrete pad at the MSQ-1A test site near Kamp Washington and a point in the Stonewall Memorial Garden in the Bull Run, Va. area is 8 miles—plus or minus two feet.

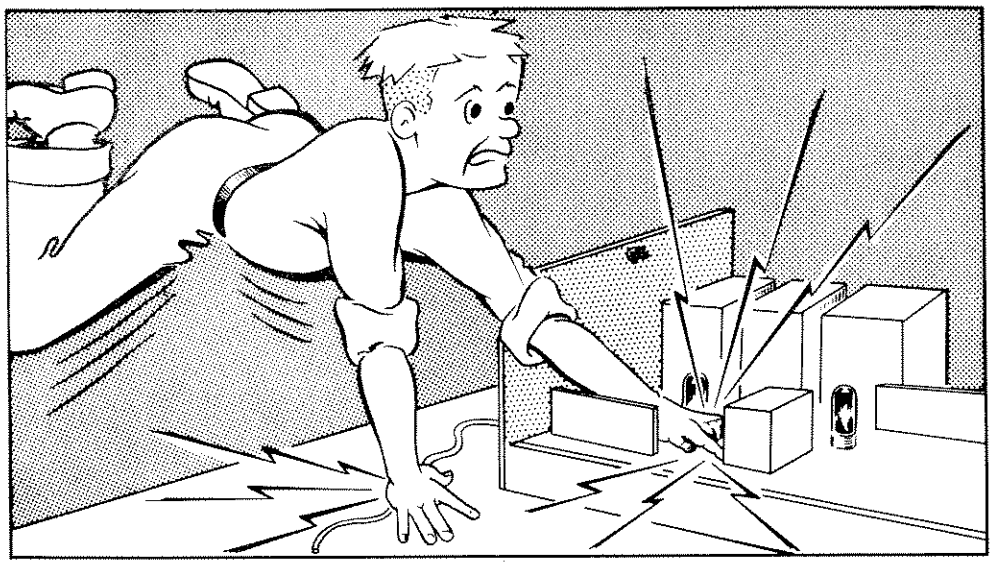
To satisfactorily establish this fact, and meet the demands of the test specifications for MSQ-1A systems, called for survey work of a calibre seldom needed in the normal course of business. The Silver Spring, Md. firm of Maddox and Hopkins was called in to make the survey in co-operation with the MSQ-1A Engineering test group headed by Glenn Stewart of G. F. Wagner's section.

With instruments calibrated by the National Bureau of Standards, a critical determination of the latitude and longitude of the chosen reference points was made. Then followed elaborate mathematical computations, involving correction factors for such circumstances as the elliptical shape of the earth and the variation in temperature suffered by the steel measuring tape.

IRE Group Hears Kelleher

"Microwave Lenses Utilizing a Variable Refractive Index" was the subject of the feature talk delivered by K. S. Kelleher at the November meeting of the Baltimore Section, IRE. Co-sponsored by the Baltimore section and its Professional Group on Microwave Theory and Technique, the meeting took place at Johns Hopkins University.

Mr. Murgatroyd Misfit



How Not to find those missing volts/

GOING UP!

Melpar people in a wide variety of occupations have earned promotion in recent weeks. Virginia MacMinn stepped up from Secretary to Forms Analyst in the office of the Company Consultant. A. S. Downer advanced from Clerk to Secretary at Falls Church. In the Technical Writing Department, P. R. Bowers left the Vari-type machine to become a departmental Control Clerk.

Robert Bawer won promotion from Senior Engineer to Project Engineer at Falls Church. New Senior Engineers at Falls Church include F. E. Peake. G. F. Stastny, and W. J. Smith. W. G. Hall rose to Engineer grade, having been a Senior Technician.

J. R. Pedevillano, former Production Planner, became a Production Engineer in that group in Arlington Division. In the same group, J. E. Thoensen advanced to Senior Production Engineer. Attached to the Technical Services group, W. E. Mitchell rose from Production Planner to Production Engineer.

In Falls Church Engineering, C. B. Strang has reached Project Engineer level, up from Senior Engineer. O. E. Seastrom, former Design Engineer, was appointed a Senior Mechanical Engineer. A number of Falls Church men now rank as Engineers, up from Junior Engineer; they include E. Parrish, R. E. Cofer, W. P. Beechy, R. C. Lipps, J. P. Bartell, and K. L. Nelson. Senior Technician R. W. Baker is now a Junior Engineer.

Arlington Division has named three new Task Leaders. J. G. Garcia and R. W. Preston were Assembly Technicians, and R. L. Pettit was a cable-former. Also at Arlington, A. B. Otis has advanced from Production Planning Aid to Procurement Planner.

C. N. Allred has been appointed Illustrations Group Leader in the Technical Writing Department. D. H. Reiss, formerly a Senior Draftsman, now is a Design Engineer. B. E. Lundy has followed the same route to the level of Design Engineer. New Senior Draftsmen include M. J. Houck, D. F. Howard, and W. D. Eimer.

Also promoted at Falls Church were R. A. Ping, now a Junior Test Equipment Engineer; J. C. Withers, now a Lead Technician; J. R. Sayers, also a new Lead Technician; and C. A. Funkhouser, advanced from Technician to Technician Group Leader.

E. T. Catherman rose from Junior Accountant to Accountant. Former stock clerk G. W. Jenkins now stands as a Technician. R. L. Chapman moved up from Expediter to Procurement Planner.

Vermont Is Speaker at SDC

P. V. Vermont, Supervisor of Mathematical Services in the Flight Simulator Section, was a speaker at a recent Computers For Training Simulators Symposium. Sponsored by the Special Devices Center, the meeting was held in Port Washington, New York.

Mr. Vermont read a paper entitled "Critical Evaluation of the Use of Flexible and General Purpose Analog Computers in Simulator Design".

Melpar To Build New Simulator

Total of 8 Trainer Units Now In Varied Stages

Melpar will design and build the Flight Simulator device for the F-101-B "Voodoo" intercept fighter aircraft, under the terms of a contract recently awarded the Company by the Air Materiel Command.

Being produced by the McDonnell Aircraft Corp. of St. Louis, the F-101-B is an advanced version of the well-known "century series" of sub-sonic and supersonic fighter planes. Melpar's Simulator is expected to realistically reproduce the aircraft's operating characteristics and the special equipment peculiar to it.

The Simulator will train pilots in tactics as well as in the handling of a multitude of emergency situations which can arise in flight. The degree of realism attained in such simulators is said to be so great that pilots, after their first simulated "flight", call it a full day's work.

Receipt of the F-101-B contract brings to eight, the number of flight simulators assigned currently to Melpar. The Company has, in the past, been engaged the F-86-D and the F-100-A Simulators. Several devices now in process of design or construction match various special purpose variations of McDonnell's basic F-101 aircraft.

In addition, Melpar is designing and constructing several simulators for versions of Douglas Aircraft's A-4-D "Skyhawk". The Company is under contract for these units to the U. S. Navy.

The Flight Simulator Engineering Section is based at the Falls Church plant under the direction of Section Head J. L. Clark. Approximately 95 engineers and technicians on all levels are engaged in the section.

NOW HEAR THIS —

As a service to its readers, the **MELPAR-a-graph** publishes the following announcement:

> Monday, 2 January 1956, is a holiday. All company plants will be closed. It is recommended that the day be spent in resting, recuperating, and in making at least one New Year's resolution.