

melpar-a-graph

MELPAR, INC.

A SUBSIDIARY OF WESTINGHOUSE AIR BRAKE COMPANY

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\$604,000 Apollo Contract Signed with NASA

Melpar was awarded a contract in June for the research, development, and supply of food required for NASA's Apollo program. The Pillsbury Company of Minneapolis, Minn., is its major subcontractor.

Melpar received the prime contract for \$604,000; Pillsbury's portion totals \$183,940.

The 24-month contract covers the procurement of raw food materials, formulation, processing, packaging, testing, and package orientation in the spacecraft.

NASA's Manned Spacecraft Center, Houston, Texas, will supervise the contract. Dr. Donald M. MacArthur, manager of Melpar's Chemistry and Life Sciences Research Center, has operational responsibility for the contract. Mr. Sol S. Nelson will serve as program manager and will report to Dr. MacArthur. Dr. Howard Bauman, associate director of research for Pillsbury, will be associate program manager.

The program will be conducted (100 per cent) under reliability and quality control procedures, including testing and documentation of materials from the point of origin, through processing and delivery.

The quality assurance program will be carried out at Melpar. Reliability and quality control procedures will be conducted under the Quality Assurance program by both companies. After packaging of the food has been completed, Melpar will continue the quality assurance effort in its test and evaluation laboratory and food sciences laboratories.

The procurement, formulation, and processing of the foods will be carried out by Pillsbury in their laboratories in Minneapolis. The package design and production will be accomplished by Melpar. Final packing will be done at Pillsbury immediately after food processing.

The contract covers three separate phases. For phase I, an estimated 2500 complete meals will be prepared according to production guides provided by U.S. Army Laboratories, Natick, Mass., and NASA's Manned Spacecraft Center in Houston, Texas. These foods will be similar to the bite-size sandwiches and desserts and the dehydrated juices, stews and casseroles in zero-g dispensers supplied for the Gemini flights. These foods are to be eaten inside the pressurized Apollo

command module spacecraft by raising the face plate of the helmet. Other foods are to be eaten under depressurized conditions, such as would be experienced in the lunar excursion module which will actually land on the moon.

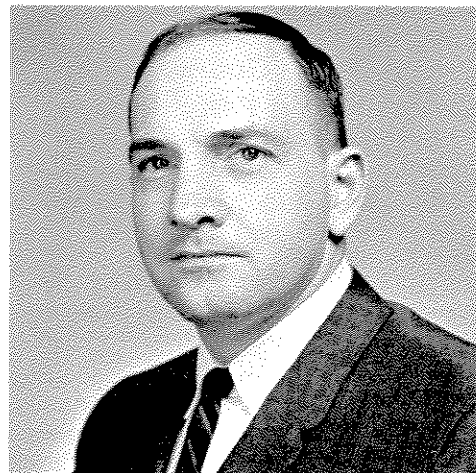
Foods supplied under phases II and III will contain modifications of the Gemini food and any new food concept developments that meet the flight qualifications set by NASA.

Cosby Appointed Program Manager

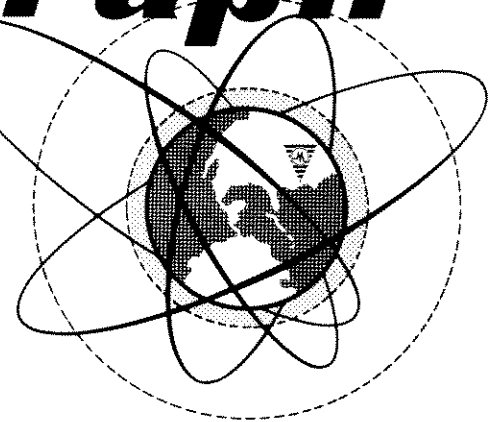
Al H. Cosby was named Program Manager on June 21 by Lincoln Brown, Vice President for Contract Management. He was previously staff assistant to Mr. Brown.

In his new capacity Mr. Cosby is responsible for coordination of contractual work assigned to Aerospace Center and the Space Sciences Center of Research and Engineering. He continues as a member of the Technical Publications Review and Approval Committee and as a permanent member of the Proposal Review and Assignment Committee.

Mr. Cosby came to Melpar in 1957 as an electrical engineer in the Production Division. He was active in systems engineering for many programs of the di-



Al H. Cosby



NASA AWARDS MELPAR \$1.75 MILLION CONTRACT

Melpar was named to receive a contract by the National Aeronautics and Space Administration to provide engineering support on spacecraft and launch vehicles for the Goddard Space Flight Center in Greenbelt, Maryland.

The contract announced was in the sum of \$1,750,000. It is to run for two years with an option for a one-year extension.

vision, including the MSQ-1A and the GE Atlas projects. In 1958 he advanced to project engineer and in that position participated in a number of major programs, including the B-58 navigation system and the AN/ALD-4 reconnaissance system. He was staff assistant to Mr. Brown from June 1963 until his recent promotion. Before joining the Company, Mr. Cosby was employed by the Naval Research Laboratory.

From 1954 to 1957, Mr. Cosby served as a line officer in the United States
(Continued on Page 4)

June Orders Hit \$6.5 Million

Melpar received \$6.5 million in new orders in June. The orders came from the United States Air Force, Army, and Navy, from NASA, and from the National Institutes of Health.

Work to be performed under the new contracts relates to meteorological studies, studies of tropical service-life of electronic equipment, radar instrumentation, flight simulation, and food for astronauts in Project Apollo.

Melpar Takes Five From NSF

For the fourth consecutive year Melpar has taken a group of young scientists from the National Science Foundation to teach them the realities of scientific research. These high school students will work closely with Melpar employees for the two months that they are here.

Approximately 100 high school seniors have been chosen by the Foundation to study practical research this summer. The choices are made through tests and interviews given to some 300 applicants from high schools in the Washington area.

Five students came to Melpar: Sandy Miller, Bishop O'Connell High School; Kenneth Holt, Bethesda-Chevy Chase High School; Dusan Lysy, Herndon High School; Brian Carroll, McLean High School; and Chuck Svendsen, Washington and Lee High School. The students will be working on research projects related to research programs in the company.

Kenneth Holt is studying Applied Mathematics at the Shirley Plant. He is working with the DDP-24 computer - programming and graphing, under the guidance of Principal Engineer Ruth Faith. His special interest is mathematics, and he plans to continue studying math in college.

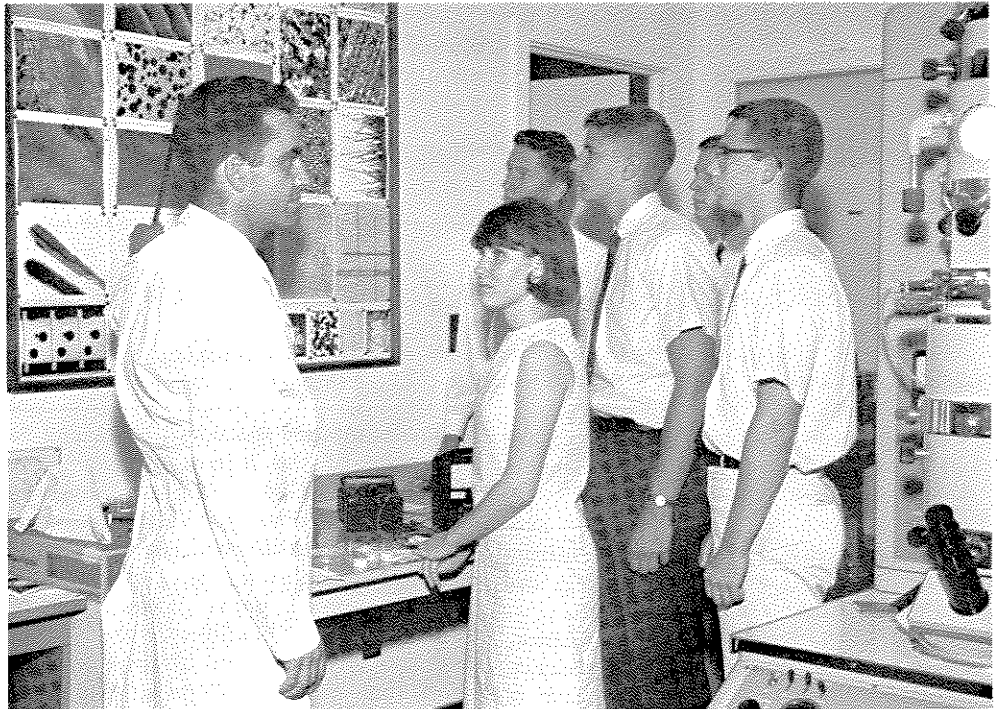
Dusan Lysy is studying with Senior Scientist Martin Gimpl in the Electron Microscope Laboratory. He is studying crystal growth and detecting this growth with infrared light.

Anthony Corio, Senior Mathematician, has claimed Brian Carroll for the Aerospace Department. Brian is studying equations for satellite tracking, and before he leaves, will run his own tracking problem through the computer.

Along with Biologist Marlene Barger in the Life Sciences Department, Sandy Miller is working on quality control. She is involved in studying the plastic bags which will hold the food which the astronauts will eat on their way to the moon.

Chuck Svendsen hopes to make our moon travelers safer by working with Branch Supervisor Lawrence Eliason, using short wave guides to detect the dielectric constant of various sample materials to be used in future space travel.

The students will be with us until August 19th, when they return to complete their last year of high school. All of them plan on continuing their educations beyond the undergraduate level of college. This is their first step on the long and fascinating road of science, and Melpar is happy to be of assistance.



NSF STUDENTS SPEND SUMMER AT MELPAR. Alex McMaster explains Electron Microscopy to 5 students from the National Science Foundation. From left to right: Alex McMaster, Sandy Miller, Dusan Lysy, Chuck Svendsen, Kenneth Holt, and Brian Carroll.

SNACK BAR OPENS

A snack bar is opening this week in the Falls Church Plant Cafeteria as an addition to the existing service. It will offer a selection of made-to-order sandwiches, plus soup, salad, ice cream, potato chips, coffee, tea, and milk. Hot and cold sandwiches will be removed from the regular cafeteria lines.

Regular sandwiches will be 30¢ and a Daily Special including a choice of one of the 30¢ sandwiches, soup, salad, and coffee or tea will be 50¢. In addition submarine sandwiches (50¢), grilled cheese (35¢), and at least one other sandwich will be available each day.

The snack bar will be open during the regular lunch period: from 11:45 AM to 12:45 PM.

Two In-Plant Courses Scheduled for Fall

The George Washington University will offer two after-hours courses at Melpar in the fall semester. They are *College Algebra* and *Calculus I*, both three-credit hour courses. Registration will take place Wednesday, September 22, and classes will begin the week of September 26. Tuition will be \$30 a credit, payable at registration or in three equal installments.

The time and place of registration and of classes, and descriptions of the courses, will appear in the next issue of the *Melpar-a-graph*.

MELPAR PERSONNEL GET COMMENDATION FROM SAC

A letter of appreciation has been received from the officer in charge of FINDE, USAF Captain John E. Britton, commending Dallas J. Ralph, and his FINDER systems group for their "display of outstanding professional ability and dedication to their work."

For the last four years, Melpar has provided a field service team at SAC Headquarters, Offutt Air Force Base, Omaha, Nebraska. They have been supplying maintenance and logistic support services to keep over 17,000 circuit boards for the FINDER computer system working perfectly.

FINDER is an electronic data processing computer system designed and built by Melpar. In a single processing operation, FINDER can handle as many as 100,000 observations of events.

Melpar adds its commendation to that of the Strategic Air Command for the outstanding job which these employees are doing.

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Melpar in Youth Opportunity Campaign

Melpar's participation in President Johnson's Youth Opportunity Campaign has merited the commendation from Vice President Hubert Humphrey shown at right.

In keeping with the President's request that each company in the U.S. hire one summer employee for every 100 permanent employees, Melpar has taken aboard 33 youths.

These high school and college students are working in many areas of Melpar. They have been placed on temporary assignments - performing clerical, drafting, assembly, and aid duties.

Record Number Receive 10 Year Pins

June set a record for 10-year awards when Melpar employees received their service pins. For the first time the award luncheon had to be divided into two separate meetings to accommodate all recipients. These meetings were held on June 16th and 17th in the cafeteria of the Falls Church plant.

Jared Hunt was the only one of the group to receive a ruby-studded pin, for 15 years of service to Melpar. He is the 36th Melpar employee to be awarded the 15 year pin.

Field work prevented five employees from attending the award luncheon. David Conway in Pittsburgh, John J. Fanto in Hawaii, Richard W. Freeman and Lowell D. Jessee in Omaha, and Christopher W. Winter in El Toro, California, received their 10-year pins by mail.

Congratulations, Veterans.



OFFICE OF THE VICE PRESIDENT
WASHINGTON

June 21, 1965

Mr. C. B. Raybuck
Vice President for Administration
Melpar, Incorporated
3060 Arlington Boulevard
Falls Church, Virginia 22046

Dear Mr. Raybuck:

I wish to express our deep gratitude for your support of the President's Youth Opportunity Campaign. Your response and that received from thousands of others has been inspiring to us all. It proves, once again, our country's capacity to unite in the solution of a common problem.

So that we may further assist those youngsters who will not be returning to school in the fall or not continuing with you permanently, I have asked that your State Employment Service contact you for evaluations on them.

Our youth and our nation have benefited by your action, and I congratulate you on the role you played in opening opportunities to youths. Your contribution to the future has been substantial.

Sincerely,

Hubert H. Humphrey
Hubert H. Humphrey



WE HONOR YOU Attending the service-pin luncheon on June 16 were (left photo, left to right) John Gallagher, Wayne McAlarney, Hubert Poulter, George Jenkins, I. Bruce Tiedemann, (10 year pins); Maurice Adon; Joseph Duff, William Vivori (10 year pins); Ira Apter; Mary Lee Wood (10 year pin); William C. Purple; Dorothy Moore, John Bartell, Al S. Gaizick (10 year pins); Jared Hunt (15 year pin); Benjamin Hale (10 year pin); Robert G. Murrell; Walter Sisson and Thomas Ramos (10 year pins). The group that attended the June 17



luncheon is shown in the photo at right. From left to right: William H. Smith, James Miller (10 year pins); Frank Brown; George Klop; Robert G. Smith (10 year pin); Stanley Sjosten; Eli Parrish, Norman Langford, Orah Shegogue, Thomas O. Smid, Ronald Howard, James Lookabaugh, Richard Baker (10 year pins); David Fain; Gene Paine; Len Blumenthal; Arthur Otis and Harry McClarren (10 year pins). Not shown: Keith McMichen, Alvin P. Hogan, Eleanor M. Lavelle, Herman A. Johnson, and Lewis E. Lowe (10 year pins).

Initiative Brings Two Swedish Students to Melpar

Bo J. Karlander and Bengt Stillstrom of the Swedish Royal Institute of Technology, working temporarily with Melpar, are part of a group of 90 Swedish and Norwegian students who came to the United States to work this summer. The group, Fysiks United States of America (FUSA), represents the combined initiative of these students who saved enough money to charter a plane for the trip.

Bo is presently working with Dr. S. Joseph Campanella of the Electronics Research Laboratory studying the organization of power spectrum patterns of speech in terms of phonetic structure. The breaking down of individual words into power spectrum patterns and the conversion of these patterns into "short hand" parametric replicas is similar to work at the Royal Institute of Technology under Gunnar Fant.

Bengt Stillstrom is working for Morris G. Watson on a problem of wave identification. Along with Raymond Soma, Melpar principal engineer, Bengt is investigating the possibilities of using a storage filter on which up to 50 individual wave patterns per millimeter can be stored to construct a wave identification system. Bengt's problem is to devise a system with which an unknown wave can be identified by passing it through an optical system and matching it with one of the known waves on the storage filter.

Both students are living with Drs. Earl and Vera Usdin who volunteered room and Board until the end of August when the youths will return to Sweden.

MELPAR-A-GRAPH GETS NEW LOOK

Last spring the ball started rolling on getting the *Melpar-a-graph* a new face. From the suggestions submitted the "space" idea was decided upon as the best theme for the masthead. The ball was then handed to the Graphic Arts Department.

William C. Baumgardner, a Design Engineer working for the Graphic Arts Department, moved ahead with drawings which he submitted for approval. Final approval was given in July. The new look starts with this issue.

Along with the new masthead, the *Melpar-a-graph* gets a new editor. Daniel Appleton is replacing Miss Peggy Kiley to whom we extend thanks for a job well done. Miss Kiley is now assigned to the Simulation and Training Center as a Mathematician.

GOING UP!

It's an especially happy summer for the following, who recently advanced to higher positions:

Coleman J. Bryan, Senior Chemist; James R. Brotherton, Design Engineer; and Kenneth R. Geyer, Senior Electrical Engineer.

William A. Gutierrez, Senior Physicist; Roy D. Mapes, Senior Programmer; and Douglas R. Morrisette, Senior Methods Engineer.

John C. Mould, Branch Supervisor, and Howard R. Straight, Project Engineer.

Congratulations to all!

Employees Can Now Buy Safety Shoes at Discount

Under a plan that went into effect June 1, Melpar employees may buy safety shoes at discount prices by payroll deduction.

Safety-toe shoes and boots are available in an assortment of dress and sport styles as well as traditional workshoe styles. A limited number of women's styles can also be obtained.

Catalog descriptions, price information, and authorization and order forms are available in Safety Offices. Orders will be processed the 15th of each month. The cost of the shoes may be deducted from one, two, three, or four payroll checks, at the buyer's option.

Safety glasses, both plane and prescription, also may be ordered through Safety Offices and Dispensaries, under a plan that has been in operation for over a year.

Cosby (Continued from Page 1)

Navy. He was graduated from the Navy's Treasure Island Officers' School of Electronics. In 1957 he took part in Navy's IGY program, Operation Deepfreeze, serving aboard Adm. Richard E. Byrd's flagship, which operated in McMurdo Sound, Antarctica.

Mr. Cosby received the B.S. degree in physics from the University of Richmond in 1953. He is a member of Sigma Pi Sigma, honorary physics society.

SOS from TIC!

The Technical Information Center has urgent need for several issues of *IEEE Transactions* to complete binding for 1964. The issues wanted are

IEEE Transactions: Aerospace, 1964, Volume 2; one copy each of Nos. 1, 2, and 3.

IEEE Transactions: Microwave Theory and Techniques, 1964, Volume 12; one copy of No. 1.

IEEE Transactions: Automatic Control, 1964, Volume 9; one copy of No. 1.

IEEE Transactions: Military Electronics, 1964, Volume 8; one copy of No. 1.

The TIC would be happy to receive donations of these volumes, to purchase them, or to accept them in exchange for copies of other volumes of which the Center has duplicates. Anyone willing and able to help the TIC in this matter should call Mrs. Dorothy Miller on extension 2425.

Bush Briefs Students

Melpar safety engineer Stephen E. Bush recently introduced 120 high school students to the basic principles of industrial safety. Speaking at Thomas A. Edison High School, Fairfax County, he gave members of industrial arts and vocational education classes a preview of what steps their future employers would take to guard their safety. He also lectured on how they would be expected to cooperate with the employers' safety programs.

Charles Hooper

Charles Hooper, electrical engineer with the Applied Mathematics Laboratory, died July 10. Except for a three-month period in 1961, he had worked with Melpar since 1955. During these years he made important contributions to the development of nearly all the major flight simulators designed and built by the Company.

MUTT AND JEFF

