MELPAR-A-GRAPH

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

Volume 7, Number 1 January, 1962

$18 MILLION 4th QUARTER RECORDED

MELPAR WINS $4 MILLION AIR FORCE CONTRACT

The Air Force has awarded a $4,211,000 contract to Melpar to refurbish and modify airborne reconnaissance equipment. Responsibility for the technical management of the new contract has been given to Mr. E. J. Diehl, Manager of the Reconnaissance Department. Most of the work on this contract will be accomplished at the Hardin Street Plant and at Melpar's Field Reconnaissance Laboratory near Topeka, Kansas.

SYKES APPOINTED AS BUDGET DIRECTOR

The appointment of Mr. H. F. Sykes to the position of Budget Director was recently announced by Executive Vice President A. C. Weid and is effective 29 January.

This appointment is another step in management's continuing program to insure that Company funds are committed to those programs and activities that are most important to Melpar's progress and growth.

Mr. H. F. Sykes

The Budget Director will be responsible for the development of the overhead budget structure and for the preparation and coordination of periodic budgets. His responsibilities will also include the analysis of overhead commitments and of the effectiveness of control measures. Commenting on his new appointment, Mr. Sykes emphasized that even though one of his first concerns will be to identify means toward further cost reduction, his primary objective is to seek the wisest use of funds, and not cost reduction as an end unto itself.

A 1929 graduate of the United States Military Academy, West Point, N. Y., Mr. Sykes holds a M.Sc. from the State University of Iowa and is a member of Tau Beta Pi, an honorary scholastic group. He is a member of the Society for Personnel Administration, of the Washington Operations Research Council, and President of the Washington Chapter of the Society for Advancement of Management.

Mr. Sykes served in the U. S. Army Corps of Engineers until his retirement in 1957 as a Colonel. The last assignment

(See SYKES, Page 2)

MELPAR FORMS NEW SUBSIDIARY —MOVES PLANT TO THE WORKERS

The formation of a new subsidiary to be located in Fairmont, West Virginia was announced by President E. M. Bostick. The new activity will be known as Melpar-Fairmont, Inc. and is situated approximately 200 miles from Falls Church. Mr. Bostick said that initial work for the subsidiary, which is planned for opening in March of this year, will be pilot production work in support of the Company's manufacturing programs. He pointed out that this will be work which would normally be subcontracted to other industries and will not decrease the work-load in our existing operations.

In selecting this central West Virginia location for the new subsidiary the company is placing prime importance on the availibility of personnel such as machinists, assemblers, and necessary supporting personnel. Mr. Bostick stated that the plant's proximity to West Virginia University at Morgantown was another important factor in the Company's decision.

Total employment at the new site may eventually run as high as 100 and Mr. Bostick indicated that it is his intention to hire as many local people as possible to staff the new plant.

Public announcement of Melpar's newest subsidiary was made by Senator Jennings Randolph on behalf of himself, Senator Robert C. Byrd, Representative Cleveland M. Bailey, Governor W. W. Barron and Mr. A. L. Henry, Executive Vice President of the Greater Fairmont Development Association at a January 18 luncheon honoring Secretary of Labor Arthur J. Goldberg.

2ND HIGHEST IN HISTORY OF MELPAR

New orders totaling $18,039,504 were recorded on Company books during the fourth quarter of 1961 for new contracts, amendments, and change orders according to Mr. R. T. Cosby, Vice President and Treasurer. Compared with previous fourth quarters, it is exceeded only by the fourth quarter of 1959 and ranks as the third highest figure to be recorded during any quarter in the history of the Company.

MANAGEMENT DEVELOPMENT COURSE STARTS FOR ALL MELPAR SUPERVISORS

Melpar supervisors attended the first meetings of the new management development course this month.

In announcing the new course, President Edward M. Bostick emphasized that every one of Melpar's managers and potential managers must be competent to undertake a most important job—the training and development of subordinates. Designed to help managers and supervisors improve themselves in this respect, the in-plant course was started January 8th under the direction of the Personnel Director. The course is being administered by W. F. Fenton, Training Coordinator.

The first part of this course consists of a series of lectures on the management of a contract, covering all phases from receipt of a request for a proposal to equipment delivery. Each lecture is followed by a question and answer period. The second part of the course will consist of lectures on the techniques of supervision with each lecture followed by a discussion period. All divisions and directorates will participate in the course both as students and as instructors.

Mr. Lincoln Brown, Director of Program Management, led the first two weeks of meetings with a briefing on the organization and functions of his directorate. The second two weeks of the program starting January 22nd are being conducted by Mr. Ken Streeter on the functions of an engineering department at Melpar.

(See MANAGEMENT COURSE, Page 4)

NEW RELIABILITY AND TEST DEPARTMENTS FORMED BY Q. C.

Reliability and Test have been established as Departments in an organization change that went into effect on 8 January 1962, according to Reliability and Quality Control Director R. G. Murrell. At the same time, Mr. Murrell announced the appointment of Mr. L. J. Blumenthal as Manager of the new Reliability Department. Mr. W. F. Dupree continues as Manager of the Test Department.

Mr. L. J. Blumenthal

Establishment of the Reliability Department reflects Company recognition of the extreme importance of reliability to the business we are pursuing in aerospace and missile activities. As Manager of the new Department, Mr. Blumenthal is responsible for the direction of all Melpar efforts in Reliability Engineering, Quality Engineering and for the Measurements Standards Laboratory.

Mr. Blumenthal comes to Melpar from Goodyear Aircraft Corporation where he was Manager of their Reliability engineering Department. Other significant positions held by Mr. Blumenthal during his thirteen year career have included assignments as Chief of the Reliability Analysis Section at Bell Aircraft Corporation; Director of the Material Department for the Bureau of Ordnance in the Office of the Assistant Inspector of Naval Material at Cheektowaga, N.Y.; Chief of the Test Equipment Design Section of the Naval Ordnance Laboratories at White Oak, Maryland; and Product Engineer for glass electronic components at Corning Glass Works. He is a member of IRE Professional Groups on Engineering Management, and on Reliability and Quality Control; The American Society for Quality Control; and the Operations Research Society of America. Mr. Blumenthal is a 1948 graduate of the University of Michigan with a B.S.E.E.

RESEARCH DIV. DELIVERING RADIATION DETECTION EQUIP.

The Metals and Ceramics Branch of the Research Division's Materials Laboratory has recently delivered several photoionization chambers to the Atmosphere and Astrophysics Division of the Naval Research Laboratory. These ion chambers will eventually be employed for the purpose of detecting and measuring the intensity of electromagnetic Lyman alpha radiation in the upper atmoshere.

Because of the accuracy required in the measurements taken by these chambers, high reliability had to be built in. Even the smallest gas leakage would seriously affect their reliability and operating life. Special techniques were developed to meet this challenge which ultimately provided a more reliable and ruggedized chamber. Because of the success of these chambers, the Metals and Ceramics Branch has been assigned additional contracts to develop other types of photoionization chambers for the Naval Research Laboratory as well as additional orders for more than 200 Lyman alpha chambers from NRL and other agencies.

The photoionization chamber work is being done by Metallurgical Engineer P. J. Lare and Technician T. H. Lyons, Jr., under the supervision of Z. A. Post, Metals and Ceramics Branch Supervisor.

SYKES

(Continued from Page 1)

of his distinguished career in military engineering management was as Director, U. S. Army Engineer Research and Development Laboratories, Fort Belvoir, Virginia. Prior to joining Melpar in 1959, Mr. Sykes was Assistant Chief Engineer in charge of Research Laboratories for Chrysler Corporation's Missile Division.

Melpar Field Service Engineers Keep 'Em Flying

The ability of Melpar's Field Service Engineers to keep their simulators "flying" is reflected in the many letters of commendation received by the Company from points all around the globe citing their performance.

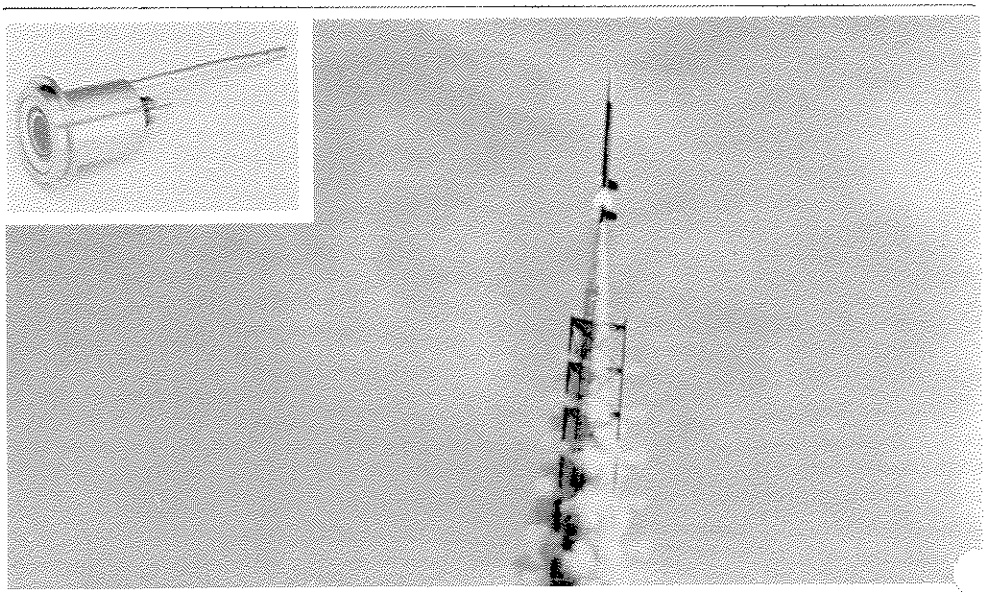
One such letter is reprinted below. It was received by H. W. Riley, Manager of the Field Service Division from Flight Lieutenant T. W. Murray writing on behalf of the Commanding Officer of Royal Canadian Air Force Station Uplands.

"Having just completed 300 hours of instruction with your F101B Flight Simulator at RCAF Station Uplands, I feel I must write and thank your firm publicly for the invaluable assistance received from your Field Service Engineers, Messrs. Robert Lamb and Kenneth Roy.

"I am responsible for the initial training of all RCAF aircrew on their conversion to the F101B aircraft, and supervise twelve hours training per crew in the Flight Simulator.

"The fact that 298 out of a possible 300 hours have been utilized for training, is indeed creditable and reflects directly on the splendid efforts of both yo engineers. They have been exceeding helpful in their suggestions, and tireless in their efforts during this the initial phase of an important defence programme.

"Mr. Robert Lamb and Mr. Kenneth Roy are excellent representatives of your Company, and fine ambassadors for your country."



A Naval Research Laboratory Aerobee-Hi Rocket is fired from its launching tower at the U. S. Naval Ordnance Missile Test Facility, White Sands Proving Ground, New Mexico. A scientific tool, the Aerobee-Hi has provided valuable information about the earth's upper atmosphere. N.R.L. has used the Aerobee-Hi to send up experiments which include improved Lyman alpha photoionization chambers (photo inset) supplied by Melpar's Research Division to take measurements of energy being received by the earth from the sun in the hydrogen resonance line. Official United States Navy Photograph. Photo inset of photoionization chambers taken by Melpar Photographer R. Sakamoto.

MINUTEMAN G-PEP AWARDS BEGIN

The monthly competition for the Group-rformance Evaluation Program (G-PEP) Award has ended in a tie in each of the first two months of competition. Duplicate trophies were awarded in the November competition to Minuteman Assembly Foreman Henry W. Shay and to Mr. Richard A. Markham, Supervisor of the Minuteman Materials Handling Group who received them on behalf of their groups (see photo).

The two tying groups for the December G-PEP Award were the Reliability Group under Mr. Lane Dudley and the Materials Handling Group under Mr. Markham (for the second time). According to the rules for the G-PEP competition, the Materials Handling Group will be awarded permanent possession of the trophy if they are selected one more time.

The Company initiated the Group-Performance Evaluation Program for the Minuteman Division in November. One of the motivational activities of the Minuteman Program, G-PEP provides a monthly competition in which Minuteman Super-sors are asked to evaluate the performance of all Minuteman first-line Supervisors and their groups. Each group is rated in its *cooperation* (Do members of the group help push the job along, or do they find excuses why they can't perform a task, ie; "bottle-necking?"), *quality of achievement* (Does the the group do the job right the first time, rather than cause errors or omissions that have to be redone?), *timeliness* (Does the group deliver on time or do they give reasons why it has slipped its schedule?), and *administration and control* (Does the group function as a controlled unit or is it a loosely knit group of people, each working on his own, thus causing delays, duplication of effort, confusion and poor morale).

The G-PEP Committee, composed of the Personnel Director, Mrs. J. T. Lafrank, the Company Consultant, Dr. L. A. Schmidt, and the Minuteman Division Personnel Manager, Dr. T. L. Wood, reviews these supervisory ratings. They also consider each group's budget and "milestone" performance, their Discrepancy Reports, and other available Quality Control and Reliability data. In addition the G-PEP Committee makes periodic observations of housekeeping and morale of all groups within the Division.

Announcements of the winning group selected by the Committee each month are made by Minuteman Division Manager K. E. Schreiber.

FIRST G-PEP AWARDS . . . Mrs. J. T. Lafrank, Personnel Director (far left) and Mr. K. E. Schreiber, Manager of the Minuteman Division (far right) congratulate the supervisors of the winning groups in the first monthly competition for the Group-Performance Evaluation Program Award (G-PEP) which ended in a tie. Mr. Henry W. Shay, Minuteman Assembly Foreman (left) and Richard A. Markham, Supervisor of the Minuteman Materials Handling Group (right) are shown receiving the awards for their groups.

Photo by Glittenberg

MM Division Training Test Equipment Operators

A new Minuteman Division training course began January 29 to train new personnel to operate test equipment for checking out the Hi-Rel printed circuit assemblies as they come off the line. The course is scheduled to last two weeks and will emphasize only the basic electronics theory necessary to develop a background for specific test equipment operations.

On completion of the course the Test Equipment Operators will perform functional tests on Hi-Rel assemblies prior to shipment. These two-phase functional tests not only determine whether each assembly meets Minuteman Hi-Rel standards but also establish values for "To Be Determined" parts and components which are then inserted in a final assembly ep and returned for final functional testing prior to shipment.

It is anticipated that approximately 100 persons will be cycled through the course during the next twelve months and both men and women will be trained to perform the duties of Test Equipment Operator.

According to Minuteman Training Coordinator J. W. Fowler, the greatest emphasis of the course has been placed on the actual operation of the test equipment.

Going Up!

Promotions include C. N. Adkins to Principal Engineer, C. M. Alessi to Quality Control Engineer, O. A. Amason to Field Service Engineer A, and C. A. Andon to Field Quality Control Engineer.

M. R. Artman and W. E. Barber advanced to Electrical Engineer, G. N. Beck to Engineering Assistant, K. S. Bland to Junior Electrical Engineer, and J. Caballero to Laboratory Head.

R. D. Cathell rose to Assembly Foreman, E. M. Connelly to Consulting Project Engineer, C. J. Cooper to Senior Spares Planner, and R. E. Davis to Planning Coordinator.

K. E. Dreyer was promoted to Inspection Foreman, F. K. Eggleston and R. M. Enos to Principal Engineer, D. E. Ervin to Photo Laboratory Technician and N. Filipescu to Senior Chemist.

L. Gonano moved up to Senior Buyer, J. T. Griffith to Senior Quality Control Engineer, J. W. Hall to Assistant Division Manager (Minuteman), and M. G. Hand to Contract Secretary.

H. D. Hawkins advanced to Senior Electrical Engineer, N. J. Hogge to Methods Supervisor, E. C. Jennings to Jr. Methods Engineer, and J. A. Jobe to Senior Industrial Engineer.

V. J. Kaneski was promoted to Principal Engineer, I. N. Keen to Shop Foreman, S. Kovell to Senior Quality Control Engineer, and H. H. Landfried to Project Engineer.

B. A. Logan rose to Senior Electrical Engineer, A. C. Madsen and R. J. Matyas to Senior Mechanical Engineer, M. J. Morgan to Time Inspector, and W. B. Morrow to Junior Chemical Engineer.

T. K. Parks moved up to Laboratory Head, W. H. Rogers to Program Coordinator, L. R. Shaffer to Senior System Engineer and R. A. Sparapany to Senior Research Engineer.

H. A. Straight advanced to Senior Electrical Engineer, P. H. Terry to Project Engineer, C. H. Thrall to Laboratory Head, and B. C. Ullom to Inspection Foreman.

J. A. Walton was promoted to Shop Foreman, H. C. Wilson to Program Manager and J. E. Worden to Senior Planner.

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MELPAR LOANS CARDIAC SENTRY TO AID RECOVERY OF EMPLOYEE

One of Melpar's employees now has intimate knowledge of the efficiency of the Special Products Division's electronic monitoring system, the Cardiac Sentry. Shortly after suffering a heart attack on December 16th, Joseph W. Hall, Assistant Manager of the Minuteman Division, reports that the Company loaned the Cardiac Sentry to his physicians so that it could be used to monitor the action of his heart during the critical period immediately following the attack.

According to Dr. J. N. Baum, Medical Consultant to Melpar, it is during this immediate post-coronary time interval that a heart patient is most apt to develop dangerous disturbances of rhythm and rate. Though the Cardiac Sentry cannot prevent these disturbances, through its continous monitoring it can detect and signal the onset of dangerous variations in heart action, so that responsible medical personnel can be alerted. Immediate action can then be taken to correct the disturbance. When certain limits preset by the attending physician are passed, the Cardiac Sentry can initiate and control the administration of prescribed medication, and a cardiac stimulator can be automatically activated in the event the heart stops beating.

Mr. Hall said Melpar's electronic nurse also provided his physicians with a permanent record of the action of his heart during the post coronary period, so that they had more precise data on which to base their diagnostic and prognostic judgments.

He was especially impressed with the ease of attaching the new Melpar Electrodes to his chest and found that they did not hamper his movements. He said that many doctors and nurses came to see the Cardiac Sentry while it was set up, and all of them wished that the hospital owned one.

Field trials of the device have been conducted in several cities including Washington, Baltimore, Philadelphia, and Boston. According to Mr. B. H. Dennison, Assistant to the Manager of the Special Products Division, units have been sold to the University of Pennsylvania Hospital in Philadelphia, Sibley Hospital in Washington, Sinai Hospital in Baltimore, and to Walter Reed Army Medical Center.

Well on the way to recovery now, Mr. Hall expressed his gratification at the interest in his recovery displayed by the Company.

NEREM HEARS DR. SUSSMAN ON AMBIGUITY FUNCTIONS

Dr. Steven M. Sussman, Head of the Communications Theory Laboratory at the Applied Science Division, presented a paper on "The Approximation of Realizable Ambiguity Functions" at the Information Theory Session of the Northeast Electronics Research and Engineering Meeting held in Boston on November 14 through 16, 1961.

Dr. Sussman noted that the importance of the ambiguity function is due to the fact that only through it does a radar signal enter into the performance equations relating to detectability, range and doppler accuracy, and multiple target resolution.

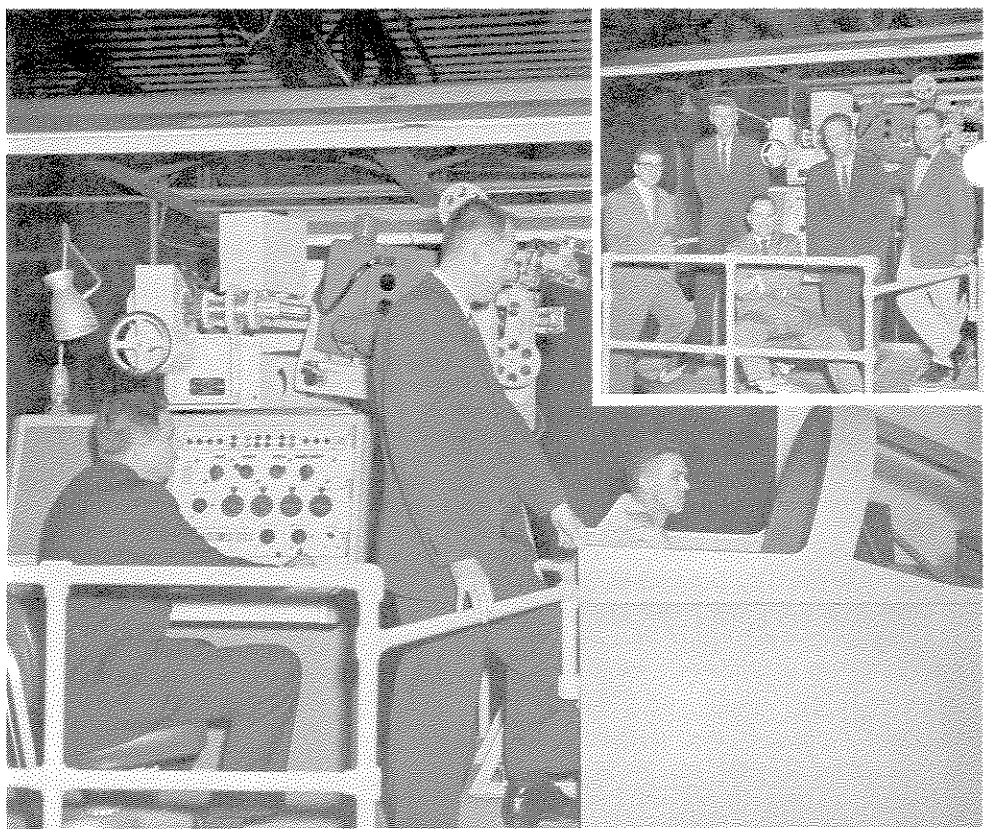
The paper detailed factors involved in the use of mean-square-error in approximating ambiguity functions realizable by known signals. It was shown that approximations in signal space and in ambiguity-function space are equivalent, and a simple relation exists between the two minimum errors.

MANAGEMENT COURSE

(Continued from Page 1)

Future subjects, which have be scheduled through April 12th for the firs part of the course, include functions and facilities of the Manufacturing Division, by Mr. L. C. Wright; Reliability and Quality Control, by Mr. R. G. Murrell; a progress report on activities in the Research Division, by Dr. Paul E. Ritt; administration of the contract, by Mr. N. J. Sargis; and management controls, by Dr. L. A. Schmidt.

Additional subjects are on the agenda and will be announced in the future.



ON TARGET . . . Striking a pose simulating the operation of the GAM-83 Tactical Delivery Missile Trainer, (L to R) Mr. K. C. Streeter (seated at console), Computer Department Manager; Mr. E. G. Haber (standing), Project Engineer at Aeronautical Systems Division, Air Force Systems Command; and Major C. H. Worley (in cockpit), Education and Training Officer, Headquarters, Tactical Air Command; are shown during final acceptance tests of the most advanced missile system simulator developed for the GAM-83.

PHOTO INSET: Kudos for design and development go to H. R. "Bud" Gary (seated), Project Engineer, (standing L to R) J. G. Charitat, Electrical Engineer, G. D. Smith, Senior Electrical Engineer, J. E. Conant, Senior Mechanical Engineer, and V. A. Keriakos, Engineering Assistant. With technical acceptance of the equipment assured, the preparations for shipment were turned over to Program Management leaving the project team free to devote their energies to other design and development jobs.

Development of this prototype model was sponsored by the Aeronautical Systems Division of the Air Force Systems Command. Photos by Sakimoto and Norton