



# *the* **AMCHEM** *News*

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JUNE 1960





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Ambler, Pennsylvania  
in the Interest of AMCHEM  
Employees and Their Families

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William A. Drislane  
Editor



## On Our Cover

The picture on the cover was taken at our Research Farm, April 15, immediately before a test flight by a Bell helicopter, to which was mounted a new 1960 Amchem centrifugal spraying rig. The conical shaped objects on each side and to the rear of the pilot's "bubble" are the reservoir "saddle" tanks, each containing the usual load of 25 gallons of Amchem invert emulsion herbicide. The disc throws a spray 50 feet wide from a height of 35 feet at 35 mph flying speed. 20 of these Amchem centrifugal sprayer rigs will be in use by various agencies engaged in weed killing all over the U.S. this year. For complete story turn to pages 6 and 7.

## Bringing You Up to Date — Editorially Speaking

Your editor wishes to thank all the *Amchem News* readers who took the time to fill out and return the questionnaires which accompanied the March issue. He also appreciates the suggestions and comments which many of these readers made on their returns.

Using the answers as a guidepost we now feel we're on the right road, since 97% of the returns expressed satisfaction with the magazine's contents. Projecting these figures to cover our entire employee circulation of *The News*, we find that it meets with the approval of 99% plus of the readers. Furthermore, there was not a dissenting vote on the format of the magazine.

All of this is very gratifying to your editor who likes to feel that the magazine is serving the purpose for which it was founded. One thing, though, he would like to get is a few more newsworthy items from our branches or from the men in the field because some *News* readers expressed an interest in this kind of material. Since the source of this material has to be the branch or the field, we at Ambler have to depend on the co-operation of our good friends—the branch reporters or the men in the field themselves—to supply us with these newsbits or stories. Such reports or stories don't have to be formally composed. Just jot down any incident that you feel deserves space; supplying the facts (names, dates, places, etc.) and toss it in the mail, directed to William Drislane (that's me!). Reproducible pictures would also help. We'll endeavor to do the rest. W.A.D.



## Will Gettysburg Battlefield Become a Supermarket?

*The News* has never been used as a fund-raising medium, and it is not our intention to use it for this purpose. It may, however, from time to time mention a cause or project worthy of your attention. These are always of a patriotic nature and appeal to the populace at large. Such a project is that espoused at the present time by the Gettysburg Battlefield Preservation Association.

As the name implies, this non-profit, non-salaried association, incorporated under the laws of Pennsylvania, has as its objective the preservation of the historic battle grounds at Gettysburg. The Honorary Advisory Board of this organization contains the names of Governors, Senators, and Representatives of both northern and southern states. The Board of Directors is composed of prominent educators, business and professional men from Pennsylvania, New York, New Jersey, and Maryland.

Currently, business and residential expansion has encroached rapidly and heavily on these hallowed grounds. To prevent further expansion, the GBPA Emergency Committee, under the chairmanship of Mr. Cliff Arquette (TV star Charlie Weaver) seeks support in purchasing this privately-owned land before its historical significance is lost to posterity.

The Gettysburg Battlefield Preservation Association receives mail at the Gettysburg Post Office, Box 1863, Gettysburg, Penna.

For your convenience in writing checks or money orders, the short title "Battlefield, Gettysburg", presently publicized by Charlie Weaver, can be used.

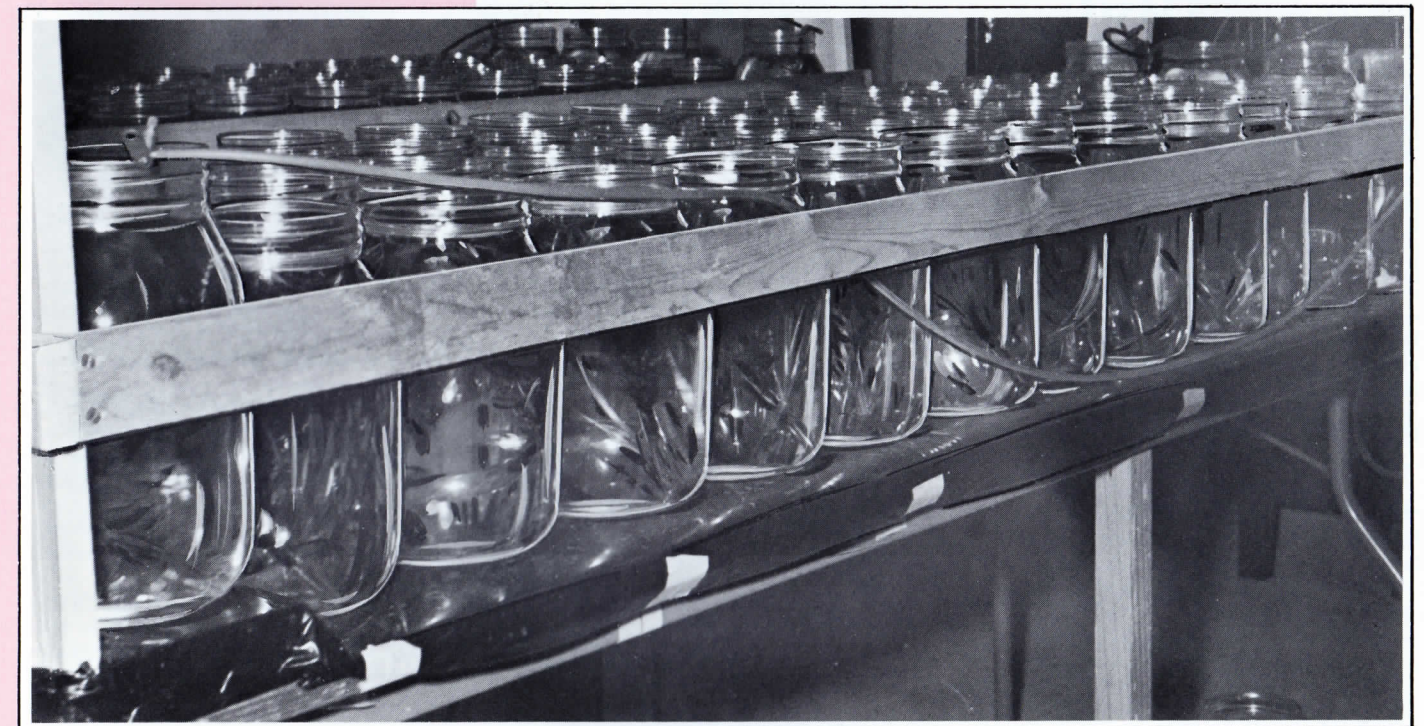
"Positively,  
Mr. Gallagher?"

"Absolutely,  
Mr. Sutherland!"

Ever since Innes Simpson spotted the dense infestation of water hyacinth in the Congo River in Africa, some five or six years ago, and succeeded in bringing about its eradication through the sale of 80,000 gallons of Weedar® to the Société Belge de l'Azote et des Produits et Chimiques du Marly, who subsequently used the Weedar on the Congo River project, the problem of aquatic weed and plant control has intrigued our ACD researchers.

very effective in combatting alligator weed. Encouraged by this discovery and subsequent exploration by Dr. John Lawrence of Auburn University, Auburn, La., and other weed control scientists, John and Mel have entered into an extensive study of "aquatics" for 1960.

In new quarters at our Research Farm they have five typical representative aquatic plants under cultivation in 104 one-gallon glass jars. These five aquatic



## Amchem Researchers Become 'FROGMEN IN BOTTLES'

John Gallagher and Mel Sutherland  
Establish Extensive Aquatic Weed  
Research Program at Amchem Farm

The seriousness of the situation where aquatic plants have infested irrigation ditches, rivers and ponds to the point of creating a multi-million dollar economic problem has long been recognized by the U.S. Department of Agriculture and various Federal and State Fish and Game Commissions.

By infesting the ditches, the plants restrict the flow of water, some plants as much as 90%. And not only do these so called "aquatics" impede river navigation, but they also interfere with commercial and amateur fishing to the extent of losses running into millions of dollars annually. In our Gulf area a few years ago, water hyacinth alone was costing navigation and agriculture a staggering \$15,000,000 a year. According to Dr. W. B. Ennis, Jr., former president, Weed Society of America, weeds cost the American public the astounding sum of 5 billion dollars annually. This amount exceeds the combined losses caused by insects and plant diseases.

Considerable work in the area of aquatic herbicides has been done by ACD researchers Mel Sutherland and John Gallagher, who found, after a small test two years ago, that Amchem's Fenac was

plants are *Sagittaria*, *Vallisneria*, *Cabomba*, *Anacharis*, and *Myriophyllum*. In the tests, all five can be considered as free floating, although they are anchored to the jar bottoms by glass tubing. In their natural environment, they root in soil. This fact does not alter the effects of the experiment.

Up to now, the difficulty of procuring "aquatics" for screening purposes has been something of a hindrance to Mel and John. However, a local source that supplies "aquatics" to aquariums, pet shops, etc., was recently found in New Jersey. This discovery has accelerated the program considerably.

It should be noted that the existence of "aquatics" is necessary to sustain fish life. When an overabundance of plants exists, havoc is wrought in nature's orderly scheme of events... for too many plants means too many little fish; too many little fish results in too few big fish. To assist nature in maintaining a proper balance, and at the same time aiding navigation and agriculture, is the ultimate aim of Mel Sutherland and John Gallagher. The results of their 1960 experiments should guide them a long way towards their objective.

\*Weedar is a registered trademark of Amchem Products, Inc., Ambler, Pa.



# THE fuel CELL

*A Century of Research Points the Way to a New Source of Power*

Most of the electric power produced in the world today is generated by the combustion of the "fossil fuels", coal, oil, or gas. The process is essentially three stage:

- 1) The chemical energy of the fuel is transformed into thermal energy by combustion;
- 2) The thermal energy is transformed into mechanical work in a heat engine;
- 3) The mechanical work is transformed into electrical energy in a generator.

Early in the nineteenth century, the French physicist Carnot (1796-1832) showed that heat is a very special form of energy, and that its changes into other forms of energy are subject to definite restrictions, even under ideal conditions. Working with the principles developed by Carnot, the engineer expresses the efficiency in a steam plant by the equation:

$(T_1 - T_2) / T_1$ , where  $T_1$  might be the inlet temperature of the first stage in a turbine, and  $T_2$  the temperature after expansion. (Temperatures are "absolute".) The outstanding feature of this relation is that high boiler temperature (and pressure, of course) tend to increase conversion efficiency, and this is the reasoning behind our modern high-pressure central power stations. For a modern steam plant this conversion efficiency might reach 64%. Taking into further consideration the losses of energy by incomplete combustion of the fuel, friction of mechanical devices, and heat losses to the surroundings, the over-all efficiency of this type power plant would not exceed 40%.

Within the past hundred years, scientists have dreamed that another, more efficient, method could be devised for converting the energy of fuels to useful electrical energy. If a fuel could be made the anode of an electric battery, and could be oxidized in the cell with the direct production of electrical energy—and a minimum of heat—the penalty inherent in the

Carnot-cycle conversion could be avoided. Such a device, a "fuel cell", would have tremendous advantages in the utilization of the world's natural fuel resources.

This dream of "electricity direct from coal," of long ago, is illustrated in the sketch. The carbon-bearing fuel reacts with oxygen ions at the anode, producing carbon dioxide, and liberating four electrons. The electrons pass through the external circuit in the opposite direction to the current flow, resulting in the ionization of oxygen at the cathode. The idea is excellent. However, the difficulties in the practical application of the procedure—residues in the fuel, low reactivity, and side reactions—are so considerable that no practical fuel cell operating on coal or fuel oil has ever been developed.

Recently, another type of fuel cell has been more nearly successful. In 1839 and 1842, W. R. Grove published two papers on what was essentially a fuel cell operating on hydrogen as fuel. Although work on the fuel cell was intermittent for the next hundred years, the most successful fuel cell to date is similar to the fuel cell of Grove—the hydrogen cell, using air as the oxidizing medium.

The basic simplicity of the fuel cell, and the directness of its conversion of chemical into electrical energy, make it tremendously attractive as a source of low-voltage direct-current. For present day uses, the convenience of the fuel cell far outweighs its advantages in cost savings. The convenience items include high power per unit volume and weight, and cleanness and quietness of operation.

There are several fuel cell systems that show technical feasibility. All of these cells operate on gases, using hydrogen-oxygen systems, or hydrocarbon-oxygen systems, at temperatures from 50° to 1000°F, and pressures from 1 to 1000 p. s. i. The tendency is to classify fuel cells into two general categories: *fuel cells for special applications*, and *fuel cells for*

*central-station power*. All the immediate emphasis is on special applications, such as home power supplies, mobile units, and chemical reactors—the type of service in which convenience is important. As an example, a hydrogen fuel cell drove a fork-lift truck in August, 1959. Some of the problems involved show promise of definite solutions within five years. The solution of the central-station power problem, with fuel cells operating on cheap fuels such as coal and fuel oil, is further in the future.

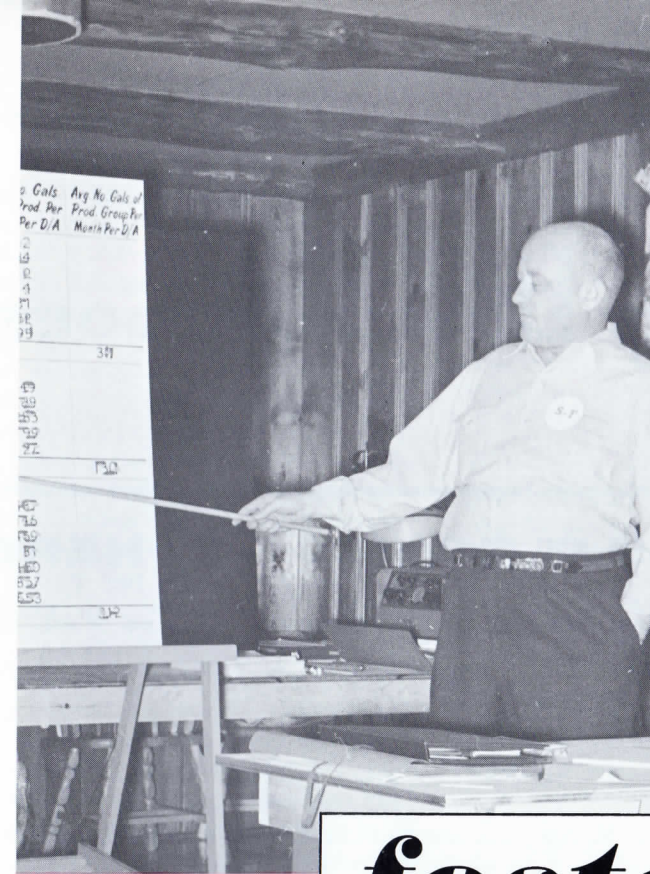
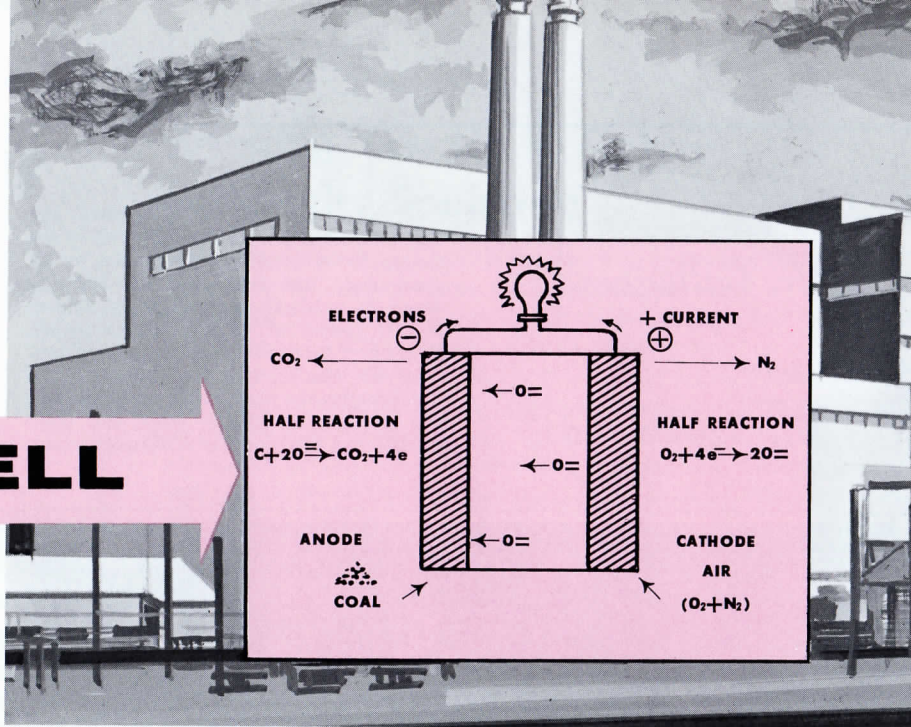
This year, millions of dollars will be spent on fuel cell research, both here and abroad. The curve is rising steeply, with new research organizations entering the field frequently. As the new industry develops, Amchem will no doubt find many opportunities to serve the manufacturer and user of fuel cells, in the preparation of components, and in the protection of equipment in use.

Many people—including Jules Verne—have been fond of making predictions, and of naming the centuries as they pass by. If the past century has been the age of steam, or electricity, or chemistry, perhaps the next century will be the age of the atom, or the computer, or the rocket. Then again, for the average man, as his everyday life is affected, the next century might very well be the age of the fuel cell.

For additional reading on this subject we can suggest:  
The Fuel Cell—Status and Background, Liebhafsky and Douglas, *Mechanical Engineering*, Vol. 81, No. 8, pp. 64-68 (1959)  
Half-hours with Great Scientists, C. G. Fraser, New York, Reinhold Publishing Corp., 1948, p. 413  
Fuel Cells, Liebhafsky and Niedrach, *Journal of the Franklin Institute*, Vol. 269, pp. 257-267 (1960)  
Fuel Cells, Young and Rozelle, *Journal of Chemical Education*, Vol. 36, pp. 68-73 (1959)  
Symposium on Fuel Cells, *Industrial and Engineering Chemistry*, Vol. 52, pp. 291-310 (1960)

These references will lead to many others.

GEORGE S. GARDNER



(Far left, top) Vice Pres. George Foster, Jr. points out those interesting sales figures which are the prime objective of all progressive companies.

(Top left) Stig Sasse arrives for the week's session well fortified with sales literature as well as plenty of body insulation.

(At left) Harold Pickel emphasizes importance of the salesman's duty to secure accurate specifications from clients.

(Far left, below) Wayne Ellis, V.P. in charge of Research, draws sharp comparison between earlier product and its improved successor.

**foster**

## 1960 Sales Meeting



While natives fished through the ice of Lake Wallenpaupack, in the Poconos, ashore the 1960 Foster Sales Meeting tended to business at Nemanie Lodge. The meetings started on February 28 with a tour of Foster Laboratories at Ambler, and ended with a bus ride through the snowdrifts back to Philadelphia on March 4.

Under the direction of George Foster, Jr., Vice President in charge of sales, 24 members of Sales and Technical Departments listened, learned, and discussed new Foster products, new merchandising methods, and the 1960-61 sales program. Mounting enthusiasm, paced by mounting snowdrifts, led to firm predictions of a successful sales year, and to grave doubts that the bus could get the group back to home base. That all did return safely is taken as a good omen for 1960 sales!

WAYNE ELLIS



## from Amchem on Overseas Trips

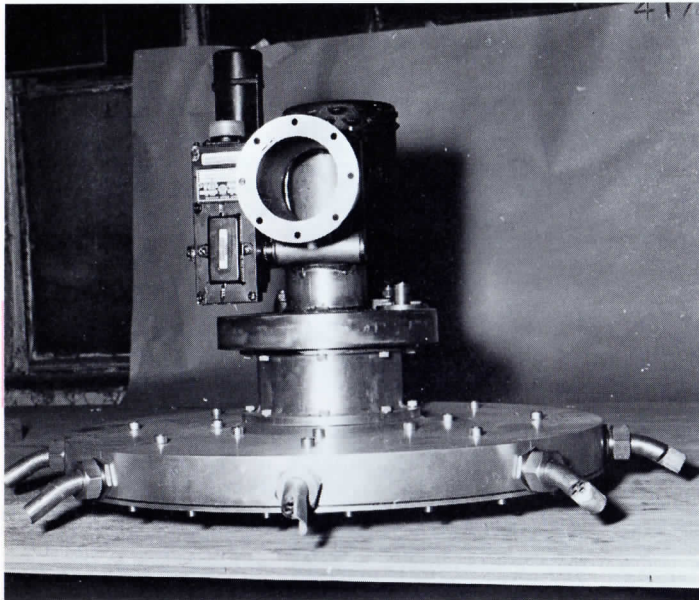
The increased use of our products abroad has necessitated more than the usual number of trips overseas for Amchem personnel. Since the last issue of the *Amchem News*, seven members of our company have set foot on foreign soil. Business beckoned J. O. J. Shellenberger, Vice President in charge of marketing, Al Douty, Technical Director, and Raymond Naylor, Treasurer,

to France, toward the end of March.

Stig Sasse visited licensees and prospective representatives of the Foster line of coatings and adhesives in England, Holland, Belgium, France, Italy, Germany and the Scandinavian countries. Willard Snyder called on our South American neighbors in the interests of our agricultural chemicals.

Joe Dudek is presently paying his respects to our MCD licensees scattered throughout Europe, and Warren Weston has just arrived back from the land of the setting sun where he proved that the three years he spent as manager of our Canadian Branch did not lessen his interest in our Nipponese trade. The latter four gentlemen are from the International Division.





# THE EMULSION GOES ROUND AND ROUND AND IT COMES OUT HERE

*New Centrifugal Sprayer Designed by Tex Waldrum  
Gives Excellent Performance in Trial at Our Farm*

**A**FTER eight months of work on the drafting board, in the shop, at the airport, and on our Research Farm, the 1960 version of Amchem's centrifugal disc sprayer was officially approved as a helicopter rig by the U.S. Government aviation inspector on Good Friday, April 15. These eight months were spent in "ironing out the bugs" that had developed in the sprayer discs of former years. Most of these shortcomings can only be learned about and corrected by the conventional "trial and error" system.

In toto, the results climaxed three years of intensive effort marked finally by what appears to be success, especially for Tex Waldrum, Amchem's mechanician, whose inventiveness created and whose mechanical skill directed the manufacture and assembly of the apparatus.

## Birth of the Inverts

The history of the disc sprayer goes back almost a dozen years to the time when our Agricultural Research Department conceived the idea of formulating low-drift brushkillers called invert emulsions. The improved marking and penetrating advantages of this type of herbicide,

with its water-surrounded-by-oil droplet, were readily apparent, for the film of oil on the outside kept the water-soluble mixture from breaking up into a mist, drifting, and partially evaporating. However, the accepted methods for spraying conventional herbicides were not suitable for dispensing the invert emulsions due to their thickness.

After repeated failures, the use of inverts was temporarily abandoned until 1957, when Waldrum was given the assignment of creating and designing a sprayer that would work with the inverts.

## A New Kind of Sprayer

Waldrum's first design was a whirling disc on the end of a cylindrical boom. A worm gear inside the boom conveyed the invert emulsion from the reservoir tank to the spinning disc. The complete apparatus was attached to a jeep or truck, and both the turning of the gear and rotation of the spray disc were powered by an auxiliary engine.

Since aerial spraying is continually on the rise, drift control is of paramount importance to this method of herbicide application, if it is to retain its popularity. The thick invert emulsions with their oil shielded droplets, were ideal for aerial spraying because they considerably decreased the drift.

## The Sprayer "Earns its Wings"

The next move for Tex was to adapt the disc sprayer for aerial use. His first apparatus was rigged to a Bell helicopter at Wiggins Airways, Norwood, Mass., where the primary aerial work was accomplished. After this experiment, the rig was tried out on fixed-wing craft at Aero Agricultural Services, Allis, Texas, in the spring of 1958. Here, the plane's engine supplied the power to rotate the disc, and centrifugal force sucked the chemical liquid from the tank. A few weaknesses showed up which warranted correction, notably a lack of uniform droplet size and the ability to control the volume width in relation to the RPM's of the disc.

This fault was corrected in the 1959 model, which was completely re-designed in order to take advantage of internal pressure as well as centrifugal force in dispensing the inverts. This was done by hollowing out the 17-inch disc from solid aluminum, sealing on the top, and installing eight nozzles around the perimeter. In the earlier models, the herbicide was sprayed from the open face or top of the disc.

From this evolved the 1960 model, with its multi-valve assembly inside the disc. Thus each nozzle has its own individual valve that functions independently of gravity changes due to variable flight altitudes.

## Works Best on Helicopter

From the experience gained in the short history of centrifugal disc spraying, it appears, according to Tex, that the maneuverability and general versatility of the helicopter shows that this type of craft is more adaptable to disc spraying equipment than the fixed-wing type. In addition, the slower speed at which a helicopter can be operated provides much better drift control.

As the inventor of the centrifugal disc sprayer, patents have been issued in the name of John E. Waldrum, Tex' more formal appellation. Up to the present time, our machine shop has produced 10 rigs, with 10 in the process of manufacture. These have been leased out to various agencies which will use them in conjunction with Amchem's herbicides.

The working drawings for the complete unit including all its parts were made by Mervin Hubbard of Amchem's Engineering Department. In the manufacturing end, Joe Mallozzi of Maintenance worked very closely with Tex. In addition, the following men from Maintenance also assisted in the fabrication and assembly of parts: Harry Bailey, John Baranowski, George Blattner, Stan Blichasz, Wolfgang Burlein (Construction), Al Cassell, Bill Cole, Joe Feckno, Dave McInnes, Hal McKenzie, Francis Morgan\*, and Ray Robinson.

\*No longer with Amchem.

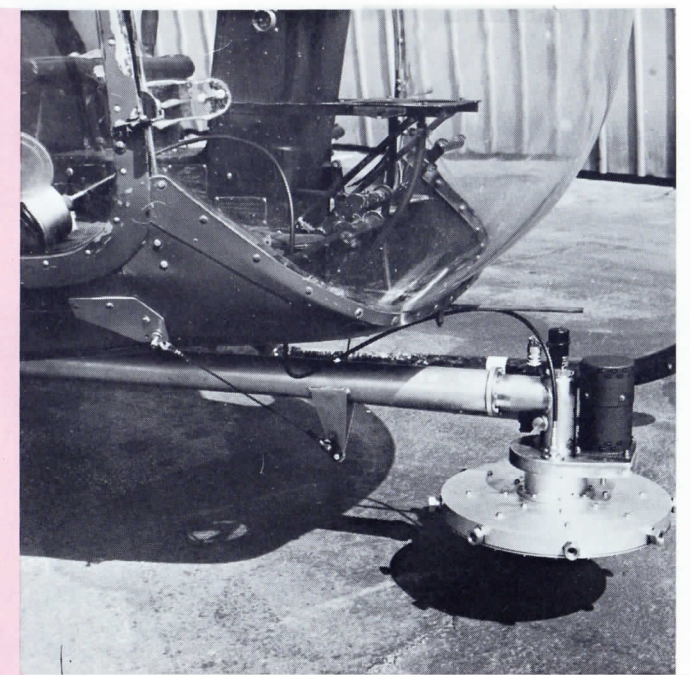
*This is an informal shot of the group responsible for the success of the new Amchem Centrifugal Sprayer. Names of all of these men appear below.*



(Far left) Bill Cole (wearing cap) and John Baranowski. (Front row, l. to r.) Tex Waldrum, designer and inventor of sprayer; Joe Mallozzi; Dave McInnes; Ray Robinson; Joe Feckno; George Blattner; Harry Bailey. (Back row, l. to r.) Merv Hubbard, who made working drawings; Hal McKenzie; Wolfgang Burlein; Francis Morgan\*; Stan Blichasz; Al Cassell. The new 1960 Model Sprayer appears in the foreground.



Special iron wind tunnel was designed and erected to duplicate actual spraying conditions while testing efficiency of different types of nozzles. Harold McKenzie (standing) has just completed welding sprayer to tunnel; Joe Mallozzi is adjusting valve on the feed tube. Propeller is off U.S. Navy "Drone" used as target.



The whole rig, including tanks and pipe line, can be mounted and unmounted in a little less than half an hour. Removable plates under the 'copter's "bubble" simplify attaching the wire cables. The angle of nozzles on sprayer is adjusted to permit them to dispense herbicide clear of skids when 'copter sprays.





## HE? SHE? IT?

Or  
*How Are You Fixed  
for Genders?*

For the sake of propriety, we have refrained from injecting too much of a Rabelaisian flavor into our story, and instead we have resorted to a little over-ripe "corn" and "pigeon-holed" most of the original angle.

### "A Bird in the Hand . . . etc."

Our little feathered friend, that you see in the picture and held so caressingly by Joan Detweiler, who is something of a cute little pigeon in her own right, arrived in Ambler unheralded and unsung on Wednesday, March 30. The pigeon's first port of call was the ladies' rest room in Building 1. These

circumstances started some speculation among MCD personnel as to whether it(?) was a little girl bird or a little boy bird.

Jack Breen, who lays no claim to being another Audubon, nonetheless stated that the bird had a few aboard and got confused, since he had seen it(?) at the bar while he and some of the MCD boys were having lunch at the Springhouse Hotel. Jack also claimed that the same bird came out of the Hotel Tate across the tracks, and by its(?) series of aerobatics, it(?) couldn't tell night from day, let alone one rest room from another.

The MCD ladies, bless 'em for their sympathetic souls, declared that the bird was a female, and that she could tell a ladies' rest room that was a paragon of sanitation from one of those wayside affairs that belong only on Tobacco Road.

### "Strictly for the Birds"

Thespian Wilbur Hall, employing his best Broadwayese, suggested that the question could easily be settled by keeping the bird around for a few days to see if it(?) would "lay an egg," like some of those plays he occasionally has to direct for the Whitmarsh Curtain Callers.

This last remark was all that was necessary to send Nardene Minnehan "flying" down to Kel-Ees' Pet Shop on North Main Street for a package of bird seed. Simultaneously, a precise, staccato step announced the arrival of Tom Rogers.

"It's evidently not an AWOL carrier pigeon from the Signal Corps at Fort Monmouth," said Tom, "otherwise it(?) would have snapped to attention in the presence of an officer. In that case, I'll fashion a home out of a cardboard carton and some chicken wire — pardon me — I mean aluminum screening . . . and it will be alodized. We'll put subject on subsistence and quarters immediately, it's now 1600."

At this point, the keen eye and active Breen brain resumed its effortless synchronization.

"Did you say home, Tom? . . . Home? . . . Homing! That's what it is, a homing pigeon, see that band on its leg?"

"Yeh, I see it," said Ann Lucas, "does that mean it's married?" We can't blame Ann for her ignorance, since her only knowledge of pigeons had heretofore been strictly confined to tales involving the sorry plight of folks who unsuspectingly stood under a ledge while the pigeons perched overhead.

Ignoring the remark, Jack expounded. "The band has a number on it and the ownership of the bird can be traced through it."

At this juncture, Lou Schiffman entered the scene and challenged Jack on the authenticity of this last statement, claiming that the bird must be a "stool pigeon" and that the numerals which it bore must be its(?) prison number.

"A rather naive observation by a Ph.D.," tossed back Jack at Doc Schiffman, "especially a Ph.D. from the Bronx, where pigeons are as thick as ants on a used popsicle stick." This held Lou in check.

### "Home, James, and Don't Spare the Birdseed"

As it turned out, contact made with the American Racing Pigeon Association confirmed the veracity of every Breen statement. The MCD girls entrusted the little bird to this agency before the feline night patrol from Railroad Avenue had a deluxe dinner of fricassee of pigeon.

The last report we had from the ARPA at its Norristown headquarters stated that their guest was enjoying a period of convalescence and was consulting some topographical maps of Pennsylvania and New Jersey prior to setting out on a return trip to its rightful owner in Elizabeth, N. J.

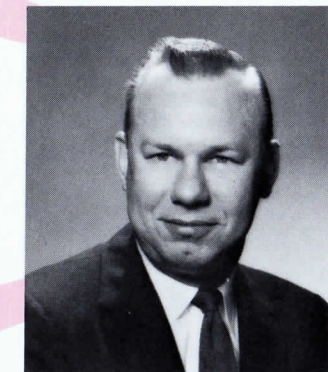
At Amchem, the primary question is still unsettled—is it a boy pigeon or a girl pigeon — it didn't remain long enough in MCD to "lay that egg."



ORAN E. CRISLER



LEO C. DAMSKEY



KENNETH C. KRAMER

## Damskey-Crisler Team to Run MCD Midwest District Kramer Promoted to Cleveland Area Supervisor

Management has announced the promotion of Leo C. Damskey from Sales Supervisor of Metalworking Chemicals for the states of Ohio, Kentucky, Tennessee, Alabama, and Mississippi to manager of our MCD Midwest District. He succeeds Don Miles, who recently resigned. Damskey's place is being filled by Ken Kramer, who has been elevated from sales representative.

At the same time, Oran E. Crisler has been promoted from staff assistant at Detroit to the newly created post of Assistant Sales Manager, Midwest District.

In his new assignment, Damskey will be in complete charge of all operations of Amchem's Midwest District. This includes administrative as well as directing sales. The latter responsibility is particularly important since Amchem

derives a considerable portion of its metalworking chemical sales volume from the automotive industry, which is heavily concentrated around Detroit.

Damskey is a native of South Dakota and graduated from Michigan State University with a B.S. in chemistry in 1950. Prior to joining Amchem in August of the same year, he was employed by Sealed Power Corp., Muskegon, Michigan. During World War II he was a Captain in the Air Force. His present address is Berea, Ohio, but he will move shortly to the Detroit area. He is married to the former Carol Felger. The couple has two children, Douglas 5, and Diane 2.

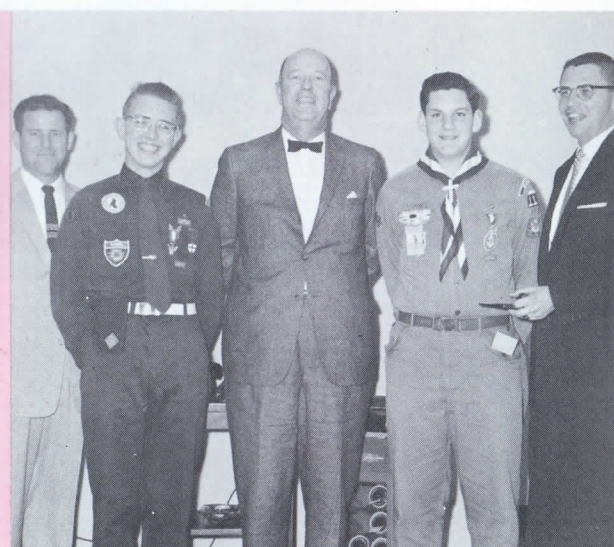
Crisler, a veteran of 13 years employment at Amchem, has specialized in sales and service to the automotive industry both here and abroad. Before joining Amchem, he was a research

chemist with General Motors, Detroit, for 14 years. He's an alumnus of Wayne University. Crisler makes his home in Ferndale, Michigan, with his wife, Alice, and the couple's two children, Ann and John.

Kramer's new duties will be supervising sales activities in the states vacated by his predecessor, Damskey. He came to Amchem in January, 1955, from the sales staff of the Kaiser Aluminum Co., and previously was with the E. I. DuPont Co. as a sales representative for aluminum electrical conductors. Ken holds two Air Force citations: the D.F.C. air medal (three clusters) and the Presidential Unit Citation (two clusters). He and his wife Lois reside in Lakewood, Ohio, with their three children, Karen 12, Kevin 10, and Karol 9.



Meet the Champs! The Amchem Dart Team that took top honors in the North Penn Dart League (Amchem News, March 1960) pictured at victory dinner in their honor at School Inn, Tuesday evening, May 3. Front row (l. to r.): Mickey Krisan; Johnny Zollo; Ralph Lelli; Tony Bruno; Joe Rocco; Nick Boychuck. Back row (l. to r.): Dick Shellington; Frank Cahill; Earl Seitz; Bob Godorecci; Charlie Olivieri; Emil Stoyanov.



Area Eagle Scouts visit Plant Manager Graham Smith's office on Recognition Day. (L. to r.): Mervin Hubbard, Amchem sponsor; Eagle Scout Thomas R. Brennan; Graham Smith; Eagle Scout Robert L. Porter; Karl Weigand, Amchem sponsor.

## Dick Fosse is 'Wheel' at 1960 W.S.A. Meeting

Word reached us too late to publicize, in our March issue, the prominence of Dick Fosse at the Weed Society of America's Third Annual Meeting, held in conjunction with the Seventeenth Annual Meeting of the Western Weed Control Conference, at the Cosmopolitan Hotel, Denver, Col., February 22-25.

Dick, who represents the Research and Development Department of ACD in 13 Far West and Southwest states, is quite active in the former organization and is now serving on its executive

committee. He is currently president of the Western Weed Control Conference.



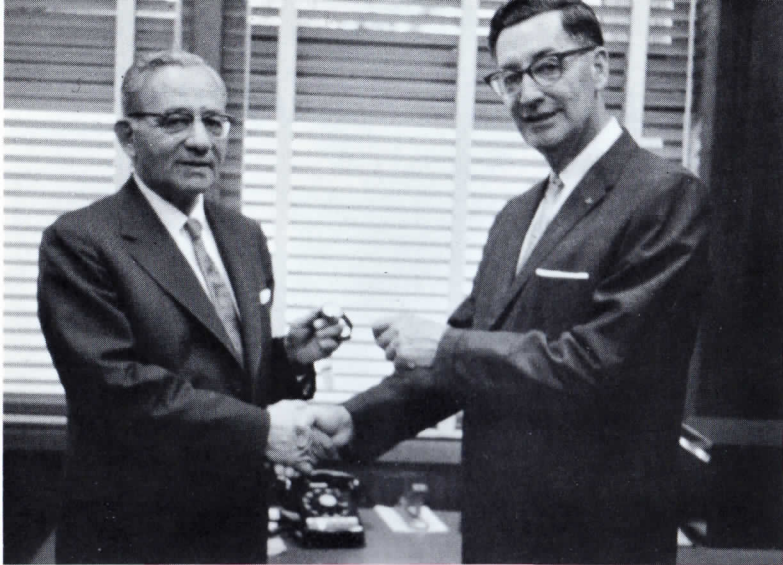
RICHARD A. FOSSE

At the dual meeting in Denver, Dick was chairman of the Special Committee in charge of local arrangements, and as president of W.W.C.C., he presided at its all-important business meeting. He was also toastmaster at the banquet which climaxed the three-day activities of the Weed Society of America.

The various responsible offices which Dick presently holds, and has held in the past, are a tribute to his knowledge and ability in the field of herbicides. They are also an indication of the confidence weed control experts place in Amchem personnel and its products.

Fosse has been with Amchem since May, 1954, and formerly was an Agronomist with Monsanto Chemical Company, St. Louis. He is a native of South Dakota and graduated from the State University there with a B.S. degree in Agronomy in 1951. Dick and his wife Natalie now make their home in Hayward, California, which is in the area of our Western District offices at Niles, to which he is attached.





"Here, have 'a little time on your hands,' George, and don't hock the diamond," facetiously remarks Board Chairman Leon Cherksey as he presents solid gold watch and diamond emblem to V.P. George Williamson on latters 25 years with Amchem.



Joe Blessing rounds out 25 years at Amchem by accepting solid gold watch and diamond service emblem from President Romig. On hand, in addition to Mr. Romig, are (l. to r.) Bob Breining, Graham Smith, Adolf Karcher, Dick Rockstroh.



Two former Penn Staters are the genial subjects in this picture—Bob Beatty and President Gerry Romig. The occasion being presentation of Bob's 20th Anniversary diamond service award.

"I'll kill two birds with one ruby stone" —says Jimmy Roberto (center), as he hands out 10-year ruby service award tie chains to Emil Stoyanov (l.) and Earl Seiz (r.).



Dual ceremony was compressed into one as Dick Reeves (center), presents 5-year service awards to two happy fellows—Dave Dollman (r.) and Wilbur Hall (l.).

## Congratulations!

These are the men and women of Amchem who have received Service Award Emblems between the last issue of THE AMCHEM NEWS and May 31

- ★ —25 YEARS— ★  
Joseph E. Blessing  
George Williamson
- ★ —20 YEARS— ★  
Robert H. Beatty
- ★ —15 YEARS— ★  
George A. Antonacio
- ★ —10 YEARS— ★  
Earl B. Seiz      Emil Stoyanov
- ★ —5 YEARS— ★  
Wilbur Hall      Paul Kern  
David Y. Dollman



"This is one of the nice things I like to do around here," says Jimmy Roberto to George Antonacio as George accepts his ruby tie chain on 15th year at Amchem.



"Paul, this is just a starter for your future collection," says MCD Development Department Manager Hugh Gehman while awarding Five-Year Emblem to Paul Kern.

## SAFETY REPORT To End of May, 1960

Safety records of departments for the 12 months ending on May 31, 1960 are listed below in the order of merit.

1. Shipping
2. Packaging
3. Maintenance
4. Research
5. MCD Production
6. Construction
7. Receiving
8. ACD Production

Percentage of improvement based on the performance from January 1, 1960, to May 31, 1960, as compared with standing on December 31, 1959.

1. Shipping
2. Research
3. Construction
4. MCD Production
5. Packaging
6. ACD Production
7. Receiving
8. Maintenance

## Introducing New Members of the Amchem Stork Club

JOSEPH MALLOZZI . . . March 19, 1960  
The Proud Amchem Parent: Joseph A. Mallozzi (Maintenance Dept.)

BETH LISA STEINBRECHER . . . March 19, 1960  
The Proud Amchem Parent: Lester Steinbrecher (MC Laboratory Staff Research Chemist)

ELIZABETH ANN TARR . . . March 30, 1960  
The Proud Amchem Parent: Roy E. Tarr (MCD Sales, E. Dist.)

LISA COLLINS . . . April 13, 1960  
The Proud Amchem Parent: Harold Collins (ACD Sales, E. Dist.)

WENDY JEAN HART . . . April 19, 1960  
The Proud Amchem Parent: Richard D. Hart (Research Chemist, Farm)

DONNA LYNN RUTH . . . April 21, 1960  
The Proud Amchem Parent: Edward P. Ruth (Maintenance Dept.)

DOUGLAS ROBERT DETWILER . . . May 11, 1960  
The Proud Amchem Parent: Robert H. Detwiler (Accounting Dept.)

ANNE MARIE WHEELER . . . May 11, 1960  
The Proud Amchem Parent: Dr. Edward S. Wheeler (Adhesives Research)

## Amchem Scholarship Winner Awarded NSF Fellowship

George A. Schnabel, a 1956 Ambler Joint High School recipient of the four-year Amchem scholarship, has added more laurels to his already richly foliated scholastic crown. George graduated earlier this month from Massachusetts Institute of Technology, where he had been awarded the National Science Foundation fellowship on the basis of grades obtained in the Graduate Record Examinations taken during his senior year. The fellowship, worth \$1,350, will be used by George to defray his expenses while pursuing his Master's degree in chemical engineering practice at M.I.T., starting this fall. In addition, the NSF pays tuition.

George is the son of George, Sr. and Hilda Schnabel, Whipain Drive, Broad Axe. He worked in Amchem's MCD Research Laboratories during the summer of his Freshman year.

## Welcome to our new employees

NAME	HOME TOWN	ASSIGNED TO
WILLIAM T. ARROWOOD	Fremont, Calif.	Niles Production
JOANN BEDELL	San Leandro, Calif.	Niles Office
ALICE H. BROWN	North Wales, Pa.	MCD Sales Office
CHARLES N. BROWN	St. Joseph, Mo.	St. Joseph Production
NORMAN L. BROWN	St. Joseph, Mo.	St. Joseph Production
PAUL J. CARUSO	Havertown, Pa.	ACD Research
LOREN L. COLE	Ambler, Pa.	Packaging Dept.
JOHN COLLINS	Wakefield, Mass.	MCD Sales (Eastern District)
JOHN CURRAN	Philadelphia, Pa.	MCD Research
ANGELINA DELPOPOLO	Ambler, Pa.	Accounting Dept.
LAWRENCE J. DOYLE	Owosso, Mich.	MCD Sales (Midwest District)
JANET HARPER	Lansdale, Pa.	Inventory Dept.
ROBERT L. HAYNES	St. Joseph, Mo.	St. Joseph Production
DAVID R. HERNANDEZ	Elwood, Kansas	St. Joseph Production
RAYMOND P. HERNANDEZ	St. Joseph, Mo.	St. Joseph Production
MARY JANE HILDMAN	Ambler, Pa.	Publications
WILLIAM B. LAWSON	St. Joseph, Mo.	St. Joseph Production
MARY MCCOY	Newark, Calif.	Niles Office
EDDIE MCDOWELL	St. Joseph, Mo.	St. Joseph Production
DONALD J. MCINTYRE	St. Louis, Mo.	MCD Sales (Central District)
ZACHARY MORENO	St. Joseph, Mo.	St. Joseph Production
JOSEPH R. MYERS	Ambler, Pa.	Receiving Dept.
ELIZABETH REINHART	Wings Field, Pa.	ACD Advertising Office
DANNY ROBERTS	St. Joseph, Mo.	St. Joseph Production
EDWARD J. SICKEL	Chicago, Ill.	MCD Sales (Midwest District)
ROBERT L. SIMERLY	St. Joseph, Mo.	St. Joseph Production
JOHN W. SIMPSON	Wathena, Kansas	St. Joseph Production
RUTH ANN SOLLIDAY	Norristown, Pa.	Accounting Dept.

## Students Learn About Industry in Tour of Amchem

As in former years, Amchem participated in the ACES' (Americans for the Competitive Enterprise System) Student Tour Program by having 30 members of the senior class of Central Bucks High School visit our plant late this spring. The day following the tour, F. E. Wilson, Amchem's Personnel Director, addressed these students in the high school at Doylestown.

The subject of Mr. Wilson's 45-minute talk was "Your First Job," which covered every aspect of the neophyte's entry into the complex world of business, from the filing of an application to the new employee's contribution to his company's profit picture. Wilson concluded his discourse by remarking: "Most of us in industry are anxious to contribute our experience to help you to get properly started in your career and I suggest you take advantage of this by calling upon us prior to accepting your first job, or shortly thereafter."

ACES is an educational, non-profit, non-political citizens' movement, whose aim is to demonstrate the superiority of the American Competitive System over any form of collectivism.

## Agricultural Researchers Study Radioisotopes

Reminiscent of some of those G.I. accelerated cram sessions at O.C.S. during World War II days, six Amchem scientists returned to the role of students for an intensive 10-day course in radiochemistry, May 9 to 20, at Amchem. Those attending were: Mel Sutherland, Stan McLane, Dick Hart, Hirsh Segal, Russ Bishop, and Al Schneider.

The course, which dealt with radioactivity in plant life, was given by Dr. A. J. Stevens, head of Radionics Inc., Norristown, consultants and designers of radioisotope equipment.

The purpose of the course was to provide these young men with a basic knowledge of radioisotopes, their use, measurement, and the safety measures required in dealing with them. Radioisotopes, which are radioactive chemical elements that give off radiation, have been used extensively in recent years to help unravel the complex chemistry of plants. Amchem is currently sponsoring several of these programs at universities and Government Agricultural Stations.

Dr. Stevens, who holds a Ph.D. from M.I.T., has done considerable work with the Atomic Energy Commission.



## Realignment of Personnel in International Division

With the resignation of Innes Simpson as manager, Agricultural Chemical Section, International Division, the specific duties of the present personnel in that division were defined in an announcement sent out by J. O. J. Shellenberger, on May 17. The assignments are as follows:

W. E. Weston, Manager, L. A. Dorsay, Territorial Manager, Agricultural and Metalworking Chemicals for Europe. W. R. Snyder, Territorial Manager, Agricultural and Metalworking Chemicals for Latin America. R. P. Murphy, Territorial Manager, Agricultural and Metalworking Chemicals for the Far East, Africa, and the Near East. S. F. Sasse, Supervisor, Benjamin Foster Products, world-wide. J. H. Dudek, Technical Advisor, Metalworking Technical Activities, world-wide. J. R. Sterry, Technical Supervisor, Agricultural Research and Development for Europe, Africa and the Near East. K. Bridge, Agricultural Research and Development, areas outside of Europe, Africa and the Near East. J. B. Rohrer, Supervisor, Metalworking Sales for Canada. C. Andersen, Traffic and Office Manager.

## Amchem in New Golf League

The first golf team ever to represent Amchem in organized match play made its initial appearance May 23 against Columbia Steel Equipment, in the newly-formed Suburban League, and won.

The league, composed of Leeds and Northrup, Narco, Melrose Lighting, and Corson Lime, in addition to Columbia Steel and Amchem, holds matches every Monday evening, beginning at 6 o'clock, at the Oak Terrace Country Club, Welsh Road. Matches are conducted on a handicap system.

The members of Amchem's first team (chosen largely on a punctuality basis, we are told) are: Bruce Green, Jim Knight (Foster), Walt Krogh, Frank Piacitelli, Tom Rogers, and Jim Thirsk, captain. The following are the alternates: Dwight Buczkowski, Jack Campbell, Dan Friend (Foster), Joe Mancini, Jack Price, Tom Rice, and Ells Stockbower.

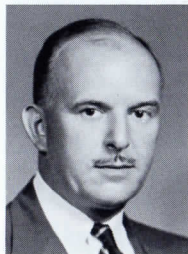
The latest standings show Amchem just 3 points out of first place.



Mr. and Mrs. GEORGE WILLIAMSON, JR.

# Along the Party Line

**Adieus with regrets:** INNES SIMPSON resigned his position as manager, Agricultural Chemicals Section, International Division, May 2; and left Amchem, May 20 to become vice president of the export and licensing firm of H. E. Botsow, Inc., New York City, which was established before the turn of the present century. Innes had been at Amchem since January, 1953, coming here from the National Bank of India, where he had served as an executive officer and manager in the bank's East African Branches in Uganda, Kenya, and Zanzibar. We regret Innes' departure, but wish him every success in his new post.



INNES SIMPSON

stationed with the Air Force.

GLORIA ZYLLA, whose blonde effervescence was always a tonic to the little group within the confines of the IBM room, has taken up residence in Hazleton, Pa., after changing her name to Mrs. John Fasulka, June 4, at St Anthony's Church, Ambler.

**Prize winner:** Amchem's MARY SCHULER walked away with first prize in the metallography (the science of Metal structures, visually) contest for students enrolled in local colleges and universities. The contest, sponsored by the American Society for Metals, and held in conjunction with an exhibit on corrosion, was part of the "Students' Night" program at the Engineers' Club, Philadelphia, this past May. Mary recently completed advanced research studies in metallography at Temple University.

MERV HUBBARD has just earned his certificate in machine and tool designing after twice-a-week attendance at Penn State University, Ogontz Campus, for the past five years. The results have paid off, for Merv made the complete working drawings for Amchem's new centrifugal sprayer (see pages 6 and 7). His perseverance is highly commendable.

**Nice Gestures:** National Secretaries' Week (April 24-30) was observed by MCD gallants AL SINCLAIR and the two T. R.'s—TOMMY RICE and TOM ROGERS. Beneficiaries of their largesse were JEAN PALERMO—a deluxe luncheon, and JOAN DETWEILER and ANN LUCAS—corsages. Bon bon delectables were passed around freely to all the girls in the office, while lollipops were anyone's regardless of sex.

**Neat Recoveries:** May 9 was a rather dark and cloudy day weatherwise, but for WAYNE WILSON and FRANCIS SUPPER it was blue skies and sunshine all the way. For this date was "glad-to-see-you-back day" at Amchem and marked their return after long absences—Wayne for surgery and Francis out with a little ticker trouble. Wayne has since returned to Abington Hospital for further post-operative treatment.

We missed ANN LUCAS' sunny smile while she was out making a contribution to the 1960 gallstone bank at Chestnut

Hill Hospital. By the time the *News* goes to press, we're sure Ann will again be regaling us with her good humor.

JOE BLESSING had a rather rough winter, too, but "you can't keep a good man down," as witnessed by picture on page 10. Joe, incidentally, has hit upon the clever idea of having his 25-year diamond service award converted into an Amchem ring, since he already has a lapel pin, tie chain, etc., from his previous anniversaries.

Our good friend ANDY LAWRENCE had to submit to the sterilized instruments wielded by the men-in-white at Sacred Heart Hospital and is now recuperating at home.

JOHN BERKY, our floor manicurist, is proud of the fact that his 48th Wedding Anniversary is coming up this fall.

TOM MONAGHAN dined out May 5. Reason? Kathy's girlfriends at Amchem surprised her with a dinner at Casa Conti, in Glenside, followed by a baby shower. Kathy left Amchem May 26 since there's a third member of the Monaghan family due to arrive in August. Those who attended the affair at Casa Conti were: MARIE GIBBONI, CLAUDY HEATH, EDNA GAUSS, JOAN MARIOTZ, MARIAN JONES, EDITH COSTELLO, JEAN MONACO, LOIS JOHANSON; also CONNIE GODORECCI, HELEN SKELTON, JEAN SCHMIDS, MARIE MASCOLA, JOANNE DAVIS, LYDIA CATAGANO, HELEN SPRINGER, BRENDA MORRISON, PAT KING, HARRIET TYSON, GLORIA ZYLLA; also FRAN VALEO, MARIE LIBERTO, CAROL BRUNO, and KAY LORENSKI.

**Niles News:** If all fathers were as lucky in obtaining daughters-in-law as attractive as the one GEORGE WILLIAMSON acquired when his son, GEORGE JR., married the former JUDITH ANN KEECH recently, they would be rushing their sons into matrimony by the hundreds. Both George, Jr. and his lovely bride are graduates of San Jose State College—he in February of this year; she in June, 1959. A glowing account of the beautiful wedding was given in the local (Cal.) newspapers. The young Williamsons honeymooned at the Sugar Bowl ski resort in the Sierras, and then set up housekeeping in San Jose. (See picture at left).

**Detroit Doings:** PEGGY HENDRICKS' husband, HARVEY T., was awarded the Michigan Society of Architects' 1960 grand prize in the form of a plaque and \$200 in cash, at the Society's annual dinner on March 31. Since the honor is highly coveted, the *Detroit Times* newspaper gave excellent coverage to the event, including a picture of recipient "Tom", who is associated with the engineering firm of D. J. Zabner & Co.

Our congratulations to F. P. SPRUANCE, SR., Vice President and MCD Sales Manager until his retirement in September, 1955, and Mrs. Spruance on their Fiftieth Wedding Anniversary, on April 21.

The tasteful attire of the AL SCHNEIDER family—Papa, Mama, and kiddies Laurie and Karen—earned a prize in the Walnut Street Fashion Parade this past Easter Sunday.