

SUPERVISORS' CERTIFICATES AWARDED

Fourteen AERO employees who successfully completed the Supervisory Training Course conducted for 17 weeks here by the Pennsylvania State College Extension Services were presented with certificates at the conclusion of the course on May 6. Professor R. A. Riggs gave certificates to the following men:

- James C. Bowman, Carl M. Crouthamel, Ernest N. Koch, Herbert P. Lee, David J. Leeds, Alfred J. Ludwig, Joseph F. Masino, Harold G. Nilson, Jr., Everett M. Rhodes, Bruno E. Sciambi, Robert S. Scott, Jack C. Webster, Gus W. Winter and Franklin Yates.

O'BRIEN-STANOJEV WEDDING

John O'Brien and Sarah Stanojev were married Saturday morning, April 24, at St. Hugh's Church, at Mascher and Tioga Streets. John O'Shea and John Adamas represented AERO at the wedding ceremony. They were joined by Jack Webster at the wedding reception at the bride's home. The three Johns had a fine time celebrating the fourth John's wedding.

After being fully feted by their friends, the newlyweds left for Canada.

SANDS-SMITH WEDDING

John A. Sands and Miss Miriam R. Smith are to be married Saturday, May 29, at 4 P.M. at Frankford Memorial Methodist Church. John's

AERO PICNIC PLANS ANNOUNCED

AERO's Annual Picnic will be held at Somerton Springs again this year. Circle the date now on your calendar -- Thursday afternoon, July 22.

The Picnic Committee will query you later on whether you will come to the picnic, whether you will bring guests, and whether you will need transportation. The Committee is made up of Ed Brown, Ernie Koch, W. K. McCullough, Bob Sohngen and Eric Storms.



HOLIDAY TO DELAY PAYCHECKS

Pay checks for all hourly employees will be unavoidably delayed until June 2 by the Decoration Day holiday, according to an announcement from the Accounting Department. The holiday will be observed on Monday, so the Accounting Department will not be able to compute and prepare the checks until the following day.

NEW GARAGE BUILT

Adjacent to the Shop & Maintenance Building on East Courtland Street is the new garage built by Maintenance Department for servicing AERO's cars. The garage accommodates two cars -- one for major overhaul, and the other for minor repairs. Greasing and car washing facilities will be added later. Joe Mortimer is in charge of the unit.

93 CONTRIBUTE TO SALVATION ARMY

Ninety-three AERO employees contributed a total of \$107 to the Salvation Army's Campaign this year.

THEY'LL DO IT EVERY TIME:

AN AERO FISH STORY

The following AERO fishermen engaged in a little fishing trip to Barnegat Bay recently: Jim Stach (the Instigator), George Gause, George Hamilton, Frank Yates, Mario and Sal Mestichelli, Manny Kilstein, Bill Hoffman, John Jewell, Stanley Town and Walt Jablonski. A very accurate log was kept on the trip, and here it is

6.30 a.m. - Everyone is assembled at the Delaware River Bridge, passing the time by admiring the patches in the seat of Jim Stach's pants, while waiting for Jewell to arrive. Weather - Warm and Sunny.

7.00 a.m. - Where is Jewell?

7.30 a.m. - On our way. Stach eats first sandwich (only 11 left). Weather - Swell.

8.00 a.m. - Jewell is in the lead car. His foot goes to sleep on the accelerator until someone reminds him he is doing 82. He immediately stops and rests the car for 20 minutes.

8.30 a.m. - We're there! We're there! We're over the water. Stan Town immediately starts to get seasick, until it is explained to him that you can't get that way just standing on the dock. Weather - 1 Cloud.

9.00 a.m. - Hoffman's combination hat and life raft blows off and sinks to the bottom.

9.30 a.m. - Captain drops the anchor. George Gause picks it up and hands it back to him. Captain thanks George and hits him with a flounder. Weather - Still 1 cloud (but so big.)

10.00 a.m. - Lot of lines bobbing up and down. Someone should get a bite. Hamilton does. He scratches it.

10.30 a.m. - Yates lands one. Everyone is amazed at the size of it. It's not quite as big as a small guppy. Weather - All cloud. (Starting to leak). High winds.

11.00 a.m. - Seems as if Stach made arrangements with everything but the fish. Jabby keeps looking over the side of the boat, shaking his head, and saying "I no see none."

11.30 a.m. - At this point the weather takes over. Briefly, it is Squalls, Typhoons, Cloudbursts, Windstorms, Sleet,



Rain, Snow, Hail, Sandstorms, and Blizzards. (Captain's barometer changes from Sunny to Unsettled.)

12.00 a.m. - We are now frozen at our posts. Even the blood worms are blue. We drink cold beer to keep warm. The Captain comes up out of the cabin, takes one look at us - and goes back down again.

12.30 p.m. - Sal looks at Mario. Mario looks at Sal, and with that knowing brotherly look they wind in, cross rods, and in a fanfare of chattering teeth they interlock hooks and sink below (into the cabin).

1.00 p.m. - Someone notices that Manny has been reeling in like mad for the last 2 hours. They explain things to Manny. "Oh, you need string, too!" he says.

1.30 p.m. - Only Hoffman and Stach survive. Hoffman - "I'll snag my hat yet." Stach - "I ain't never been blanked."

2.00 p.m. - 5.00 p.m. We spend 3 hours trying to convince the Captain that we had caught enough fish and want to go in. He is a hard man. He doesn't think 3 fish are enough.

7.00 p.m. - We are crossing the Delaware River Bridge. Stach (the dishard) is trolling in the Delaware and still muttering to himself, "I ain't never been blanked yet."

8.00 p.m. - I have been home a half hour. My wife is still laughing. I am too tired to beat her.

DULIN REPORTS FROM CANADA

Harry Dulin is piloting AERO's PBY on a special magnetometer Assignment in Canada this month. He reported on his experiences and Eddie Irwin's during their first week on the job, and here are a few extracts from Harry's letter

"We left here yesterday at our usual time, 7:30 A.M., and flew east on one of the 200-mile east-west profiles. We got within 40 miles of the eastern end and ran into a snow storm. Since the snow was moderate and dry, we continued east for some 20 miles until we began picking up ice and were forced back to the base.

"The weather may give us some trouble as far as lost time is concerned, since there are no weather stations within 400 miles of here, and the area has the worst weather in Canada. The only way we can find out what the weather is doing is to fly out and look. The weather man here says this is their worst season too.

"Today we got in another good day. It was really rough, though, and almost everybody on the airplane except Eddie Irwin and I were sick. The ship pitched and rolled so severely it was impossible to stay in the pilot's seat without a safety belt."

LOCAL MAG TELLS AERO STORY

Philadelphia Magazine, a local publication distributed by the Chamber of Commerce to its 15,000 members in the Greater Philadelphia area, will carry an article about AERO's varied services in its June issue. This issue is also expected to have extra circulation among the Republican Convention Delegates.

13 RUN POOL WINNERS

Brock's mathematicians have added up the figures on their 13 run pool winners, and they find that these lucky boys claimed the following boodle: Eric Storms, \$10.08; Jean Adcock, \$7.20; Bill Benz, \$4.32; Tom Kirk, \$2.88. P.S. Storms won an additional \$15., as PROP WASH goes to press.

SALES' MAIL VARIED

One day's mail for the Sales Department recently brought letters from India - Venezuela - and Siam, and one request from a prospect who wants AERO to undertake the investigation of an old Spanish land grant claim. Never a dull moment.



KEAGLERS' CORNER

If you think AERO has no fancy bowlers, take a look at these scores. On April 29, Bob Plum went wild and bowled a series of 148, 181 and 234. Still using the same ball, and with one lucky pants' cuff rolled up, Plum went on the week of May 13 and rolled a 201, 204, 147 for a 552 series.

But S. Hackett was pushing too. On May 13 he tallied 204, 167, and 189. The competition is red hot.

To make it really worthwhile VK has put up an extra \$10 in prize money for the night of May 20. With all this pressure on, the hotshot bowlers may freeze up so badly that Jewell's little 130 will cop the loot.

Below is a list of the teams and their standings as of May 13. They are grouped pretty well. Trying to dope out the winner in these final two weeks will be as tough as picking the winner in the fourth at Garden State.

	Won	Lost	%
Indians	38	22	.633
Senators	36	24	.600
Browns	36	24	.600
White Sox	32	28	.533
Red Sox	30	30	.500
Tigers	26	34	.433
Yankees	22	38	.367
A's	21	39	.350

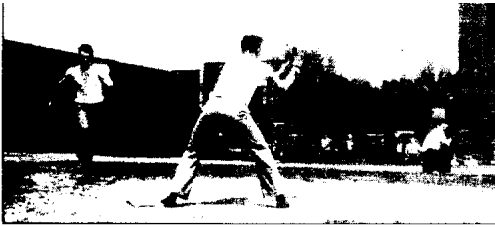
BREAKFAST AT PERRY'S

Perry's, where AERO meets to eat, has added home-made waffles with Vermont maple syrup to the breakfast menu. Helped by the heckling of certain members of the AERO Breakfast Club, Charlie has not burned any waffles yet.

At noon now, it gives pickles and sometimes even potato chips with the sandwiches, what with competition and all.

KRAMER, DONNELLY BUY CARS

Ed Kramer and Joe Donnelly of Shop and Maintenance are the new owners of a Ford and Studebaker respectively. Donnelly's Studebaker is equipped with a wolf whistle, a very handy attachment.



**BATTER UP - or
THE SEASON IS ON**

Scene 1

Time: 11:55 A.M.
Place: Drafting Room

Stach: Come on - get that lunch down so you can get out there and grab the bat for practice.

Hamilton: Are you kidding? Haven't you seen me murder the ball those last couple of times?

Sebastian: Murder is right. The ball just dropped dead at your feet when you hit it.

Hackett: Am I pitching again? I am! Oh, my back!!

Stach: There's the buzzer, gang - see you on the field.

Scene 2

Time: 12:01 P.M.
Place: AERO Athletic Field

Eckhardt: Let me hit first. I had only a homer and double last game - I need practice.

Storms: Make room down the base line. I want to practice getting away from the plate. The pitcher threw me out on that last grounder. (Meanwhile the other team is practicing in the driveway, since they can't get on the field.)

Hoffman enters to a round of cheers and jeers. He takes his place and announces; Play ball, you jerks.

Scene 3

Time: 1:00 P.M.
Place: Drafting Room Club House

Stach: Nine game, fellows. The score should have been a lot higher, though.

All: Drop dead!
The umpire enters. Another drop dead chorus rises.

Hamilton: What support we gave you, Hack.

Hackett: I didn't have an error. Didn't get any hit to me....

Hassett: I didn't like that pitcher. He put them all below my shoulders.

Kilroy: That hard liner --

All: With four or five bounces?

Kilroy: That hard liner I missed sure fooled me. Didn't seem to bounce at all. Well, can't get them all ---.

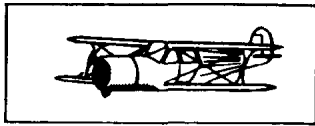
Sebastian: I'll still have a higher average than you, Hamilton, at the end of the season.

Hamilton: Never.

This rings up the curtain on another AERO Baseball season. With three teams playing - Brock, Aero and Magnetometer - the season will be a lively one for all rooters. At press time, this is how they stand:

	W	L
Brock	3	0
Magnetometer	1	2
Aero	0	3

Last minute flash: Umpire Bill Hoffman broke his glasses May 16 and is now in the process of being examined for new ones. No cracks, please.



FLIGHT OPERATIONS ROLLING

This has been a busy Spring for Flight Operations. Three Brock cameras have been in operation, and AERO's mapping teams have turned in more Brock plates than ever before.

The Woolnough-Roser duo have just returned from an assignment in Pittsburgh; Thomae and Quinn are moving on to North Carolina after completing a job based at Mercer. When the Tar Heel job is done, they will go west to help finish a job begun there last year. Harris and Decker, who have just finished some Minnesota work, are preparing to move in on this same western job. Stinchfield and Moore also will work on this assignment, a large Government contract specifying certain conditions as to foliage, season and so on.

Stoll and Turner are finishing a large job in Minnesota. Dulin and Irwin are busy as pilot and flight engineer respectively on a special Canadian assignment with the PBX. The customer reports they are doing a good job of both flying and maintenance under tough conditions, in remote country.

Leamon and Mullen teamed up as pilot and co-pilot, flying the DC-3 to Denver for the recent meetings of the geologists and geophysicists there. During the week of the conventions, they made numerous demonstrations flights to show the operations of the airborne magnetometer to oil company officials.

THOMAS MICHAEL O'MALLEY

Young Thomas Michael O'Malley made his bow and yelled lustily at 9:47 P.M. May 9. He is the first son of Tom and Mary Louise O'Malley.

Young Tom is the third Thomas Michael in the O'Malley family. He and his mother are fine, thanks. And if you will wander over to Magnetometer Division and drop a hat in the neighborhood of T. O'Malley he will explain to you why his is the finest son in the world.

VK TALK REPRINTED

Attached as part of this issue of PROP WASH is a copy of a talk made earlier this year by Virgil Kauffman concerning AERO's work with the airborne magnetometer. He describes a typical flight and tells of the utility of this tool in ex-

NEW EMPLOYEES WELCOMED

PROP WASH extends a cordial welcome to the following new employees who have recently joined AERO's ranks:

Magnetometer

Margaret Casey
Sarah Cordovi

Photo Lab

George Winton
Walter E. Maucher

Shop

Percy C. Ralston

AIRCRAFT MAINTENANCE MOVES

This month saw Bob Scott and his Aircraft Maintenance Department move from Wings Field to Mercer Airport, near Trenton. The new set-up affords more hanger space, as well as better runway and field facilities. While Wings Field was satisfactory for the Company's lighter planes, it was not an adequate base for the DC-3s and PBX.



PARKING RULES

Across the street from AERO's main plant the new grass grows green and bright, in the narrow strip between sidewalk and street. AERO employees are asked not to run their cars over the grass when parking. The owners of the property have been reasonable, but they do like their grass.

Employees parking along the side of the main building are asked to park their cars within the marked off parking spaces. Each space will accommodate one car. If you straddle the space, you take up someone else's space.

HUNTSMAN RECEIVES CPA CERTIFICATE

Roy Huntsman of the Accounting Office has received word from the State of Pennsylvania that he has completed his examinations and other requirements for the Certified Public Accountant's certificate. A lot of work goes into the earning of this honor, and Roy's friends at AERO congratulate him on his accom-

AIR MAGNETOMETER COMPLETES FIRST COMMERCIAL YEAR

War-Developed Instrument Proves Worth in Peacetime—Rapid Coverage of Great Areas Seen Revolutionizing Prospecting — Surveys Already Cover Thousands of Square Miles

Only a year old in point of commercial service, the airborne magnetometer, developed during wartime as a device for detecting submarines, has already covered thousands of square miles in survey work for mining and oil companies. The author reviews the purpose of a magnetic survey and describes how it is done from the air.

By Virgil Kauffman*
President, Aero Service Corp.

Just about a year ago, an Aero Service plane took off on the first commercial airborne magnetometer flight ever made. A few hours later the survey plane returned to its Canadian base. It brought back a bundle of magnetic data which could have been gathered by ground parties only after months of work.

Since then the operating techniques of the airborne magnetometer have become well established, and the utility of this new exploration tool in the search for oil and minerals has been better defined. We have covered enough ground now that a report seems in order, and I am happy to be making it here in Canada where the airborne magnetometer saw its first commercial application.

Of course, the magnetic method itself is not new. As long ago as the 17th Century, prospectors in Sweden were footslogging along with crude compasses and dip needles, hunting for big orebodies. That may have been the first magnetometer study.

Over the years the instrument has been improved greatly. But the magnetometer used today by ground parties is still essentially little more than a compass—a device of magnetized bars rigged with special weights for greater sensitivity.

Then, an airborne magnetometer was conceived and developed. Perfected during the war, it's an electronic instrument with greatly heightened sensitivity. It was used during the war as a submarine-detecting device; in its peacetime modification the airborne magnetometer now has mapped magnetically in this short period about a half million square miles of the earth's surface—better than double the area of France.

The great magnet to which this instrument responds is the whole world. The earth's surface, wherever you may be, has a magnetic field. It is intense at the poles, weak at the equator. In this latitude, for instance, the magnetic intensity may be as high as 50,000 gammas. The gamma is a geophysical unit of magnetic intensity. An automobile at a distance of 100 ft. gives a signal of two or three gamma. The airborne magnetometer is sensitive to variations in magnetic intensity as small as one gamma. If you were to stand within six feet of this delicate instrument, it would respond to the nails in your shoes or the watch in your pocket.

Variations in the magnetic field of a locality are the guideposts to important differences in

the earth's sub-surface structures. These variations, which geologists call anomalies, occur because the rocks near the surface vary in composition and structure. The airborne magnetometer helps to chart these differences, and these charts in turn furnish important clues to the nature of the geologic strata.

Developed in Wartime

Aero's interest in the airborne magnetometer goes back to 1943. In an informal meeting with representatives of the U.S. Department of Interior, I was asked to help further the work of the Geological Survey in their explorations for minerals with the magnetometer, then a highly secret device. We agreed to throw our part into the experimental work. So in the late fall of that year, the Interior Department's people, working with the Navy Department and Bell Telephone Laboratories, came to Philadelphia. There we installed in one of our planes the first airborne magnetometer employed in these experiments.

The first survey plane was a single-engine craft of high speed. The equipment installation took several months, and then we started flying. The first flight was successful, and subsequent flights substantiated the value of the instrument.

During 1943, 1944 and 1945 we operated this equipment over large areas in the United States for the Geological Survey. Finally we got scared flying a single-engine ship just above the tall trees in Michigan, Wisconsin and Minnesota, and we had a twin-engine ship released to us by the Navy Department.

First Job In Quebec

Our first operational job was a tough one. We moved into the Province of Quebec in January, 1947, when temperatures were around 30 or 40 below, and went to work. We flew lines one-quarter of a mile apart on three different survey projects. In a very short time, we covered thousands of square miles and collected data which our clients tell us would have taken years to assemble by ground methods. When they added that our costs were a fraction of the ground survey costs, we were really pleased.

During the early stages of our work, the large mineral corporations were extremely critical of our surveys for them. Rightly so, for they were employing an instrument which then had not proved itself in large scale, commercial studies. In our first surveys then, company engineers and geologists were in the field with our men and reviewed our work each night, planning and approving the next day's operations. We both gained from this close relationship, and there was another, more dramatic result. In some cases, on the basis of our data, the companies sent out staking parties to establish claims in areas we had flown only 24 hours before. Certainly that was bringing a new schedule to exploration work!

Our first surveys in Canada covered areas not too far from existing air base facilities. There-