MELPAR-A-GRAPH

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MELPAR GIVEN TWO MILLION MAN HOUR SAFETY AWARD

Presentation of a plaque to Melpar by the Liberty Mutual Insurance Company marked recognition of a new Company record for hours worked without a lost-time accident. Personnel Director J. T. Lafrank and Vice President A. C. Weid accepted the award for Melpar. Mr. Lyman B. Fox, Regional Manager of the Liberty Mutual Insurance Company, made the presentation.

Others present at the time the award was made were: Vice President and Treasurer R. T. Cosby, Safety Committee Chairmen B. R. Deschaine, W. F. Fenton, and E. M. Lane, Chief Nurse P. E. Griffith and Liberty Mutual representatives L. E. Grande and F. D. Goss.

Working from May 29, 1958, to August 27, 1958, without an accident serious enough to cause time off from work, a total of 2,025,333 hours was amassed. Previous high was 1,052,845 man hours from September 23, 1957, to November 9, 1957. A plaque commemorating this accomplishment hangs in the Personnel Department at the Falls Church Plant along with yet another plaque presented for compiling 877,818 no-lost-time hours worked during 1954.

The new award marks the second time during the past year that Melpar has achieved such as excellent safety record. It is the first time that the Liberty Mutual Insurance Company has made such an award to any employer in the Washington Metropolitan Area.

All northern Virginia Plants as well as the plants at Boston and Watertown, Massachusetts, and Tucson, Arizona, and Field Service personnel throughout the world contributed to the accident-free total.

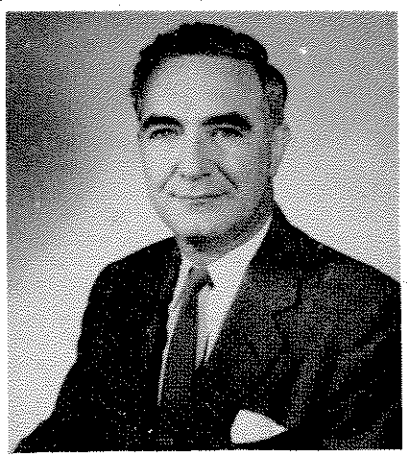
Replicas of the award have been made and will be permanently displayed at all plants.

Our next goal: 5 million man hours without a lost-time accident, by June of '59!

DR. G. E. VALLEY NAMED DIRECTOR OF DEVELOPMENT PLANNING

The appointment of Dr. George E. Valley to the post of Director of Development Planning was announced by Melpar President Thomas Meloy early this month. Dr. Valley has recently resigned as Chief Scientist of the Air Force.

Previously, Dr. Valley, Professor of Physics at M.I.T. was granted leave of absence to become Associate Director of Lincoln Laboratory, and was responsible for the development of the Sage radar early warning system for defense against enemy bombing.



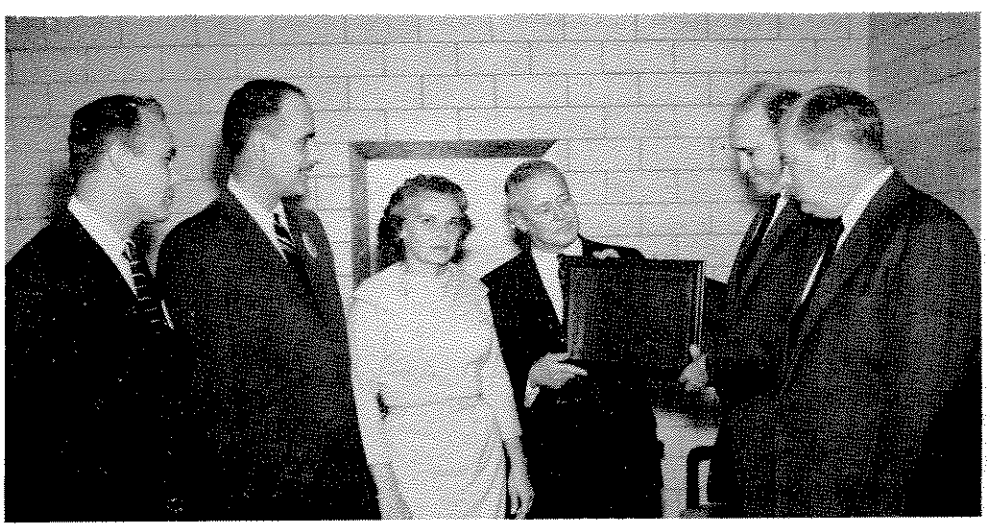
DR. G. E. VALLEY

Dr. Valley, a graduate of M.I.T., received his Ph.D. in Physics from the University of Rochester. He was a National Research Fellow at Harvard in Nuclear Physics. During the war, he became Project Supervisor and member of the Senior Staff of the Radiation Laboratory at M.I.T.

Dr. Valley is the author of numerous articles dealing with nuclear physics and electronics. He has written two books, "Vacuum Tube Amplifiers" and "Cathode Ray Tube Displays" and holds patents dealing with display and navigation systems.

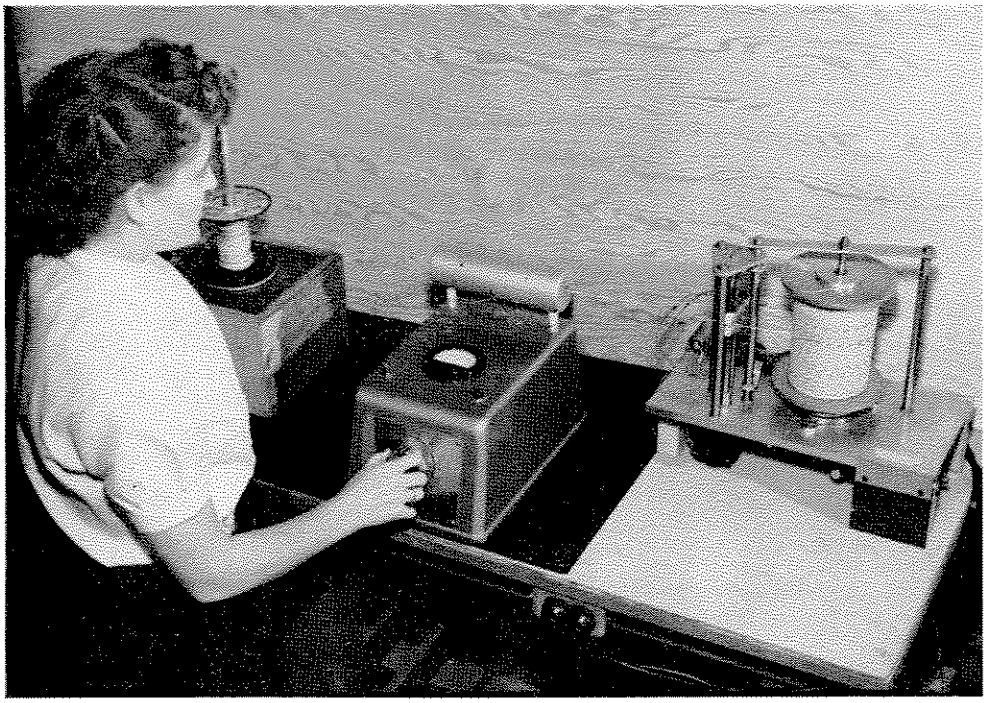
Dr. Valley has been a member of the Air Force Scientific Advisory Board since its inception in 1946 and has received the following awards: War Department Letter of Appreciation, President's Certificate of Merit in 1947, the Air Force Association Science Trophy in 1951, Air Force Exceptional Service Award in 1956 and again in 1958.

He is a Fellow of the American Physical Society, a member of the Society of Sigma Xi, and Senior Member of the Institute of Radio Engineers.



"ON BEHALF of Liberty Mutual, I am proud to award you this plaque and commend your executive staff, your safety committees and your employees on this outstanding achievement." With these words L. B. Fox, Regional Manager of the Liberty Mutual Insurance Company presented the award to Melpar Vice President A. C. Weid at ceremonies held last week. Others pictured above are, from left to right, Liberty Mutual Loss Prevention Engineer L. E. Grande, Liberty Mutual Account Executive F. D. Goss, Personnel Director J. T. Lafrank, Mr. Fox, Mr. Weid and Vice President and Treasurer R. T. Cosby. Photo by Tatroe

Arlington Process Cited by Air Force



THE WIRES GO MARKING ALONG . . . Arlington Division's "Teflon" wire-marking process has been cited as effecting a significant saving by the Air Material Command's "Conservation Bulletin." Such economies as reductions in variety and stock levels, shorter lead time for wire preparation, and speed and simplicity of handling and marking are some of the items listed by the Air Force Bulletin.

The process, in use at Arlington since September, 1957, sets the marked characters onto the surface of the wire at any desired spacing, to as small as half-inch intervals. Metal type, readily changed, makes all manner of markings possible on a given spool of wire. Here Light Assembler Task Leader H. V. Crockett keeps a watchful eye on the marking operation. Photo by Tatroe

BALLISTIC METEOROLOGICAL STUDY BEING CONDUCTED BY RESEARCH DEPARTMENT

A study of ballistic meteorological corrections for artillery and missiles is being pursued at Melpar's Research Department in Boston. Under contract from the U. S. Army Signal Corps, this quarter of a million dollar study will include evaluation of present systems, as well as study and design of an optimum system of recording weather data with the use of radiosonde balloon vehicles.

To obtain the optimum system, study is being conducted to determine the shape, size and method of operation of the balloons and the associated field equipment, taking into consideration the logistics, mobility and distribution of data.

The end result of this study will be the design of an automatic balloon inflation and launching station as well as a radiosonde balloon capable of reliable and rapid ascents to the edge of space under both day and night conditions.

The project is being conducted by Senior Research Engineer C. F. Jenkins and Research Engineer E. V. Locke under the direction of Project Coordination Manager G. L. Fellows of the Research Department.

BOSTON MEN ATTEND NAVAL SYMPOSIUM

Dr. T. P. Cheatham and Dr. David Van Meter, of Melpar-Boston, were invited to participate in the Workshop Panel on "Signal Processing" as part of the 16th Navy Symposium on Underwater Acoustics held at the U. S. Naval Submarine Base in Groton, Connecticut, on October 14-16. Drs. Cheatham and Van Meter discussed recent advances in the field of communications and radar as they may apply in the sonar field.

IMMUNIZATION

All Melpar employees desiring immunization against influenza are currently receiving preventive vaccine from the Industrial Nursing Section at no cost to the employee. Medical Consultant J. N. Baum, M.D., advises that persons with a known allergy to eggs in any form should not seek or accept the flu vaccine inoculation, since the side effects, for such people, can be more distressing than the illness.

YEARLY CHARGE . . . Once a year certain types of fire extinguishers must be emptied, and recharged. Normally the top is removed from the devices and the contents poured down the drain. This year, however, training was combined with the recharging operation by having Emergency Brigade members discharge the extinguishers, thus obtaining invaluable operating experience. Some of the Brigade members taking part in the practice, from left to right, are E. G. Dockery, J. F. Hasky, R. L. Brenneman, F. C. Mahoney, R. J. Fitzgerald, K. E. Wheelock, R. E. Perrero and R. D. Cathell. Photo by Norton

Engineering Standards Assist Development

Engineering Standards, aimed at assisting in the selection and application of materials and processes used in engineering research and development, have become an important source of information at Melpar since the Engineering Standards program was instituted in July 1956.

Standardization, when defined as the application of scientific techniques toward the establishment of definite uniform levels of performance, size, quality, etc., can be a valuable aid to the development engineer, by saving time normally spent searching for information on materials and processes.

The fact that the electric razor or toaster you bought in Pennsylvania, operates in Virginia and will work if you take it to California, is just a small sample of standardization as it has been applied in the electrical industry and how it has already affected us all.

Since much of Melpar's work is being done in areas where little prior work has been accomplished, the standardization program does not restrict new development but rather provides information compiled from many sources, which may then be used as a starting point for further development. Melpar's Engineering Standards are intended to supplement, not duplicate, Government Standards and specifications, by interpreting areas which are subject to interpretation, thus providing uniform understanding.

Topics for standardization are undertaken on the basis of general usefulness to the various engineering activities along with consideration of the benefits to be derived by establishing such a standard.

Working under the direction of Engineering Standards Supervisor B. C. Comstock, Senior Standards Engineer L. W. Bartlett and Standards Engineer P. J. McGinnis undertake to obtain all published information regarding present practices or available materials bearing on the standard under preparation. Government and industry standards are reviewed and persons having experience with the subject are consulted.

With this data a proposed standard is prepared and submitted to the appropriate department and project heads for their review and comments.

Following a period of review and coordination of the comments to a point where general agreement is reached, the proposed standard is submitted to the Chief Engineer for final review, approval and distribution.

Copies of standards are supplied to the Purchasing Department for the use of subcontractors and reproducible copies are available to be included with engineering drawings and data for delivery to government agencies if needed.

Periodic review of revisions to government specifications and standards as well as advices as to industry trends supply information used in revising released standards.

NEW SPACE OCCUPIED DUE TO COMPANY EXPANSION

"Expansion" was evident again last month with several moves made to accommodate the company's growth. A new building designated as Leesburg Pike #3 was occupied by Communication and Navigation Systems Engineering headed by Manager B. R. Boymel. Occupying the space in Columbia Pike #1 released by this move is a section of Antenna and Radiation Systems Engineering headed by C. M. Volk, along with some activities of the Wiring Shop which were located on the Lower Level of the Falls Church Plant.

The move of the Drafting group headed by Supervisor E. F. Koch to Columbia Pike #1 from Columbia Pike #4 signalled a step-up in production activities of flight simulators in Buildings #3 and #4.

Termination stores had been relocated in the Alexandria Plant from Columbia Pike #1 to clear the way for the drafting move.

CONVENTION HEARS KERR PAPER

Maxwell A. Kerr, Project Engineer of the Ground Support Equipment Branch, Reconnaissance System, Engineering Department, presented a paper on a new approach to magnetic half-stripping of optical tracks for sound at the 84th Semi-Annual Convention of the Society of Motion Picture and Television Engineers, October 20-24, in Detroit. A new method of adding magnetic stripping without losing optical playback was explained and demonstrated by Mr. Kerr.

COLE ATTENDS IRE CONFERENCES

R. I. Cole, Manager of Military Project Planning, was Moderator of Space Communications Session of the Fourth National Aero-Communications Symposium of the IRE held at Utica, New York, on October 20 and 21. Earlier in the month, Mr. Cole was an honored guest at the Fall Symposium of the North Carolina Section of the IRE.

LAWSON PAPER TELLS OF PLASTIC USE PROBLEMS

Project Engineer A. A. Lawson, of the Antenna and Radiation Section, delivered a paper before a seminar conducted by the Granite State Chapter of the American Society of Tooling Engineers at Somersworth, New Hampshire, last month.

Entitled "The Use of Plastics in the Electronic Industry," the paper dealt with problems involved in new applications for dielectric or plastic materials and the team effort necessary from a variety of arts and sciences to resolve the problems generated by the numerous requirements which must be met.

The invitation to present the paper was extended as the result of an article published in the May issue of Machine Design magazine and co-authored by Mr. Lawson and Project Engineer J. D. Svedlow, of the Reconnaissance Systems Engineering Department.

GOING UP!

N. J. Haines, of Arlington, has been promoted to Assembly Supervisor. Promoted to Project Engineer were E. R. Pulsifer, A. H. Cosby and E. A. Golden. J. G. Garcia, G. C. Dowdy, D. E. Sisson and J. E. Bledsoe rose to Assembly Foreman.

Other Arlington promotions saw L. G. Mochel advance to Chemical Engineer and R. J. Owens and J. R. Thompson move up to Senior Engineer from Engineer. D. L. Bier rose to Senior Methods Engineer from Methods Engineer. E. B. Edwards advanced to 1st Class Light Assembler and M. E. Stutzman to Incoming Inspector Task Leader.

C. C. Heflin was promoted to Junior Planner from Expediter and N. A. Emmons rose to Machinist 1st Class Leadman. R. J. Sorrell, E. A. Davila, J. C. Hicks and J. E. Arneson advanced to Senior Planner from Planner while M. D. Thomas moved up to Planner. R. V. Gerace was promoted to Engineer.

At Falls Church, N. A. Langford was promoted to Budgetary Control Accounting Supervisor and B. H. Feehan rose to Administrative Assistant from Senior Clerk Typist. R. L. Thomas advanced to Engineer. P. A. Thompson, L. R. Langston and M. O. Fullilove rose to Senior Engineer from Engineer and M. M. Ingrisano moved to Senior Technical Editor.

G. D. DeRosa advanced to Incoming Inspection Supervisor at Falls Church and E. M. Doran rose from Clerk Typist to Senior Clerk Typist. P. M. Furlong was promoted to Control Clerk and S. W. Minichello to Central Files Group Leader.

J. A. Conrad moved up to Junior Planner from Expediter and M. L. Richardson rose from Stock Clerk to Junior Planner. K. D. Brown advanced to Junior Engineer while J. N. Beyrent was promoted to Packaging Inspector Group Leader.

Other Falls Church promotions saw C. B. Middlebrooks move up to Machinist B from Machinist Assistant and J. N. Reinig from Machinist A to Experimental Machinist. G. G. Cunningham was made Carpenter Group Leader and J. W. Eversole rose to Senior Spares Planner. D. J. Moriarity was promoted to Welder 1st Class.

A. E. Hilker advanced to Electrical Test Group Leader and L. A. Niskanen rose to Machinist B. J. C. Withers was promoted to Lead Chemist from Chemist. C. C. Cutting moved up to Senior Technician from Technician and M. M. Goddard from Clerk Typist to Control Clerk.

R. L. Dent, S. R. Jones, C. L. Padgett and P. E. Taylor were promoted to Senior Engineer from Engineer. R. M. Cahill was promoted to Personnel Interviewer and C. F. Neal rose to Senior Personnel Clerk from Personnel Clerk.

At Columbia Pike, C. Z. Hitchcock was promoted to Assembly Supervisor and H. S. Arnold, C. H. Caldwell and J. W. Peltz rose to Assembly Foreman. R. L. Burnett and B. L. Hurley rose to 1st Class Heavy Assembly Task Leader. J. L. Johnson rose to Senior Draftsman from Draftsman while C. F. Bullard and R. K. Pearsall advanced to Engineer. J. A. Grumich was promoted to Test Engineer.

R. E. Mulford and S. V. Campbell moved up to Senior Engineer from Engineer. M. A. McGuire, R. D. Ditton, C. G. Grimm and R. E. Colvin were promoted to Heavy Assembly Task Leader.

Bailey's Crossroads promotions saw R. B. Salmon advance to Senior Draftsman from Draftsman and W. R. Heidig from Junior Engineer to Engineer. H. R. Green rose to Senior Engineer from Engineer and C. H. Bell moved up to Engineering Assistant. L. T. Fry was promoted to Junior Engineer from Technician and C. A. Evanto rose to Electro-Mechanical Inspector Group Leader. D. A. Steele rose to Senior Technician.

C. D. Wimmer advanced to Lead Wire Technician 1st Class and J. G. Gibbs moved up to Technical Editor from Junior Specifications Engineer. D. C. Burnetti rose to Senior Test Engineer.

At Watertown, G. W. Wicks was promoted to Senior Draftsman from Draftsman and H. H. DiPesa advanced to Engineer from Junior Engineer. R. W. Moore moved up to Planner from Junior Planner. R. B. Hughes advanced to Receiving and Identification Clerk from Stock Clerk. J. A. Peters rose to Wire Technician 1st Class.

At Alexandria W. P. Pence was promoted to Senior Operations Analyst and C. B. Degges advanced to Senior Technician. W. E. Johnson moved up to Engineer from Junior Engineer.

J. W. Gerdes, of Boston, was promoted to Assistant Manager of Project Coordination. T. C. Randell rose to Research Branch Leader. A. W. Satorelli was promoted to Maintenance Group Leader.

C. D. Rosen, of Leesburg Pike, rose to Senior Administrative Engineer from Administrative Engineer and W. H. Wilson advanced to Senior Engineer.

CHEM LAB STUDY TOOLS PROVOKE SPECULATION

The mystery of the long gray wooden structure built along the security fence on the north side of the Falls Church Plant has been solved. Guesses as to the use of the 200-foot-long trough ran from "a bumper guard which had been built wrong" to "an old-fashioned aqueduct," but it's really a race track. Honest, a drag strip to be used as part of the Chemistry Laboratory's test of a Solion Cell for possible accelerometer applications.

A midget 1-cylinder racing car, fueled with ethyl alcohol, castor oil and minute quantities of nitroglycerine, will reach close to 80 mph as it races down the track.

HERE SHE COMES . . . Carrying a Solion cell as part of a Chem Lab study, a model racing car heads down the track toward our camera. Wires leading from the cell make measurements possible while the car is in motion. Photo by Tatroe

Solion is a relatively new type of electrolytic device capable of transforming mechanical energy to electrical energy. It can also be constructed to be sensitive to a variety of stimuli, namely acoustic vibration, acceleration, and electro-magnetic radiation. Multiple cells can be constructed to function as: d.c. amplifiers, to take logarithms, powers, roots, derivatives and products of electrical outputs; and to perform integrations. The variety of outputs is largely controlled by the geometry of the electrodes in the cell.

The Chemistry Department has been active in Solion research for the past year. Cells have been constructed in a variety of sizes, ranging from a few centimeters to several inches in diameter. The sensitivities can be varied so that a unit can be tailored for varying stimulus intensities.