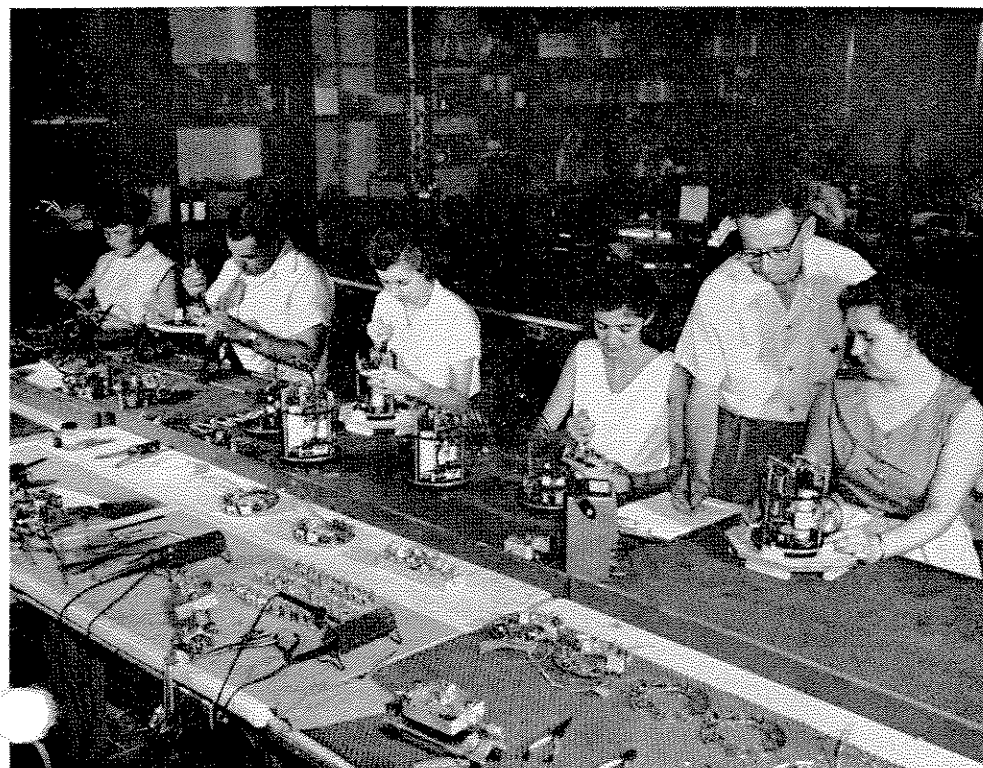


MELPAR-A-GRAPH

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

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CASING THE JOINTS . . . At far right, Frank Brockwell and Olive Mills of Quality Control make certain there's plenty of it in AN/DPN-14 radar beacons reaching one of many inspection stations spotted into the assembly line. Trying to overwork the inspectors are Assemblers Hazel Crockett, Quinton Smith, Vivian Ward, and Elizabeth Andrews.

IRE MEMORIAL AWARD TO HONOR LATE W. G. TULLER

The Institute of Radio Engineers has announced the establishment of its "William G. Tuller Memorial Award" for original work in the field of electronics. To be presented through the IRE's Professional Group on Component Parts, the \$500 award will recognize the best technical paper on improvement of electronic components prepared by an engineering college student.

At the time of his death, suffered in 1954 in the crash of a commercial airliner in Ireland, Dr. Tuller was the Company's Vice President for Engineering. Long active in IRE affairs, Dr. Tuller was a member of the administrative executive committee of the Professional Group on Component Parts. Regarded as one of the leading scientists of this country, Dr. Tuller was posthumously elected a Fellow of the Institute of Radio Engineers.

SCIENTISTS DRAWN BY IRE SYMPOSIUM

Speakers drawn from Europe, Canada, and the United States will be heard during a three-day symposium on "Optics and Microwaves", beginning on November 14 in the Lisner Auditorium of The George Washington University. Antenna Section Head K.S. Kelleher is chairman of the Advisory Committee for the event; Coleman Goatley, Staff Assistant to the Chief Engineer, serves as chairman of the Administrative Committee.

Principal sponsor of the symposium is the IRE Professional Group on Antennas and Propagation, in cooperation with The George Washington University, the Optical Society of America, and the Office of Naval Research.

Mr. Kelleher will read a paper on "Inhomogeneous Lenses" as a participant in the symposium's session dealing with Optometry and Microwave Optics, in addition to his service with the Advisory staff.

ARLINGTON GROUP'S BEACON OUTPUT SETS RECORD PACE

Four months from date of contract to shipping platform was the record set by Arlington Division in tackling the task of turning out three versions of the Melpar-designed AN/DPN-14 radar beacon on a 'must meet' schedule.

Using better than 20 tubes, while containing its transmitter, receiver, power supply, and decoder all in one package, the AN/DPN-14 has found favor with some of the country's leading aircraft and missile manufacturers.

The production effort now reaching its peak calls for a total of 68 beacons, ordered almost simultaneously by three customers—each of whom required different versions of either power supply or decoder. This made for an interesting supply problem. Project Planning Supervisor William Davis, with Robert Zelloes and Otis Osborne, worked closely with Purchasing to establish requirements and bring home the goods within two months.

Project Engineer Charles Rogers and Senior Engineer Monroe Hill led the manufacturing engineering phase which followed, working with an assembly team to shape up the manufacturing sequence and wring out the inevitable bugs.

Foreman Omer Kennel headed the assembly crew, supported by Task Leader Joseph Garcia and Light Assemblers Maggie Witt, Oravis Bly, and Quinton Smith. Very critical coils were wound by Carlos Dolinger and fitted into the receiver by Elva Edwards and Lizzie Sager. Vivian Ward and Betty Andrews built the transmitter, and thus the first units moved into Test in just one month.

With the production pipeline rapidly filling behind them, a Quality Control group took over the pilot units, prepared to blow the whistle if so much as a cycle was missing. Within a month, Assistant Test Supervisor Stanley Armstrong together with Joseph Zupancic, Bernard Flatley, and William Ludwick had put the first beacons over the jumps. No whistle blew (well, maybe it chirped once or twice,) and AN/DPN-14 kept moving—on schedule.

OPINION

If the impression exists that the **MELPAR-A-GRAPH** is preoccupied with the matter of education . . . nothing could be closer to the truth.

A couple of obvious reasons need be mentioned only briefly. A general advance in education holds the potential of an advance for our Company—new avenues of endeavor, more highly trained people to tread them. This is good. As one means of warding off disaster, our country must hugely increase its supply of scientific and engineering talent. This is a flat necessity.

That takes care of the big picture and the long view.

Those of you who are not yet parents may leave at this point, if you wish.

Now, the prime reason for this editorial—what's to do about education. The principal of a mid-west high school recently explained why his curriculum included little or no math, physics, or chemistry. "Our students won't take (the subjects) because they're 'too hard'."

This is where you come in. Not on the national level, but in your living room.

You must sell education to your children. You can sell it. Very definitely you can. You can sell it if you yourself have it—and you can sell it if you didn't get enough of it.

That's our program. And neither a survey nor a committee is required. Sell the pride of education, the pleasure of intellectual exertion and the worth of its product. Sell the facts of life . . . the most expert ditch diggers are rapidly being supplanted by trenching machines and ribbon clerks get very tired in the feet.

Whenever you see or sense an opening, do the education bit. Remember, your customers already like you. With customers in that frame of mind, you could sell houses.

The broad-gauge programs will rumble on, and eventually something fine will come of them. Meanwhile, each person who ultimately is trained in the sciences, the arts, or the humanities through your aid is 1 more than 0. That's quite an increase.

FLU VACCINE AGAIN OFFERED FREE TO MELPAR EMPLOYEES

Adhering to a practice begun in 1950, the Company again this year will offer, without cost, an influenza vaccine inoculation to all employees desiring it. In 1955, more than 700 Melpar people availed themselves of this service.

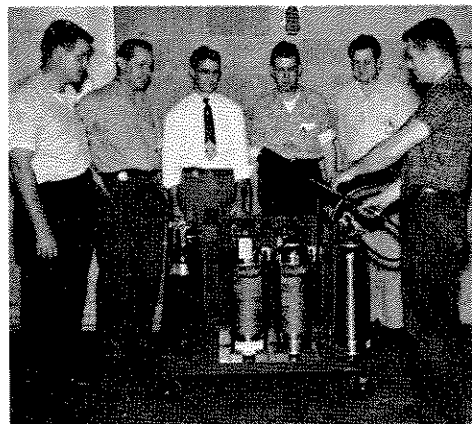
In each department, one person has been designated to accept registrations for the inoculation. Upon receipt of the registration lists, Plant Nurses will notify the various groups when to appear at the dispensary.

The medical profession generally is in agreement that group inoculation programs of this nature result in seasonal immunity for from 75 to 80 percent of those treated.

TRANSISTOR PACKAGING WORK SHOWN

Drawing upon the results of the Company's long-continued development program in the field of miniaturization and packaging of electronic assemblies, Project Engineer A.A. Lawson spoke at the 5th Annual Industrial Electronics Symposium in Cleveland, Ohio recently.

Mr. Lawson discussed certain of the techniques developed at Melpar for the "Packaging of Transistorized Assemblies". Mr. Lawson was joined in the preparation of the paper by Senior Engineer R.J. Simms.



WHERE'S THE FIRE . . . If it should occur in Arlington Division, this rig will roll. It may not feature sirens and flashing lights, but it packs a lot of fire fighting in its compartments. Ready to deal with electrical fires, oil fires, or plain fires are J. W. McCartney, J.W. Peltz, C.H. Pitts, H.S. Arnold, H.P. Potter, and C.G. Burns.

COLE LEADS COMMUNICATIONS FORUM

Ralph I. Cole, Manager of Military Project Planning, presided as chairman of a forum on "Communication System Considerations" during the 2nd Annual Symposium on Aeronautical Communications.

The symposium was conducted at Utica, N.Y., with classified sessions transferred to Griffiss Air Force Base at Rome, N.Y. Its sponsor was the Rome-Utica Chapter of the Professional Group on Communications Systems, IRE.

316 ENROLL UNDER NEW TUITION PLAN

The current academic semester is under way, and the response of Melpar employees to the Company's Tuition Refund Plan now can be measured in numbers. By a slightly biased observer, the Plan is rated a resounding success in the present and a good omen for the future.

316 Melpar employees are enrolled in 364 courses. They hail from every location in which the Company is presently active: from the Falls Church laboratory, from Arlington Division, from Boston, and Watertown; in addition, the Plan has enrolled men stationed at Tucson, Arizona; at the Convair plant in Fort Worth, Texas; and at the Bendix plant in Mishawaka, Indiana.

The extent of the interest roused in graduate study programs is an especially pleasing result of the Tuition Refund Plan. 26 Melpar people are enrolled in a graduate level course in Transistor Principles and Circuits, being taught by Alfred Brodzinsky. Mr. Brodzinsky is Head of the Transistor Research Branch of the Electronics Division at NRL.

Because of the range of transistor development and application work in progress within the Company, the University of Virginia has approved elimination of the required laboratory period in this course.

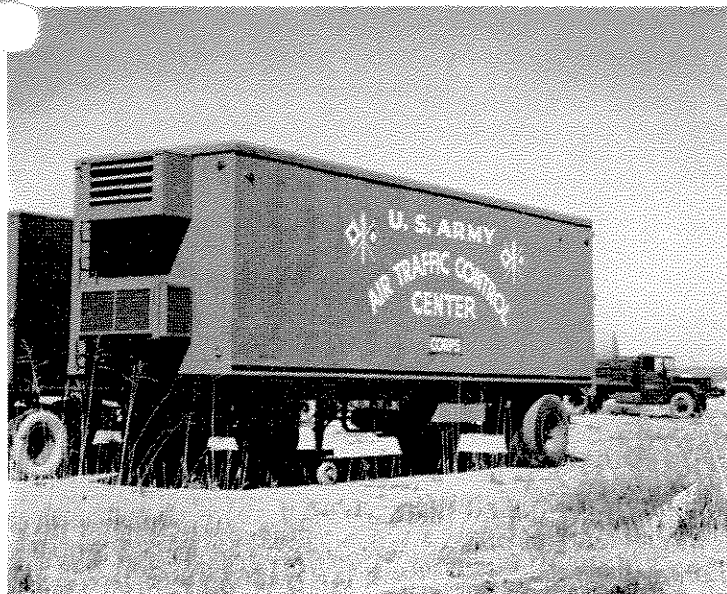
In other graduate level courses, 16 are enrolled in Antenna Theory, taught by Falls Church Section Head K.S. Kelleher and sponsored by the University of Virginia. The course in Transient Analysis is sponsored by The George Washington University, and numbers 35 students. It is taught by William Alderson, of Corvey Engineering Co.

NEW ENGLAND RADIO-ELECTRONICS MEETING AIDED BY MELPAR MEN

Melpar-Boston men are actively engaged in promoting the 2nd Annual "New England Radio - Electronics Meeting", scheduled for November 15-16 in Boston. Dr. T.P. Cheatham Jr., Director of Research, is serving as Program Committee Chairman, and Dr. David Van Meter is acting as co-chairman of that committee. A.P. Pennelli, Administrative Assistant to the Director, is a member of the Publicity Committee.

Sponsored by the New England and the Connecticut Valley Chapters of the IRE, the Meeting will include a number of technical and management sessions.

Air Traffic Control - - Mountain Style



Housed in this 26-foot van are the complex electronic equipment and skilled personnel necessary to plan and control the movement of U.S. Army aircraft operating in far from placid tactical situations.

Trucks, towers, radar sets, and other air age paraphernalia lately have been appearing in arid valleys pocking the mountainous territory surrounding the U.S. Army's Electronics Proving Ground at Ft. Huachuca, Arizona.

Such 'hardware' is the result of a joint effort of Melpar and the U.S. Army Signal Corps in designing and developing an air traffic control system now installed at Ft. Huachuca. With a range of 160 miles, and encompassing four airports and the flyways connecting them, the system controls the movement of all aircraft, both helicopters and fixed wing airplanes, enroute between Army, Corps, and Division Headquarters.

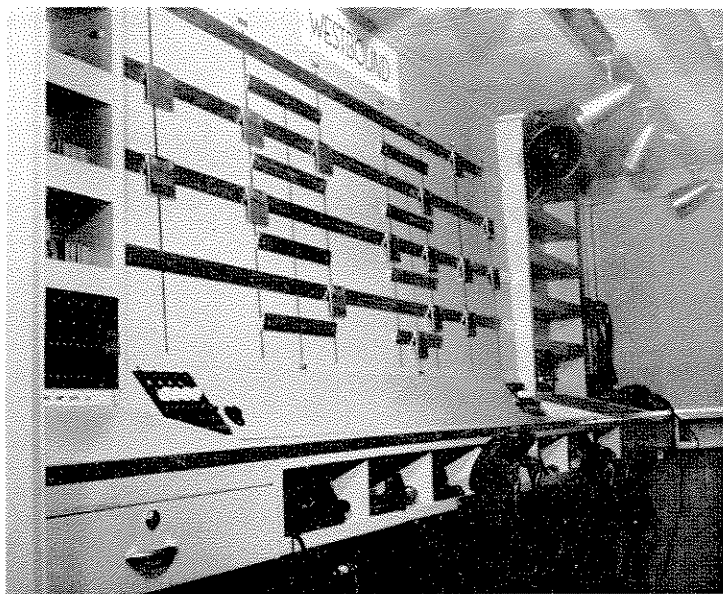
Now in its late stages of test and evaluation, the system has been engineered to meet the demands of tactical situations requiring that a similar communications network be set up on an emergency basis, using readily available materiel.

The system's air traffic controllers are based in control towers and trailer vans. Both are air conditioned, since the weather in southern Arizona sometimes tends to be warm. Towers and vans are fitted out with terminal equipment, gear for inter-communication with remote stations, and control panels for ground-air communication.

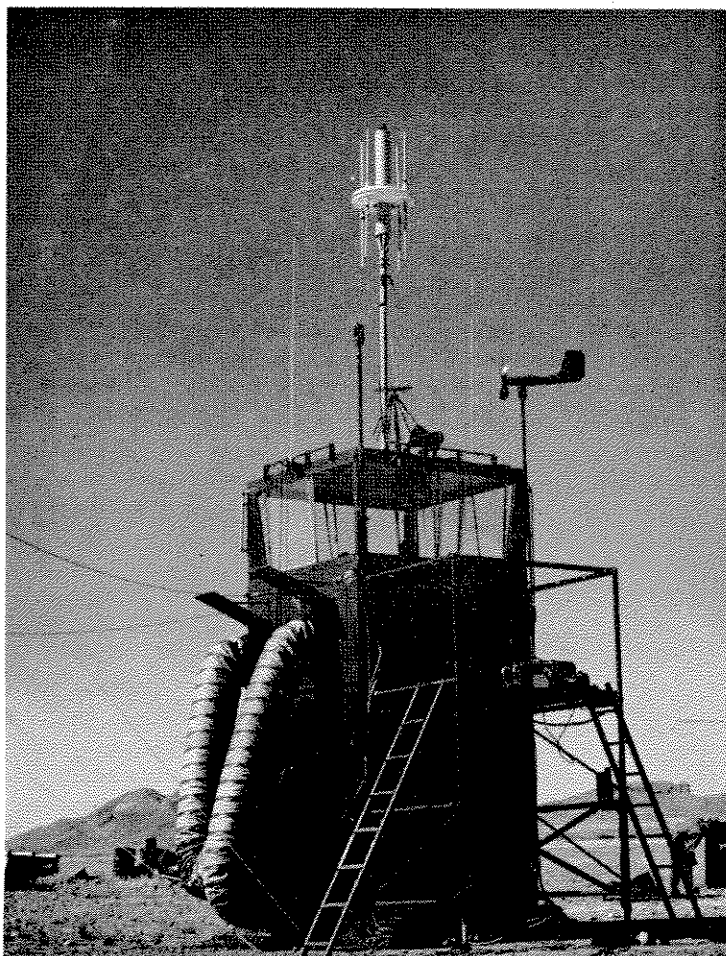
Field Project Engineer J.E. Swafford leads the operation from headquarters in Tucson, Arizona under Melpar's contract with the Army Electronics Proving Ground. At Falls Church, the job is directed by Section Head B.R. Boymel, aided by V. I. Weihe, Technical Assistant to the Vice President of Research and Engineering.

The Electronics Proving Ground is commanded by Major-General Emil Lenzner. Closely associated with the air traffic control project are Brigadier General W.M. Thames Jr., Colonel M. Wood, and Lieutenant-Colonel L.M. Northrop.

The photographs, which obviously are the chief virtue of this article, are the work of Senior Engineer R.M. Scott of the Tucson plant.

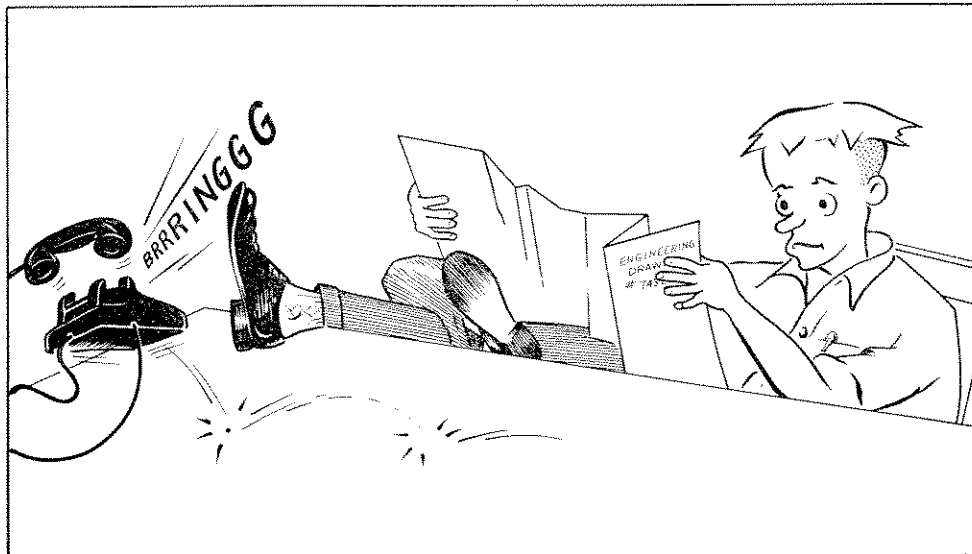


This status board maintains surveillance over U.S. Army airplanes enroute between Army and Division air fields. The control panels at each end afford ground-air communication, enabling the controllers to see that everyone rides the right road.



Against a forbidding backdrop of mountains and wasteland, this airport control tower stands ready to receive and dispatch aircraft flight testing the Army's Air Traffic Control System at Ft. Huachuca, Arizona.

Mr. Murgatroyd Misfit



"Pick it up Murgatroyd, it's not hot!"

GOING UP!

The promotion of J.H. Heimann from Senior Engineer to Project Engineer was announced at Falls Church. Mr. Heimann now supervises the Flight Systems Group for Navy simulators.

Newly advanced to the rank of Senior Engineer are P.J. Lepanto, M.A. Orr, R.V. Parent, and J.H. Steinbeck. All four men previously were Engineers at Falls Church.

At Arlington Division, several promotions have taken effect in the Assembly group. Raised from Heavy Assembly Task Leader to 1st Class Heavy Assembly Task Leader were E.B. Emshwiller, A.P. Hogan, and H.V. Wertz.

The Quality Control Department has recorded various recent promotions. J.J. Mayman and G.R. Schulz, former Technicians, have been advanced to the rank of Junior Engineer. Both are assigned to Arlington Division. W.L. Widmer has moved from Mechanical Inspector 2nd Class to Mechanical Inspector 1st Class, while A.V. Lucian rose from Electro-Mechanical Inspector 2nd Class to Electro-Mechanical Inspector 1st Class.

Two men newly promoted from Junior Engineer to Engineer are C.H. Lassiter and R.L. Tomlinson, both of the Falls Church laboratory.

Melpar-Watertown has announced the promotion of L.J. Klemola from Procurement Planner to Senior Planner.

E.A. Fleuti and E.A. Hendrick, of Arlington Division, have advanced from

H. T. WARD ADDRESSES USAF SYMPOSIUM

Three Melpar engineers joined forces in writing a study of "Antennas for Fairchild 123A Vehicle" for presentation to the U.S. Air Force Antenna Research and Development Symposium.

The Symposium took place at the University of Illinois on October 23. The Melpar paper was read by Project Engineer H. T. Ward, on behalf of his co-authors Senior Engineer C.W. Morrow and Engineer K.L. Nelson.

Light Assembly Task Leader to 1st Class Light Assembly Task Leader.

In the Project Services group at Falls Church, R.K. Felty has been named Scheduling and Dispatching Supervisor; previously, he served as Lead Dispatcher. Also at Falls Church, F.B. Swick was promoted from Stock Clerk to Lead Man. In Arlington Division, M.W. Masters Jr. has advanced from Production Planner to Senior Planner.

L.B. Lollis and S.T. Pitala Jr., both formerly ranked as Draftsman, moved up to Senior Draftsman at Falls Church.

In Falls Church, R.K. Pearsall and M. Polchenko have risen from Technician to Senior Technician. Former Mechanical Technician H.C. Wheelock has advanced to Senior Mechanical Technician in Arlington Division.

Also at Arlington Division, J.E. Bledsoe moved up to 1st Class Light Assembler from Light Assembler. Three promotions from Heavy Assembler to Heavy Assembler 1st Class also took place at Arlington: G.A. Kolac, R.L. Burnett, and J.W. McCartney.

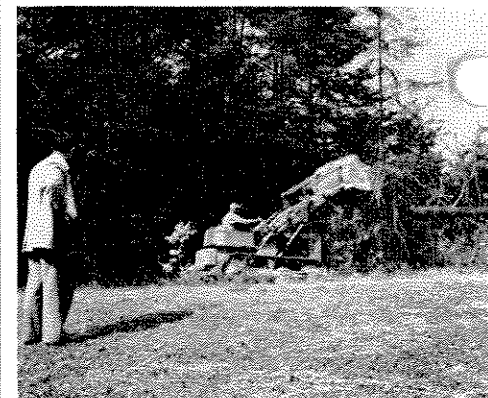
FALLS CHURCH PARKING SOON WILL CARRY 100 MORE CARS

Despite the dampening effects of weather in late October, the work of expanding the parking area at Falls Church is being pressed forward. Early in November, space for an additional 100 cars will be thrown open for use.

Looking even farther into the future, the construction plans call for site clearing and grading an area sufficient to hold a total of 200 cars; when the need arises, the unfinished half of the new lot can be surfaced and made ready in short order.

The parking area now in progress extends the central parking lot to the east and occupies approximately one acre. It will be surfaced with bank gravel and a "one-shot" oil treatment, in accordance with the secondary roads specifications of the Virginia Department of Highways.

Along with enlarging the gross parking area, the central lot's entrance is being widened to accommodate two lanes of traffic. With an eye to pedestrian safety and comfort, a concrete sidewalk is being laid from the entrance to a juncture with the north and west parking lots.



REMOVE IT . . . Sub-Contract Purchasing Agent J.J. Rooney, having purchased a large helping of destruction, is making certain he gets his money's worth.

MILLER DISCUSSES B-58 WORK BEFORE DEFENSE DEPT. GROUP

Project Manager R.E. Miller, head of the B-58 sub-systems development program at Falls Church, participated in a recent Symposium on Electronic Countermeasures held at the University of Michigan. The symposium was sponsored by the Department of Defense.

Mr. Miller described to the group some of the work being done by his sections in the course of designing and developing reconnaissance and data handling equipment for the B-58 Hustler, a supersonic bomber being developed and built by Convair.