MELPAR-A-GRAPH

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AF GENERAL OFFICERS TOUR MELPAR

CIVIL DEFENSE PROCEDURE IS CAMBRIDGE STUDY AIM

The nation's civil defense communications needs will be explored and evaluated by the staff of Melpar's Research Department at Cambridge under a contract recently awarded the Company by the Federal Defense Administration.

Beginning with the question of how best to transmit a "first alert" message to the public, the Cambridge group will go on to study all the steps involved in maintaining mass communications under emergency conditions. The broadcasting of information and instructions before and after an attack, communication between civil defense leaders and workers before and after an attack, and communication among civilians after an attack all fall within the scope of the task.

The circumstances under which we must expect to wage nuclear warfare, including the probability that a target area will get little warning of an imminent attack, make obvious the need of a method of sure communication under the most adverse conditions. Therefore the effectiveness and reliability of CONELRAD, the nation-wide system of synchronized broadcasting of information and instructions over two specific radio frequencies, will be evaluated.

A final element of the Cambridge report is to consist of recommendations leading to the design of the best possible alarm system, adjusted to the influence of relevant engineering, economic, and political factors.

Work on the project is expected to continue for approximately one year. It is under the cognizance of Research Group Leader A. L. Fullerton, Jr.

V. I. WEIHE ADDRESSES MATS PILOTS

V. I. Weihe, Technical Assistant to the Vice President and Chief Engineer, journeyed to Mobile, Alabama, recently to address a convention of Chief Pilots of the Military Air Transport Service. Mr. Weihe discussed the "Future Role of Automatic Communications and Computation in Air Traffic Control".

Left to right in the first row are Melpar Consultant Harold Stuart, Lieutenant General F. F. Everest, Melpar President Thomas Meloy, and Vice President and Chief Engineer C. B. Raybuck. In the second row are Major General W. D. Eckert, Lieutenant General E. J. Asensio, Major General L. S. Stranathan, Director of Research T. P. Cheatham, and Section Head R. E. Williams. In the rear row are V. I. Weihe and R. E. Miller of Melpar, and Brigadier General H. F. Gregory.

CAMP WORK IN TURKEY DRAWS COMMENDATION

Letters of appreciation from Colonel Fuat Ulug of the Turkish Army and from H. A. Sargeaunt, Assistant Scientific Adviser at SHAPE headquarters in Paris, France, attest to the success of the mission to Turkey recently concluded by Dr. G. D. Camp of Falls Church.

Sent to Turkey at the request of the North Atlantic Treaty Organization, Dr. Camp's assignment was to describe the techniques and objectives of Operations Research work and to outline the steps required of the Turkish Army in setting up its own OR group. Colonel Ulug's letter indicates that the program already is in progress.

Commenting on Dr. Camp's work in Turkey, Mr. Sargeaunt wrote: "He gave several important lectures both at universities and to military audiences, and his day-to-day advice to various working groups in Turkey was of the greatest value. He certainly raised the standing of American scientists in the eyes of those who heard him".

COMPANY HEADS DESCRIBE ACTIVE WORK, NEWER AIMS

Headed by Lieutenant General F. F. Everest, Deputy Chief of Staff for Operations, a group of high-ranking officers representing many of the principal functions of the United States Air Force attended a 'briefing' at Melpar's Falls Church laboratory on April 16.

The meeting was designed to acquaint the Air Force men with the newest developments in electronics and acoustics being pursued by Melpar's research and development staff within the framework of our USAF contracts. In addition to summary accounts of work in progress, the visitors were given an insight into various new lines of scientific inquiry which our scientists and engineers plan to pursue.

President Thomas Meloy discussed Melpar's operating policies and future planning as they affect the constantly evolving need for military electronics. Dr. T. P. Cheatham, Director of Research at Melpar-Cambridge, described the activities of his organization. Engineering Section Head R. E. Williams and Project Manager R. E. Miller spoke on various aspects of the Company's developmental engineering work. Arlington Division Manager W. C. Purple, Jr. described the organization and operation of our Production Department.

In addition to Lieutenant General Everest, the Air Force group consisted of: Lieutenant General Thomas Power, Lieutenant General S. E. Anderson, Lieutenant General E. J. Asensio, Major General Herbert Thatcher, Major General W. D. Eckert, Major General L. S. Stranathan, Brigadier General A. L. Pachynski, Brigadier General James Ferguson, Brigadier General H. F. Gregory, Brigadier General H. E. Watson, Colonel Gordon Gould, and Lieutenant Colonel O. J. Schulte.

Following the speakers' session, held in the main conference room, the visiting group toured the building to inspect the Company's fabricating, processing, and test facilities.

OPINION

This month of April saw an event of some note recorded in Melpar's memory book: our first ten-year man. The happening is given due prominence in the news columns of this issue of the **MELPAR-a-graph.** Mention of it in this space is a device to trigger some reflective comment on the future, as it is conditioned by the past.

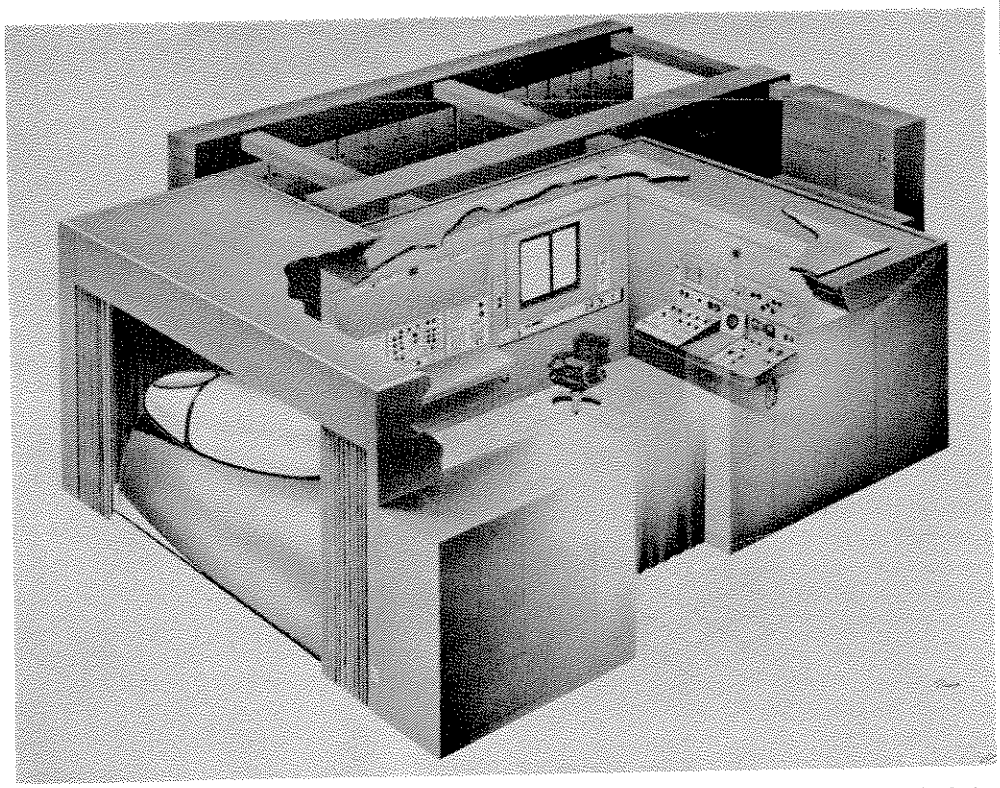
Like a human being, Melpar has passed through many stages of growth in its first decade. Tasks which once put a consuming demand on our strength now rank as standard exercises; we can grab them by all four corners. And as those tasks followed one another, each left its mark.

Each bequeathed us a greater capacity, measured in terms both tangible and intangible; a new set of machine tools, a new cluster of test instruments, a new building, a new fund of engineering knowledge.

"Ten years older" is no true index of our stature today. With a new baseball season getting under way, a more apt analogy comes to mind: Melpar has come up through the minors and now is eligible to play in fast company. We're fielding a right good team—plenty of seasoned veterans, plenty of promising rookies. And of most importance, the passing years have generated in us that cohesive quality which enables one collection of individuals to rank higher than another in the season's standings.

Vastly different though our activities are today, compared to an earlier day, we believe our capacity and our calibre will withstand a further testing. Though we are carrying on many projects which, singly, engage more people than were on Melpar's total payroll a few years ago—still we are not content to ride on momentum.

Bringing the baseball analogy to a fitting close, we are actively competing for certain programs which will lift us into a still higher league. There, the competition, rightly, will be hotter; entries in the Errors column will have greater consequence. But somehow, it seems that a well-knit team, playing as a team, just doesn't make very many errors. We hope so, anyway. It's no fun going back to the minors.



CONTACT *with terra firma seems a far-away thing to pilots undergoing tactical instruction in this Melpar-developed flight simulator, the F-101A. Flying conditions extending even to engine noise, are realistically simulated during its operation. It is one of a group of similar devices, the development of which has brought Melpar a prominent position in this field.*

WILLIAMS, KINGS NOTE SUCCESSFUL TRIP TO ENGLAND

Section Head H. M. Williams and Projetc Engineer Leonard Kings recently returned from England after what both describe as a "very productive" two-week span of working with Great Britain's Signal Research and Development Establishment and other British government agencies.

During a series of technical conferences and laboratory visits arranged by Ronald Holman, MBE, of the Ministry of Defense, the Melpar men discussed current technological practice in the two countries as well as plans for future work on the same cooperative basis.

Sessions were held with F. T. Rule, Superintendent of Communications and Acoustics, and his staff in the laboratories at Christchurch, Hampshire; other meetings occurred at Farnborough, the British equivalent of the United States' Wright Field.

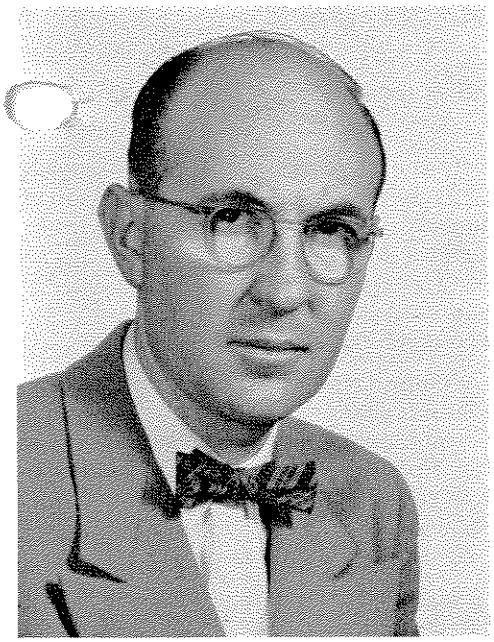
The venture was adjudged so successful by those involved, that arrangements have been initiated by the British to send a group of their engineers on a visit to Melpar during the next two months to continue the work.

F-101A SIMULATOR NEARS COMPLETION

The intricate task of test and clean-up on the F-101A Flight Simulator is proceeding virtually on a round-the-clock basis at Falls Church. The accompanying artist's illustration accurately depicts the huge size, and suggests the complexity, of this pilot training device.

Weighing approximately 25,000 pounds installed, the simulator requires a 40x40 foot room with a ceiling height of no less than 14 feet. In operation, it generates a heat load of such proportions that a 3-ton air conditioning unit must be provided for the instructor's station as well as the cockpit section.

The simulator incorporates facilities for a thorough and intensive training program in the areas of cockpit familiarization, instrument flying, normal and emergency procedures, navigation and communication techniques, bombing and gunnery simulation, and scoring. Simulation is principally accomplished by the use of electronic analog computers.



B. H. Dennison

CAMBRIDGE READY FOR MOVE INTO TRIPLED PLANT SPACE

It's time to go for Melpar-Cambridge. The lusty growth of the Company's research center has made quarters which were ample in December, 1954 as uncomfortable as tight shoes.

In early May, Dr. T. P. Cheatham's group will move into a 15,500 square foot section of the United Building at Greenleaf and Forsyth streets in Boston. The 10 people who originally set up shop in a 5,000 square foot area in Cambridge now number some 36; by the time the move is completed, it is expected that the roster will total more than 40.

AS THE WILD BELLS RING, BE CALM—MERELY TESTING

A "dry run" test of the fire alarm system in the Falls Church laboratory will be made on Wednesday, May 16. The test will **not** be a fire drill. It will **not** call for evacuation of the building—its purpose is to acquaint Falls Church people with the meaning of the bell-ringing sequence.

First heard will be the muted sounding of 15 pre-signal gongs, automatically repeating a coded call four times. The coding establishes the location of the trouble for the emergency forces assigned to respond.

Next, and with unmistakable vigor, 53 actual alarm bells will be turned loose. A commentary will be broadcast over the public address system, warning of the imminent uproar and explaining its purpose and meaning.

DENNISON BECOMES FIRST 10-YR. MAN

Sunday, April 22, 1956 was a day of more than usual significance to Falls Church Project Engineer B. H. Dennison. Though no bands played and no speeches were made, still it was a day to remember. Ben Dennison became the Company's first 10-year man—other than its founder, President Thomas Meloy.

Ben's first assignment was Job 1005, in a job number series beginning with 1001 and standing today at 1282. He recalls that it covered a small quantity of Indicator Display units developed for the "30 Series" radars. Ben also remembers standing in line to lay hands on a piece of test equipment to enable him to get on with the job.

That test gear was not too difficult to find, however. There were only 1500 square feet of plant area to cover, and only seven other engineers competing for it. Ben recalls Melpar's original quarters as being located near 5th and G streets, Northwest, "between the print shop and the Chinese grocery".

That expansive area housed some 20 people, including one secretary and two machinists. But things began to happen, sometimes with bewildering rapidity. Before Christmas of that year, "we became a big business. We moved into 8,000 square feet on Swann Avenue in Alexandria and that seemed as big as the Pentagon".

In March of 1947, less than a year after Ben signed on, he recalls that the 5th street plant was closed for good and more than 100 people were concentrated in the Alexandria location. Pressed for some profound words on some important subject (in order to make this interview conform to the rules and regulations of the society of newspaper interviwers), Ben said, "I think we're here to stay" and headed back to his simulators.

THOMPSON LECTURES IN DALLAS

Incorporating the results of developmental work carried on at Melpar, a lecture entitled "An Effective Method of Forced Air Cooling on Airborne Electronic Equipment" recently was presented by H. H. Thompson, Falls Church Senior Engineer.

Mr. Thompson appeared in Dallas, Texas, before the American Institute of Electrical Engineers during the group's Southwest District Meeting.

ARLINGTON STARTS WORK ON B-58 UNIT

Work began last week in Arlington Division on approximately 25,000 hours of assembly and wiring which will ultimately result in the production of 250 different chassis required for the electronics system being developed by Melpar for Convair's B-58 aircraft.

The units will be installed in a high speed digital and analog data processing system which forms one of the major elements of our B-58 installation. Described as one of the largest systems of its kind ever developed, the array will use 5,000 vacuum tubes and 5,000 magnetic cores as logic units.

The complex task of shifting a workload of this magnitude between plants is being coordinated by Senior Engineer Levine on behalf of Project Manager R. E. Miller's section. The Falls Church Project Services group has been assigned the task of processing the work out of its home quarters and into the hands of Arlington Division's Planning and Control group for scheduling and routing into the assembly lines.

IT'S TIME TO EAT; 3 TIMES IN FACT

Lunch service in the cafeteria of the Falls Church laboratory will be placed on a three-shift basis beginning Monday, May 7, in order to adapt the activity to the plant's steadily increasing population.

To achieve a more equitable balance of patronage, the building's first floor has been divided roughly into North and South sections and the following lunch-hour schedule established:

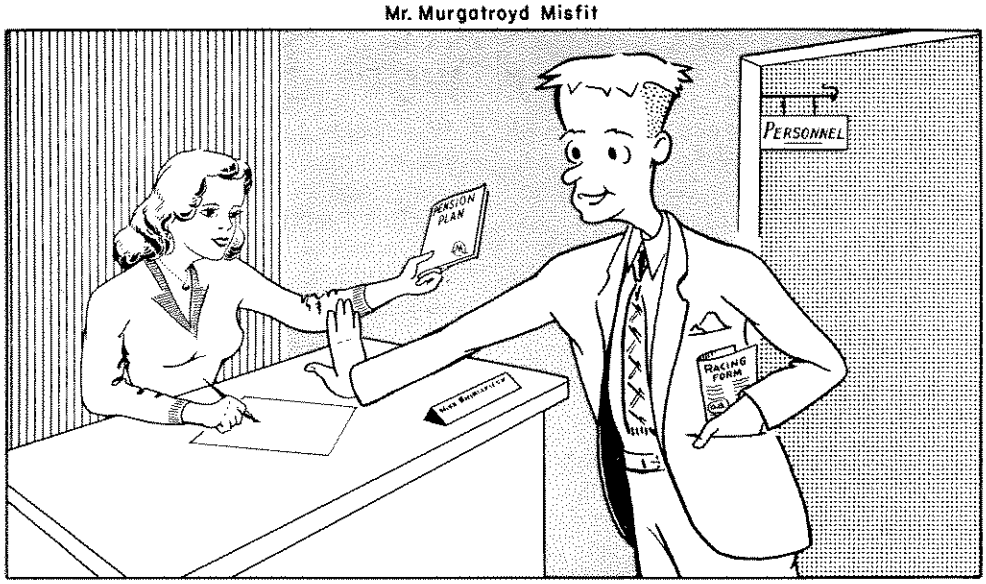
11:45 to 12:30 . . . All personnel stationed in the lower level.

12:00 to 12:45 . . . K. S. Kelleher's Section, B. R. Boymel's Section, Quality Control (first floor personnel), Machine Shop, and R. E. Williams' Section. In addition, the Maintenance Department and the Project Services Office, except for individual revisions to be made by the respective supervisors to suit the circumstances of their work.

12:15 to 1:00 . . . All other personnel stationed on the first floor.

The cafeteria management is planning to re-arrange its cooking schedules to ensure an ample supply of food during each scheduled lunch period.

Mr. Murgatroyd Misfit



"Who needs a pension? I've got a friend in the third at Bowie."

GOING UP!

The advancement of J. L. Clark from Section Head to Project Manager, Flight Simulators, leads the list of promotions of Melpar people announced during the past month. Also in Flight Simulators, K. E. Schreiber has been named a Section Head.

Elsewhere in Falls Church, D. M. Early has become a Senior Engineer, as have R. E. Brown, Coleman Goatley, W. G. Scott, H. H. Hibbs, and C. R. Bertram.

At Melpar-Watertown, J. E. Jakul has been promoted from Draftsman to Senior Draftsman.

Arlington Division people earning advancement recently included M. E. Cogswell, moving from Assembly Trainee to Detailer. A new Group Leader and four new Task Leaders have been named in other Arlington promotions. N. O. Brooks, former Shipping Clerk, is now Shipping Group Leader. Advanced from Assembler to Task Leader were R. J. Greer, E. A. Hendrick, C. R. Green, and A. P. Hogan.

M. G. Watson, of Falls Church, has advanced from Senior Engineer to Project Engineer. Three Falls Church Junior Engineers—G. S. Barbee, R. D. Kalstrom, and T. G. Hallinan—now are ranked as Engineers.

G. L. Hillegas rose from Expediter to Procurement Planner, while D. E. Jones and W. E. Garton have become Junior Procurement Planners. J. W. Swing, Experimental Machinist, has been named a Group Leader.

J. D. Greenhalgh, formerly a Senior Technician, has risen to Junior Engineer. P. E. Graves and W. T. Maltby, former Draftsmen, have become Senior Draftsmen.

S. A. Palmer has been promoted to Procedures Analyst from his previous assignment as Assistant Supervisor, Incoming Inspection. He is succeeded by A. D. Babbitt. E. Schroer has risen from Clerk Typist to Secretary. Promoted to Carpenter from Maintenance Helper was R. W. Coffman, Jr.

KELLEHER NAMED TO NATIONAL SCIENTIFIC COMMITTEE POST

Appointment to a national committee of the International Scientific Radio Union has been won by Falls Church Section Head K. S. Kelleher, according to a recent announcement by the National Academy of Sciences.

Mr. Kelleher will serve the United States' National Committee as a member of Commission 6a, concerned with research in the field of antennas and propagation. The work of the Commission, in describing avenues of antenna research currently being followed in the United States as well as its recommendations respecting areas of future effort, will be reported at a future meeting of the international body.

COLE CHAIRMAN OF WASHINGTON IRE

Ralph I. Cole, of the Falls Church plant, will serve through the 1956-1957 term as Chairman of the Washington (D.C.) Section of the IRE. Mr. Cole has been prominently identified with IRE activities for many years, and is at present editor of the Washington group's monthly Bulletin.

'What's Our Policy'

"How do I go about getting a trans

Every Melpar employee has the right to request a transfer via his immediate supervisor. Every request for transfer, whether written or oral, whether made by the supervisor or the employee, whether approved or not, **must** be reported to the Personnel Department by the supervisor.

A transfer is not lightly made. A significant change in one's job is an important matter, both for the employee and the Company. There are no hard and fast rules covering the whys and wherefores of a transfer—the reasons for such action are too widely varied.

But one criterion must be met: a transfer must benefit both the employee and the Company. The assignment or reassignment of people within the Company's structure is a vital part of personnel management. It is necessary in maintaining a balanced work-load; it is an essential in the process of "training up" employees in pursuance of the Company's policy of promoting from within.

Both your supervisor and the Pers[illegible] Department will give the most c[illegible] consideration to a transfer request; both know it can mean a great deal to your future. And they will evaluate it realistically, not merely by trite formulas of seniority or classification.

MELOY IN IRELAND TO STUDY ITS INDUSTRIAL POTENTIAL

Responding to the invitation of Ireland's Prime Minister John A. Costello, Melpar President Thomas Meloy now is visiting that country's electrical manufacturers and its universities. Mr. Meloy's mission involves a survey of Ireland's potential production in electronics, and the research potential of its universities.

Electrical manufacturing in Ireland is now confined principally to home appliances and light machinery. In extending his invitation to Mr. Meloy, Prime Minister Costello emphasized his country's desire to broaden its product lines and to expand its export markets.

Since a high level of research a[illegible] velopment activity is fundamental t[illegible] a program, Mr. Meloy is reviewing the facilities and technical staffs of the National University of Ireland and the University of Dublin in the light of that need.