GEORGIA TECH
Alumnus

THE GEORGIA TECH
STUDENT 1959
BACK IN DECEMBER, in the spirit of the season, we got carried away and made one of those resolutions about getting every issue out on time. Well, our consecutive string ended at one. We did all right with the February issue, but here it is March and we're late again. However, we do have an excuse of sorts to offer you for the tardiness of this issue. On February 22 we celebrated Washington’s Birthday by being hauled off to the local hospital to spend ten days recuperating from a still undiagnosed illness. On top of this, we were forced to stay at home for another ten days. So the fact that this issue got out at all is a miracle of sorts.

ACTUALLY, it wasn’t as much a miracle as it might first appear to you. We hasten to add that we had a great deal of help in getting out this issue. And if it hadn’t been for some friends of ours, you may have waited until May rather than April for the March issue.

First among this group we must mention Mrs. Mary Jane Reynolds, our editorial assistant, who spent a great deal of her time during this three-week period trekking back and forth between Georgia Tech, the hospital and our home carrying copy for the magazine as well as the day-to-day mail for the Publications Office.

Then there was Mrs. Mary Peeks, who for the first time in our memory as editor got the News by Classes copy in way ahead of the rest of the magazine. For this we shall be eternally grateful.

Then there was Cecil Phillips, assistant in the Publications Office, who did all of the research and background material for the article that begins on page 12 of this issue. In addition Cecil, some of his classmates and Dr. Hal Davidson, did the photography for this article.

Bill Diehl, who does most of the photography for the *Alumnus* and *Grey Hodges*, his assistant, pitched in and scurried around to get most of the other photographs for the issue.

We mustn’t forget John McKenzie of Higgins McArthur, who prints this magazine, for his help in laying out the issue.

All in all it was a cooperative venture, and we can take little credit for it.

INCIDENTALLY, this is the first issue of the *Alumnus* to be printed by the offset method. John McKenzie convinced us that we should give offset a trial with this issue. After we take a look at the finished production and gather the cost figures, we’ll know whether or not to continue with offset or return to the letterpress method of production. Offset does offer one advantage in that we can use two colors on any page of the magazine without additional cost. And if we ever get to the point where we consider four-color photography, it will be considerably less expensive using this method.

YOU WILL remember the Leon Levy letter concerning Arthur Murray’s dance school which appeared in this space in the February issue. We would like to point with a slight bit of pride to the fact that before the issue was completely off the press, it had already appeared as a feature article on Norman Shavin’s TV page in the *Atlanta Journal*.

Speaking of feature articles, Professor Edward Foster’s article “The Cooperative Individualist” which appeared in the December issue of this magazine was responsible for a series of feature articles which appeared in the *Journal* during February. This is the type treatment that makes for happy alumni editors.

ROANE BEARD has asked us to remind you that the football ticket applications will be mailed from the Alumni Office during the first week in April. So if you don’t receive your application by April 20, please contact the Alumni Office, and they will be happy to send you a set of applications. Deadline for filing for football tickets this year is May 8. And Roane would also like us to remind you that although the Alumni Office distributes the applications, it has no responsibility for the tickets. Your order is taken directly from the Athletic Association.

BECAUSE OF space problems there is no Club News in this issue. But here are some coming meetings you might be interested in: New York—April 16—speakers, Dr. Paul Weber and Howard Ector; Washington—April 21—speaker, George Griffin; Jacksonville—April 24—speakers, President Harrison and Coach Dodd.
Investigate the outstanding promotion opportunities at Douglas.

It stands to reason that the biggest field for advancement lies where the biggest programs involving advanced technology are under way.

At Douglas, massive missile, space and transport projects in both military and commercial areas have created a continuous demand for engineers and scientists with backgrounds outside as well as in the avionics, aircraft and missile fields.

As these projects grow in scope, the multiplying supervisory and executive openings are filled by Douglas engineers from within the company. This promotion policy has made Douglas a prime organization for the engineer who wishes to advance in his profession.

For further information, write to Mr. C. C. LaVene, Douglas Aircraft Company, Inc., Santa Monica, California. N Section.

the most respected name in aircraft, missile and space technology
WE HAVE LOST, I trust only temporarily, the distinction of having the largest percentage of alumni contributing to a fund-raising project of any state-supported institution in the United States. As of July 1, 1957, we led the country in this category, but during the past year, two schools jumped ahead of us.

Texas A & M College won the United States Steel Foundation's grand alumni award with a 48.9% effectiveness for the past year. And, even more bitter to relate, Auburn edged Tech out for second with 42%, just 0.1% better than our 1957-58 record of 41.9%.

You might be interested in a tabulation of the first 10 state-supported institutions in this category of solicitation effectiveness:

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<th>Institution</th>
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<tr>
<td>Texas A &amp; M</td>
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<td>Auburn</td>
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<td>Georgia Tech</td>
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These statistics were compiled by the American Alumni Council, the organization that administered the United States Steel Foundation "Distinguished Achievement Award" which carried with it a $10,000 cash award.

Tech's 12th Roll Call is now entering its final three months. As of the moment we are showing, by a slight margin, the best results in our history. By March 15, 8340 alumni had contributed $164,000. But, as encouraging as these figures are, we have a long way to go to get back in front. We need at least 10,000 alumni contributors to beat Texas A & M and Auburn.

As an additional incentive, we're going to publish our Directory of Contributors in July. The deadline to get your name in this directory is May 1. So if you haven't sent in your contribution, please do so before May 1.

Sooner or later we'll be back on top of all of the state-supported institutions. For it is not in the tradition of Georgia Tech to play second fiddle to anyone, in scholastic, alumni or athletic matters. With a really big push, we can be back on top this year.
ENGINEERS explore exciting frontiers at Western Electric

If guided missiles, electronic switching systems and telephones of the future sound like exciting fields to you, a career at Western Electric may be just what you’re after.

Western Electric handles both telephone work and defense assignments … and engineers are right in the thick of it. Defense projects include the Nike and Terrier guided missile systems … advanced air, sea and land radar … the SAGE continental air defense system … DEW Line and White Alice in the Arctic. These and other defense jobs offer wide-ranging opportunities for all kinds of engineers.

In our main job as manufacturing and supply unit of the Bell System, Western Electric engineers discover an even wider range of opportunity. Here they flourish in such new and growing fields as electronic switching, microwave radio relay, miniaturization. They engineer the installation of telephone central offices, plan the distribution of equipment and supplies … and enjoy, with their defense teammates, the rewards that spring from an engineering career with Western Electric.

Western Electric technical fields include mechanical, electrical, chemical, civil and industrial engineering, plus the physical sciences. For more detailed information pick up a copy of “Consider a Career at Western Electric” from your Placement Officer. Or write College Relations, Room 200C, Western Electric Company, 195 Broadway, New York 7, N. Y. And sign up for a Western Electric interview when the Bell System Interviewing Team visits your campus.

TELEPHONES OF THE FUTURE—Making telephone products for the Bell System calls for first-rate technical know-how. Tomorrow’s telephone system will demand even more imaginative engineering.
For representatives of a generation universally recognized as beat, the present-day Tech students are remarkably like their predecessors. Perhaps the heavy workload that has long been the regimentation, discipline, and attrition on the hill has managed to keep the student relatively stable in a world full of the beatniks. Anyway you look at it, the Tech student is still proud to be among the nation's worst dressed, with the slide rule his badge of belonging. On the following pages, The Alumnus presents a closer look at today's Tech student.
ONE WARM EVENING in early September over eight years ago I first strolled down Techwood and, hearing students call "To hell with Georgia" at passing cars, decided that these boys did not care much for their state. Since then I have seen Tech students awake and asleep (in class), getting an A only because there was no higher grade and an F only because there was no lower, on their way to church on Sunday morning and getting lost in a crowd to elude a policeman. The result has been a varied if not complete picture of what the Tech man is like.

The Tech type—it will probably surprise him to hear this from one of his teachers—is first of all a good student. More than one teacher has told me that in weighing continuance here against a more highly paid job elsewhere, he has placed in the balance the fact that he likes his students here and he means, of course, that he likes them as students. The Tech student has a healthy respect for each course he faces; he expects to work hard at it and does; and he does not jump into the Chattahoochee if he fails it.

When he takes something in hand, an engineering problem, an auto for the Reck Parade, or a student publication, he tries to do a thorough, distinctive job. The Rambling Reck parade, the exhibits for Engineers Week, and the homecoming decorations are only extra-curricular samples of a high quality of work we teachers often see in class.

And this leads to a second point—the Tech student has a deep pride in his school, based on the fact that he knows it is scholastically difficult and believes it is scholastically good. According to certain objective measurements, our alumni are more loyal to the school than those of most state schools in the country, and this loyalty only reflects the feeling these men had as students. Except for the freshmen, however, Tech students rarely boast of their school. Psychologists tell us we boast about things we really aren’t sure about; you may recall your suspicions of the girl who kept insisting how “good” she really was. Since students feel that Tech’s reputation speaks for itself, they tend instead to be critical of ways in which the school does not live up to that reputation, such as defects they see in its administration and its educational offerings. “Why doesn’t the faculty publish more books?” a senior asked me the other day.

Despite the fact that “shook-up” seems to be his favorite word, the Tech student is not easily excited. He endures tremendous noise in the dorms (from freshmen largely), pop quizzes, eight o’clock classes, and Robbery coffee with great forbearance. He groans, but he plays it cool. This calmness makes him a good man to have around in a crisis. One day I got my car apparently inextricably caught between two of the boats that park in front of the administration building. Another teacher opined the case was hopeless, and went on. Two Tech men wandered by, surveyed the situation, pointed out the only way the car could be maneuvered loose, helped me push one of the boats according to the plan, and wandered off. Or another time, so the story goes, a student had done something which resulted in a complaint to the police. Dean Griffin called him out of class and read the riot act to him for several minutes outside the class door. The student quietly listened and when released back to the class, went up to the teacher and asked, “Pardon me, sir, but who was that fellow who was just talking to me?”

The Tech student, as seen in class, is an honest fellow, who rarely steals any of the books and articles of clothing his buddies keep leaving around. A cashier for a nearby business who has trusted Tech students temporarily out of funds told me that, in the three years she has been on the job, not one failed to repay her. It would be hard to find a higher tribute to these men. At times, of course, the ethics of the student diverges from that of the teacher. For example, getting the work by some devious means or even, if he cannot write one, turning in a classmate’s report, is, for many if not most students, within the code. But revealing his classmate’s name is not, and the offender, if caught, will take almost any punishment before he will “rat.”

Census reports show that, for our country, the two greatest areas of concentration of church members are in the south and northeast, and those of our students who do not come from the former (or Latin America) are probably from the latter. Thus our campus is spared much teenage cynicism, except possibly on the part of professors. In
addition a student knows what is right or wrong even when he chooses the latter; and this knowledge, which might seem obviously necessary, is rapidly disappearing as the currently fashionable moral relativism convinces so many that what they want to do is what they need to do is what they should do.

What this adds up to is that the Tech student is a not spectacular, but sound and competent student who will some day be a trusted employee and a father bent on seeing his sons (and even daughters) come to Tech too. To me there is nothing essentially wrong with such a picture. A student about to transfer from Tech to the University of Hawaii told me, in a disgruntled fashion, that Tech was producing almost no great men. This, even if true, isn't alarming. If Tech produces first-rate engineers who are sought after by industry for their superior education and who fill responsible professional and executive positions, isn't this enough?

Because our school has done so well in the past, the current talk about raising Tech's standards leaves me a little cold. For many years Tech has been regarded as the South's outstanding technical school scholastically, and in that position it should certainly try to remain. But not in the foreseeable future can Tech match the enormous funds (and the scholastic advantages based on the fact that they are private schools) of Cal Tech and M.I.T. Our attention needs for the moment to be shifted in another direction.

During over eight years at Tech I have seen very little change in the students' academic performance, but I have become aware of considerable decrease in their deportment and ethics. Eight years ago the Technique did not headline the theft of books from the library, assaults on gate men, and dormitory stealing. Today almost every issue of that paper is in some way concerned with student misdeeds. Delinquents Anonymous is the fastest growing group on the Tech campus.

Every year the penciled witticisms on notices are becoming more frequent; the air in the halls becomes bluer from cigarette smoke and profanity; the Bradley building social club gets larger and the people who find seats to eat become fewer; more students compete with the professor for class attention; the campus becomes noisier; and immaturity, obstreperousness and plain bad manners, in and out of the classrooms, becomes more prevalent.

The upperclassmen I talk to, blame the freshmen for much of this situation. It is true that indulgent parents, dewy-eyed teachers in high schools, and general loafing of our young people are keeping them out of the one institution which is the prerequisite for all learning — "Hard Knocks University." However, it is also true that from the little stinkers being created by our present social system the Tech men of the future must come.

One can still see working the maturing process at Tech, transforming a "raw" freshman to a reasonably polished engineer. At the beginning of last quarter I was waiting in a classroom for the group to assemble for a senior course in technical writing. Noticing the kiddish behavior I felt forced to mention, "You fellows don't act like seniors." "Seniors?" they said, "We're Professor Mullen's class in sophomore literature." (A freshman class would stand out even more, and not only because of the lack of beards.) But despite all that we can do, with the inferior materials we are receiving, it becomes increasingly difficult to bring out a fine finished product.

Recent attacks on progressive education and the concurrent awareness of Russia's advances in scientific education represent a hopeful trend, and perhaps if enough working mothers stay home and enough fathers cut themselves birch rods this growing tendency to immaturity and superficiality may be reduced before our campus resembles that of the Georgia Institute of Teething.

But as I read of the vandalism and thefts about the campus and see and hear the cheap and flippant behavior that it becoming the accepted thing, I think that the Tech type as I have described him may some day be impossible to find on the campus. And that would be a pity—for he was a fine fellow.
Late into the night Bill Hines (at board) and master's student Joe Talbird study in Dr. Davidson's office. The graduate students prefer this office because of the extensive IE library, air conditioning and seclusion.

THE PH. D. ASPIRANT

An even half-dozen top students form the nucleus of Tech's newest doctorate program—Industrial Engineering. Here's a combined profile of the pioneers

GEORGIA TECH'S NEWEST Ph.D. program (in industrial engineering) is not a narrow, specialized one, but rather an opportunity for the students to develop a more comprehensive approach to present day and future engineering problems. At least this was the concept most often expressed, in one way or another, when the Alumnus recently interviewed the half dozen graduate students presently working toward the first doctorates to be offered in the School of Industrial Engineering.

When the Board of Regents gave its approval last year to a Ph.D. program for this school, it marked the culmination of over ten years of active planning by Professor Frank Groseclose and his staff. Groseclose, director of Tech's I.E. school since its inception in 1945, had spent these ten years building up a capable graduate faculty, a task made difficult by the general scarcity of I.E. doctorates in the nation. "During this period, for every Ph.D. in I.E. there were 20 schools trying to get him. Now the situation is even worse," recalled Groseclose. "This lack of qualified men made us work even harder, because we could see the growing need for more highly qualified engineers in this field. And it was evident that someone had better get started to train them."

In 1948 only two or three universities were offering Ph.D. degrees in industrial engineering. Now there are more than 50. During this period of rapid expansion, the faculty at Georgia Tech's I.E. school contributed at least a dozen directors of I.E. departments throughout the country. At the same time, however, Groseclose was attracting highly qualified engineers from industrial positions, as he developed both the graduate and undergraduate programs. Today, Tech's I.E. faculty includes eight Ph.D.'s with additional experience in industrial, consulting, or research work.

The chairman of the I.E. Graduate Committee is Dr. Harold O. Davidson—ME '47, IE '48—who received his Ph.D. at Ohio State and did several years of teaching, consulting, and research work before returning to Tech recently. Much of Dr. Davidson's experience is in the field of operations research (see box). He served as an OR advisor to U.S. and Allied Military Agencies in Europe for two and one-

Continued
PH. D. ASPIRANTS-continued

Half years just prior to his return to Tech. It's Dr. Davidson's theory that the most revealing measure of any graduate program is the quality of the students involved in it. "Good students," he says, "will be attracted by good schools, and the best students will usually be able to obtain fellowships or assistantships wherever they go. Inevitably, the level of students sets the pace in any classroom, especially in the small graduate classes and seminars."

Six men—10 Tech degrees

A quick look at the first six students presently working toward the first doctorates in Tech's I.E. school readily indicates the high level at which this program is beginning.

Three of these students (Lynwood A. Johnson, IE '55, MS IE '58; Tom L. Newberry, IE '54, MS IE '58 and Bill W. Hines, MS IE '58) began course work last summer immediately after the Ph.D. program went into effect. Cecil R. Phillips, Jr., IE '55; Edward W. Davis, ME '57; and Cecil G. Johnson, GE '48, IE '49, MS IE '57; joined the program shortly thereafter.

This group already has accumulated a total of ten degrees from Georgia Tech, and other similarities in background revealed themselves immediately. Three of them (Newberry, Phillips, and Davis) were editors of the Georgia Tech Engineer (The Engineer won the top national award for college technical magazines for the first time in 1954, when Tom Newberry was editor and Cecil Phillips was managing editor. It won again in 1957 under Edward "Bobo" Davis) during their senior years here. Four are fraternity brothers (Newberry, Phillips, Davis, and Hines are ATO's). Two received the World Student Fund fellowship for a year's graduate study at the Federal Institute of Technology in Zurich, Switzerland (Phillips and Davis). Four are married (Davis and Hines are the bachelors). And all six collected an array of honors that range over almost every known award in scholarship and leadership at Georgia Tech.

It did not seem likely that a group with such parallel backgrounds would just accidentally find themselves forming the nucleus of the I.E. school's Ph.D. program. Getting a little nosier, the Alumnus ventured to query the six on their reasons for returning to Tech, what they think of the new program, and their plans for the future. The results of these interviews provide further insight into the common ground of the group.

Tom Newberry is from Russelville, Kentucky. He graduated from Tech with almost every available key, shingle, and medal, winning a long list of honors such as Tau Beta Pi, ANAK, ODK, Distinguished Military Student, etc. Then after a short period with an oil company Tom entered the Air Force and served for three years. Part of his Air Force training was in electronics, a knowledge that he put to use when he returned to Tech. His master's thesis was entitled "The Development of an Electronic Analog for the Study of the Economic System of the United States."

When asked about his reasons for doing advanced work in industrial engineering, Tom replied that he wants to broaden his scope, "The B.I.E. leaves you with a very limited outlook on I.E.," he said. "I am interested in eventually having a consulting organization for broad types of industrial problems... I was not prepared for such a task with my undergraduate background."

Tom also wants to teach. He feels that a combination of teaching and consulting, preferably in Atlanta, would probably be an ideal arrangement. And he knows whereof he speaks, for he has been doing just that since he returned to Tech in 1957. His temporary jobs have included work for Delta Air Lines, Mead Paper Company, and Emory University Hospital. Tom's present combination of part-time teaching (undergraduate courses in I.E.), part-time consulting, part-time graduate study, and family life with his wife and two daughters may be described as the typical Newberry tempo. He went through undergraduate school at a similar pace and finished a quarter early.

Included in Tom's curriculum are courses in German, which he has begun in order to meet the Ph.D. requirements in modern language. "I'm at a slight disadvantage in languages," he cracks,
INDUSTRIAL ENGINEERING AND OPERATIONS RESEARCH

Industrial Engineering has been used by many schools as a name for curricula in management and various branches of business administration. "But," according to Tech's I.E. Director Frank Groseclose, "we have always considered I.E. as a branch of engineering—the area where engineering is applied to the general problems of manufacturing."

With the development of mathematical and other scientific methods of analyzing combat situations during World War II and the subsequent application of these methods to commercial enterprise; a new dimension has been added to industrial engineering. This dimension is called operations research, (OR) which generally connotes the application of quantitative techniques to problems that were formerly solvable only by guesswork and one's judgment. The tools of OR are largely mathematical, dealing particularly in probability, statistics, and matrix algebra. (Although Tech's Dr. Davidson emphasizes that many OR problems are best attacked with simple arithmetic.)

"The growth of OR has had a lot to do with the increased demand for advanced degrees in I.E.," observes Dr. Davidson, "and there is no end to this growth in sight."

"Bobo and Cecil (Phillips) already speak German, and Bill is pretty fluent in Algebra." Nevertheless, it seems likely that Tom's overdrive will cause him to be the first student to complete the requirements of the new program.

The best scholar of the group

Lynwood Johnson is considered by his colleagues to be the best scholar of the lot. He came close to an all-A average while obtaining his bachelor's degree and was named as the "Outstanding Industrial Engineering Senior" by the Alpha Pi Mu Honorary Society, along with a number of other honors. But, like the other five, Lynwood is no bookworm. He was president of Kappa Alpha Fraternity, a member of the golf team, active in the Ramblin' Reck Club, and the Interfraternity Council, etc., while he was collecting those A's.

Lynwood became interested in graduate study during two years of work as a methods and standards engineer. "I didn't like the routine or the type of work that my undergraduate work qualified me for," he remembers, "and I had heard enough about operations research to make me want to know more. In fact, while working I realized how little I really did know." Tech was the only school he applied to—partly because he liked Atlanta and the South, but primarily because he knew and respected Tech's graduate I.E. faculty. When he was accepted and received the generous Callaway Fellowship (sponsored by Callaway Mills, LaGrange, Georgia), he and his wife lost little time in moving back to Atlanta.

While working on his master's degree, Lynwood decided that the forthcoming doctorate program would provide an excellent opportunity for him to continue his studies in OR. Soon after he finished his master's work he accepted a teaching position and began part-time course work toward the Ph.D.

"I want to do more creative, challenging work than I was able to do before. Maybe a research or consulting firm will offer the best opportunity for me, but I like teaching, too. It would probably be ideal to combine consulting and teaching, as some of the other professors are doing."

When asked about the possible lack of prestige attached to a new, unknown graduate program, Lynwood replied, "Most people won't know whether the program is old or new; I don't think it makes any difference. We have a fine faculty here, including a relatively large number of Ph.D.'s. The only special equipment an I.E. school needs is a computer, and Tech has several . . . I believe we can get about as good and broad an education here as anywhere else . . . and our abilities as engineers will stand on their own merit in industry."

Bill Hines is a tall, lanky Southern Gentleman from Germantown, Tennessee. He was a mechanical engineering major at the University of Tennessee before he transferred to Memphis State College, where he majored in mathematics and graduated with a B.S. in 1954. The next two years Bill spent in the Air Force, where he became acquainted with industrial engineering and operations research. The fields interested Bill enough to apply to Tech when he left the Air Force. He received a teaching assistantship in the School of Mathematics, where he has remained as an instructor in freshman math.

Bill has a particular interest in forecasting models, one of the tools of operations research. His master's thesis on the probability distributions of aircraft engine removals is considered a contribution to OR theory as well as a practical aid in aircraft maintenance. But he does not intend to specialize in one area, but rather to prepare himself generally in the field of OR.

A tutor for the athletes

Like Tom and Lynwood, Bill decided to begin the doctorate program soon after it was approved. His full-time teaching load allows him to take only six hours of course work each quarter, which places his degree at least three and a half years in the future. He supplemented his income for a while by tutoring athletes in mathematics. He allows, "I liked to help those boys, they try hard and they're a good bunch of boys. But it took a lot of time, and my schedule was pretty tight already."

Continued
Bill approves of the curriculum requirement of a minor in one of the behavioral sciences. "Any person in I.E. should have as broad a background as possible," he commented, "because I.E.'s must always work with people... the human element is more important in I.E. than in most engineering fields." Bill isn't sure yet which minor he will take.

The most-experienced candidate

Cecil Johnson is the "old man" of the group (its average age is 25 without him). At thirty-seven, Cecil is the only one bringing an extensive record of industrial experience into the doctoral program. Over a period of about twelve years Cecil has applied the knowledge gained from his three engineering degrees to a number of firms in both consulting and managerial positions.

Since 1955 he has been on the full-time teaching staff of the I.E. school, now holds the title of Assistant Professor, the highest he can maintain while studying for an advanced degree in the same school.

In 1957, when Cecil was finishing up his master's degree requirements he was used as one of the "model" Ph.D. candidates during the early proposals for the new program. He became interested then, and soon after the program was approved he applied to the Graduate Division for acceptance to formal candidacy.

In describing his plans, Cecil emphasizes that he is not specializing. "Since my first studies in general engineering, I've been interested in the over-all industrial problems, not just the electrical or mechanical phases. If you have to give it a title you may call my field of interest systems design, because I am interested in the design of efficient, workable industrial systems... this means a great deal of emphasis on the human element... my minor will be in sociology and group psychology."

On his reasons for setting out on a three- to four-year program for the Ph.D., Cecil reveals, "To me, this program is primarily a vehicle for my personal intellectual development. I don't need a doctorate for financial or prestige reasons... I have plenty of degrees now. The program as it stands has plenty of freedom in it, no particular encumbrances to keep me from pursuing the areas of greatest interest to me. It looks good for that reason especially."

A switch from M.E. to I.E.

Edward "Bobo" Davis is an athletic type with a knack for leadership and excellent scholastic ability. By the time he reached his senior year in 1956, Bobo had made Tau Beta Pi, ODK, president of ANAK, Head Cheerleader, editor of the Engineer, and a number of other honors, including the fellowship to Switzerland. In Zurich, he studied physics and German, becoming fluent in the latter.

Bobo wanted to do graduate work in order to extend his range of interest. "Further work in mechanical engineering," he felt, "was not what I wanted. But I wasn't really sure that I.E. was the right field until I came back to Tech and saw for myself, you might say. I had learned something about I.E. and OR from the journals, which I often read in the library of the Polytechnic in Zurich."

The one not committed

Bobo has a part-time assistantship in the M.E. department, and is carrying a heavy load of course work to make up for his lack of undergraduate I.E. courses. He is presently working toward a master's degree, which he feels he must get before he commits himself to the long doctoral program. Nevertheless he has begun some of the advanced math courses in order to have them out of the way "if and when I begin the Ph.D. program."

After his first course in OR, Bobo said that he was extremely enthusiastic about the possibilities in that field. "But I'm not sure," he said, "that I want to be restricted to a behavioral science for my minor. Maybe being in Europe and learning some German prejudiced me, but I place a lot of value on languages. I think I'd get more out of time spent in Russian classes, for instance, than in psychology or economics. If I could, I would like to go back to Europe and other parts of the world to do some work for a few years at least."
Cecil Phillips graduated from Tech with many of the same honors as his fraternity brothers, Tom and Bobo. He was a member of ODK, president of ANAK, president of ATO, and recipient of the WSF Zurich fellowship. But editing the Engineer was such an intriguing job for Cecil that he became interested in journalism as a possible career. A scholarship from General Electric’s Department of Advertising and Sales Promotion helped him along in this direction, and when he returned from Switzerland in 1956 he took his bride up to Schenectady for a try at the ad game.

"I enjoyed the work up there, even though my training assignment was in the unglamorous section that edited technical instruction books," Cecil relates, "but it was too enjoyable, too easy. It lacked the professional aspects I wanted." Cecil discovered OR through, quaintly enough, an article in the Engineer, to which he subscribed just out of "nostalgic interest in the old mag." OR looked like what he had been waiting for, and by last summer he was setting up homestead with his wife and son in Atlanta. To pay his way, Cecil remained in the field of journalism and publicity, obtaining a position as Assistant Head in Tech’s Office of Publications.

A change of plans

Cecil first planned to take the usual route through the master’s thesis to the Ph.D. But the time and cost of the half-year of thesis work, he learned, could be avoided if the student could satisfactorily demonstrate his ability. "So I set out with the idea of working directly toward the Ph.D.," he explains. "I began by taking the toughest courses first, the mathematical statistics and probability theory. But things have sure changed in the four years since I took my last math courses. I got rusty while the Math Department’s standards went up ... So far I’ve sweated out the first couple of courses in the series, but any quarter now I may be forced to slow down the pace . . ."

Teaching in the future

Cecil does not plan to concentrate on OR, but intends to include a lot of OR subject matter in a broad program aimed at preparing him for industrial engineering work abroad.

"I’ll take a lot of economics and probably another language . . . yes, I’d like to teach too, but I’d prefer to save that until I come back to the States, say after a dozen years or so with a consulting firm or a government assistance agency."
Many of Them Have Developed Profitable Sidelines

TV AND RADIO DISC JOCKEY

Sophomore Owen Forrester (IM) is already firmly entrenched in the broadcasting field in Atlanta. He has a weekly hour-long Dance Party show on Atlanta TV Station WLW-A (see below) as well as a light classics and jazz show, five days a week, on WABE, the Atlanta educational radio station. Forrester got into radio and TV as a vice president of Junior Achievement while he was an Atlanta high school student. He still works with junior achievement as an advisor.

Forrester believes the Rock-and-Roll fad, that sustains his TV show, will play out in another year. But he looks for a future in radio or TV after he graduates and serves his four years in the Navy.

A N AMAZINGLY high percentage of Georgia Tech students work part-time while they pursue their education. Over 1100 Tech students are taking the Co-operative Plan (alternate between school three months and work three months). And an even larger number are working at jobs that require anywhere from an hour or two a week to a full 40-hour week to help pay for their education.

Dean of Students George Griffin maintains, in his office, a part-time employment job listing to help the students find jobs. The jobs range from selling door-to-door to drafting work in engineering offices and from stuffing envelopes to cat-sitting. The cat-sitting job (taking care of seven cats for a week) stayed on Dean Griffin’s list for six weeks early this year and was never filled. But most of the jobs worth having are grabbed within a day or two of posting.

Many of the students find employment right on the Tech campus. The Engineering Experiment Station employs over 100 undergraduate students (in jobs ranging from mailboy to research assistant) during the course of a year. Out of these jobs, the students receive financial assistance as well as (if they are lucky) experience that will help them in their career fields.
YOUNG MAN IN A DARKROOM

Dothan, Alabama native Grey Hodges has been in photography for eight years. For the past year he has been supplementing his income as well as furthering his photographic career by working as a darkroom technician for Professional Processing Laboratories of Atlanta, a firm run by Alumnus photographer Bill Diehl. This work along with his free-lance photography for various Tech publications now pays for about 40% of his educational expenses. In addition, Hodges recommends free-lance photography because it's a very nice way to meet pretty girls. It's also an expensive hobby—Hodges has $3000 tied up in his cameras at the present.

This year, Hodges switched from a Physics major to I.M. because it should help him more in his chosen career field, photojournalism. A student leader, Hodges is president of Pi Delta Epsilon, the honorary journalism fraternity and associate editor of The Rambler.

COFFEE SHOP FOLK SINGER

Electrical Engineering sophomore James C. Allan is a man of many talents. Two of these talents—folk singing and guitar playing—are now helping him work his way through Tech. Allan plays and sings two nights a week (Friday and Saturday) at The Golden Horn, Atlanta's newest coffee shop.

Allan, an Atlanta native, is one of three Tech undergraduates now taking Russian. He also speaks and reads French, German, Hebrew and English. His greatest ambition is to master "the toughest of these languages, English." Allan also writes poetry, dabbles in creative writing, is a ham radio operator, is a diver and swimmer, and runs on the Tech cross country team. He is now considering switching to a Physics major and continue on for his Ph.D. after completing his B.S. requirements.

The only fault Allan finds with his weekend job is that it messes up his dating. "Finding a girl that will go out on a date at 2:00 A.M. is mighty difficult," says Allan.
The “Old Pro” Ed Danforth takes a flyer and predicts a better year for THE 1959 JACKETS

Fifteen or more bright eyed yearlings will gallop out for Bobby Dodd’s spring football practice to start an argument with the twenty-five lettered hands for jobs on the 1959 Yellow Jacket force. No one recalls when so many young gentlemen of the Freshmen division were rated serious challengers for Varsity berths.

“We are looking for more competition this spring than in any recent year for spots on our first 22” Bobby Dodd says, and the other coaches echo the idea, rubbing their hands eagerly.

To say that The Flats brass is anxious to start work on the new model is an understatement. After a run of dizzy good fortune that sent them to six successive bowl victories, the Yellow Jackets slipped to 4-4-2 and 5-4-1. Now, the Engineers had not had a losing season since they went 5-6-0 in 1950, but the two most recent campaigns have looked bad in comparison with the brilliant six year span. Those of a certain mentality feared, out loud, that the skid was a trend. That’s why The Flats family is so keen to take off March 31 and work up to an impressive T-Day game May 1. Players are just as eager as coaches to resume hitting solid licks again and forget the recent past.

The chilling fact that the 1958 team was still in the bowl picture when in late November they lost to Alabama and Georgia obscured the fact that the team played some fine football along the way. Beating Tennessee, Duke and Clemson and smudging unbeaten Auburn with a tie were high spots.

Once again, the problem is to fashion a more rugged line especially at the tackles and develop depth at center behind Captain Maxie Baughan. It may not be taking too long a step to say that the backfield picture is in focus what with survivors from 1958 and the talented lads coming up from the Freshman squad. Ray Graves thinks his defensive line will be tougher and will be able to open up better on offense, but in several games the opposition will outweigh the Engineers and may be a little more violent by nature. That may account for the battle plans now on the board to open up the attack with spreads and throw the ball oftener and farther. It was not just a social visit that several coaches paid to the University of Iowa where Forest Evashevski has developed a lot of potent stuff off elaborate “Winged-T” spreads. The Engineers squeezed six bowl games out of a good kicking game, an alert deep pass defense and a minimum of touchdowns. Times . . . and football . . . have changed.

Fourteen letter winners from last year are scheduled to graduate and one other will not return. That leaves a hard core of 25 men who learned about life these last two years.

At left end are trustees Rudolph, Murphy and Beasley. Burch, the king kicker, and Carter are back at right end. Experienced tackle help are Mason, Deese and Shaw. There is some uncertainty whether the first named pair will return for another year. Nutting was held out last year after an injury. He’s a big boy they can use at tackle.

The elders at right guard are Reed and Pilgrim, definitely adequate and at left guard is McKinney. Maxie Baughan is almost alone at center since the return of Cammack is uncertain.

Into that forward cadre will be worked six or seven handsome prospects from the undefeated Freshman squad. At the ends, Terry Evans, 195, Chattanoogan (a converted fullback); Jim Powell, 212, West Palm Beach, and John Ferguson, 178, Atlanta, must be tagged as prospects.

Also at the tackle posts which are thinly manned, help may come from Dave Steadman, 226, Kingsport; Bob Lincoln, 220, Marion, Va.; and Ed Grffin, 192, Moultrie. At guard a challenge comes from Harold Ericksen, 196, Biloxi; and Jim Paulk, 193, stocky lad from Ocilla. Backing for Baughan at center could develop from Raymond Holt, 191, Americus; and Carlton Waskey, 195, Roanoke, Va.

Step-ups from the B-team like Nicholl at tackle and McGaughey at center will be in the scrap. Foret, a transfer from Louisiana is shooting for a tackle assignment.

Solid defense, fashioned by Assistant Head Coach Ray Graves and his staff, will again be the identifying factor of the Tech team.

Backfield help is plentiful. Braselton, Howard and Tibbetts are going again at quarterback with the latter useful at fullback also. Saye is moving up again at quarter from the B-team. Alternate Captain Floyd Faucette, one of the best backs in the league, is returning at left half. With him are Graning, injured last year and Tommy Wells, the field goal and kickoff specialist. Right half finds James, Nix, and Logan at their old posts. Fullback has Fonts and Simerville again and along with them Taz Anderson, ineligible last year, who should give the job a lot of authority both on offense and defense.

The Freshman backfield brigade looked good last fall and earned the right to more than usual attention this trip. At quarterback are Stan Gann, 170, Atlanta star; Bobby MacKenzie, 185, Tampa; and John Flournoy, 178, Columbus. No one remembers when better looking young folks were available at the position here.

At left half asking for a chance are Harry Littleton, 175, Gadsden; Johnny Welch, 175, Waycross; and Johnny Tomlinson, 175, Nashville, Tenn. At right half are Billy Williamson, 156, Miami; and Kenny Thompson, 160, Kilgore, Tex.

The fullback newcomers are Lee Reid, 185, Jackson, Miss., and Larry Laffkowitz, 175, Atlanta.

These youngsters looked fine last fall in beating Tennessee 26-6, Clemson 14-6, South Carolina 31-6 and Georgia 20-0.

Bobby Dodd says spring work will be devoted to fundamentals to determine their potential. Whether they will be divided into offensive and defensive teams will not be determined until fall practice.
Charlie Tate, who coached the Freshman team last fall has been moved to the Varsity staff as backfield coach.

Carl Wise, backfield coach for two years, was hospitalized during the winter but he has recovered and will be Freshman coach. Dynamite Goodloe will assist with the freshmen.

Bob Cummings, B-team coach, has gone to Kentucky on Blanton Collier's staff. John Robert Bell has rejoined the staff after two years as head coach at Southwest Louisiana Institute.

Dodd prefers a comparatively late start for spring practice because it offers a better chance of good weather in which to pack 20 practice days into the 30-day period. The Southeastern was tough last year with most of the members improved. This time no weak sister is in sight.

Furthermore, the schedule is the same except for a slight revision. The Engineers have traded Florida State for Notre Dame. It all adds up to a challenge for the North Avenue School for Boys (and a few girls) that should keep them hustling.

THE 1959 SCHEDULES

Football

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*Homecoming game.

Baseball

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Golf

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Tennis

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March, 1959
TECH RECEIVES TWO GRANTS AMOUNTING TO $900,000

Georgia Tech was the recipient of $900,000 in grants from the National Science Foundation during a one-week period in February. The first of the grants a $750,000 one was earmarked for Georgia Tech's nuclear research reactor project. The second grant is to be used for "support of the Rich Electronic Computer Center and basic research requiring digital computation."

Tech's reactor project officially got underway in August of 1957, when former Governor Marvin Griffin allocated the first $2.5 million toward the design and construction of a nuclear facility that would be "more than just a teaching aid . . . but also big enough for commercial and industrial research of a high order." Thus the groundwork was laid for the installation of a facility that would provide important research service for industry, agriculture, public health and medicine in Georgia and the Southeast as well as help maintain Georgia Tech's reputation as a leading technological institution.

Tech President Edwin D. Harrison credits Mr. Frank Neely, Chairman of the Georgia Nuclear Advisory Commission, for his group's continuing efforts toward realization of the project's goals.

Georgia Tech's nuclear reactor and its associated research facilities represent the largest individual building project in the history of the school. Now in the final design stages, the project will be valued at over four million dollars when it is completed in late 1960. According to Dr. Harrison, it will be "as fine as any university-operated nuclear facility in the world."

"The reactor which Tech plans to build will be a tame and cool one rather than a hot type: a domesticated kind of reactor for campus use," according to Dr. Harrison. "We have investigated all types of reactors whose performance has been definitely demonstrated and have decided upon one generally similar to the one located at Argonne National Laboratories, Illinois and the one in the city of Cambridge, Massachusetts, operated by the Massachusetts Institute of Technology."

Tech's reactor designed by Dr. Walter H. Zinn, one of the world's leading reactor engineers and designers, will use as fuel thin plates of an alloy of uranium-235 and aluminum set in a large tank of heavy water which contains the neutrons and removes the heat produced in fission of uranium-235. It is generally agreed that such a reactor is one of the safest known. It will be housed in a gas-tight steel building.

"Research done with this reactor, as well as the facility itself, will be open to all properly qualified students and staff members at Georgia Tech. Reactor facilities will also be available to outside agencies sponsoring research at Tech," continued the Tech President.

"Representatives of the Atomic Energy Commission have reviewed preliminary plans for the reactor. Detailed specifications will be submitted to them for approval within the next six months," Dr. Harrison said.

The National Science Foundation funds will be used by Tech's Computer Center over a three-year period in four distinct areas: (1) assistance to the faculty and graduate students for scientific research projects requiring computer facilities, (2) development of an adequate computer program library to support the research efforts at Georgia Tech and in the southeastern region, (3) assistance for research activities designed to increase the capabilities of computed facilities, and (4) partial support of the personnel needed to operate the computers and associated facilities for research projects.

Tech's Rich Electronic Computer Center—the first and largest large-scale, high-speed, digital computation facility to be located at a southern university—was opened in December, 1955. It was established initially through special grants from the Rich Foundation of Atlanta, the Georgia Tech Research Institute, and the Georgia Tech Foundation, plus a State grant through the Board of Regents.

The new memory system will greatly extend this machine's capability for handling complex problems.

In the spring of 1956, an IBM 650 Data Processing Machine was added to the Computer Center facilities under the IBM educational contribution plan. During the past year, the Computer Center's two machines were constantly worked overtime because of the increased demand for computation facilities for industry, government, and Georgia Tech.

The Computer Center is presently installing a Datatron 220, one of the newest large-scale computers. This machine, made by the Burroughs Corporation, has a 5,000-word core memory system, plus four additional magnetic tape systems each with a 1,400,000 word capacity. This equipment will expand the Computer Center's capabilities to solve even larger and more complex problems.
'03 Fletcher W. Shackelford, Sr., EE., died suddenly December 8 while on visit to Florida. His home was Clarksville, Virginia.

Linton M. Solomon, Sr., former Macon, Georgia Water Commissioner, died February 1 at his home. He had been ill for several years. Prior to his election to the water commission position in 1943, he had been active in the engineering field. Mrs. Solomon lives at 1194 Forsyth Street, Macon, Georgia.

'08 Cherry L. Emerson, ME, EE, has been elected to life membership in the Georgia Engineering Society.

'09 Ed S. Harrison, CE, chief mechanical and hydraulic engineer for the Georgia Power Company in Atlanta, resigned that position January 1 to become vice president and chief engineer for Southern Services, Inc. in Birmingham, Alabama.

'10 Charles A. Collier, GE, was elected to life membership in the Georgia Engineering Society at the December board meeting.

'11 Van Holt Garrett, Sr., prominent Denver, Colorado real estate man, died suddenly February 12 at his home, 2750 East Cedar Avenue. Mr. Garrett was vice president and co-founder of Garrett-Bromfield and Company.

'20 James MacDonald was made executive vice president of Reid Haden Company with home offices in Baltimore, Maryland. He formerly was branch manager in Charlotte.

'21 Colonel Thomas D. House, CE, was recently honored for 30 years service to the Georgia State Highway Department.

'22 John E. Patton, Jr., EE, died January 21 in a Chattanooga, Tennessee hospital after several years illness. He retired from the coal business several years ago and was engaged in real estate at the time of his death.

T. F. Sanders, owner of the T. F. Sanders Company in Swainsboro, Georgia, died of a cerebral hemorrhage December 12, 1958.

'24 Edward C. Hammond, Com., has been installed as president of the Kiwanis Club of Atlanta.

'28 B. H. Boatner, EE, has been named president of the Westinghouse Electric Supply Company (WESC) in Pittsburgh. He has been with Westinghouse since graduating from Tech and was vice president and general manager of WESC since 1947.

'30 Russell Duval Bryan died suddenly February 2 while on a business trip. He was a long-time supporter of sports in the Birmingham area. For the past several years he had operated Bryan Engineering Company in Oneonta, Alabama.

'35 R. S. Albright, ME, has been made assistant chief mechanical engineer at the Georgia Power Company in Atlanta. Arthur F. Perkins, EE, has been named manager of International Paper Company's Mobile, Alabama mill. He has been with the company since 1935.

Charles G. Swinford, Com., of 4101 Rick-enbacker Drive, N.E., Atlanta, died January 22. He was a representative for the W. D. Alexander Company in Atlanta.

'37 Born to: Mr. and Mrs. Richard A. Beard, Jr., GS, a son, Robert Roane, January 22. Mr. Beard is associated with Ward Wight Realty Company. Their home address is 845 Loridan Circle, N.E., Atlanta.

Roger M. Jacobs is now associated with the investment banking firm of Wyatt, Neal & Waggoner in Atlanta.

'38 Thomas L. Hill, IM, of 2032 West Cedar Lane, S.W., Atlanta, died February 10 at his office of a heart attack. He was sales representative in charge of Atlanta operations for the construction materials department of General Electric Company.

Benjamin H. Spurlock, Jr., ME, professor of mechanical engineering at the University of Colorado, had the rank of fellow conferred upon him during the annual meeting of the American Society of Heating and Air Conditioning Engineers in Philadelphia in January.

'39 R. Glenn Cushing, ME, has been elected treasurer of the Georgia Engineering Society.

H. B. Hutchins, EE, has been named assistant chief electrical engineer at the Georgia Power Company in Atlanta.

The Greater Atlanta Georgia Tech Club sponsored a special Randall-Blemker Night at Alexander Memorial on February 23. Over 3,800 fans turned out to see Tech's two little guards play their last home game and receive their 1,000-point trophies. Shown left to right after the big night are Athletic Director Bobby Dodd, Blemker, Randall, Coach Whack Hyder and Atlanta Club Vice President Dan Kyker. The two guards led Tech to a 17-9 season and a fourth-place finish in the SEC.
John Baum Is New Foundation Head

John P. Baum, '24, vice president and director of J. P. Stevens Co., Milledgeville, was elected president of the Georgia Tech Foundation at the annual meeting on January 27. William C. Wardlaw, Jr., '28, was re-elected vice president, and Henry W. Grady, '18, was re-elected treasurer. Baum succeeds Ivan Allen, Jr., who led the Foundation for two years.

Henry Telford, Jr., ME, of Shelbyville, Tennessee, was elected president of the Southeastern Poultry Association at their annual meeting in Atlanta in January.

Charles E. Person, ME, has been named manager of the Birmingham district for Otis Elevator Company.

Charles H. Finch, ME, has been appointed Atlanta district manager for the Yarnall-Waring Company.

Born to: Mr. and Mrs. Gordon C. Hicks, ChE, a son, Harvey Willoughby, January 22. Their home address is 3307 19th Avenue, Sheffield, Alabama.

Engaged: Edgar McCarthy Crenshaw, Arch, to Miss Ann Wise. The wedding will take place April 4. Mr. Crenshaw is associated with Kemp, Bunch and Jackson, Atlanta architects.

Born to: Mr. and Mrs. Ed L. Anderson, Jr., IE, a son, Edwin Glenn, last March.

Married: Justin Gardner Coburn, IM, to Miss Martha Dukes Ryan February 7 in Atlanta. Mr. Coburn is president of Coburn and Company, publishers representatives. Their address is 198 South Colonial Homes Circle, N.W., Atlanta.

Raymond A. Jones, Jr., CE, has been elected vice president and assistant secretary of the J. A. Jones Company, Atlanta construction firm.

Major Henry J. Schroeder, EE, has graduated from the Armed Forces Staff College in Norfolk, Virginia.

Frederick Branch, Arch, has formed a partnership with Louis Swayze, Arch '50, for the practice of architecture. The company, Branch and Swayze, is located in the Forsyth Building in Atlanta.

Born to: Mr. and Mrs. Charles K. "Pete" Cross, IM, a daughter, Patricia, December 8. Their address is Caixa Postal 943, Campinas, Sao Paulo, Brazil, S. A.

Engaged: Lt. John B. Bennett, USAFR, Arch, to Miss Evalyn Manley. The wedding is scheduled for April 11. Lt. Bennett is stationed at Forbes Air Force Base, Kansas.

J. Wylly Keck, Jr., ME, has announced that their new firm name is Keck Engineering Associated. The firm is located in the new Keck Building, 1085 Alco Street, N.E., Atlanta.

Engaged: Marshall J. Wellborn, Jr., ME, to Miss Marguerite Geer. The wedding will take place April 25. Mr. Wellborn is associated with the First National Bank in Atlanta.

Engaged: Lee Neal Smith, Jr., IM, to Miss Eva Davis. The wedding is scheduled for March 28. Mr. Smith is with Westinghouse Electric in Atlanta.

Engaged: Joseph Donald Johnson, IE, to Miss Elaine Ryals. The wed-

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Tech Alumnus
ding will take place March 27. Mr. Johnson is with Kurt Salmon Associates, Inc. in Shreveport, La.

Engaged: James Lee Peed, CE, to Miss Jeane Johnson. The wedding will take place June 14. Mr. Peed is an associate aircraft engineer at Lockheed in Marietta, Georgia.

Engaged: Frederick Rulfs Keith, Jr., IM, to Miss Judith Troy. The wedding will take place August 22.

Born to: Ensign and Mrs. Robert B. Kimmel, IM, a son, Robert Burks, September 8. Their address is 731-B Carolina Avenue, Norfolk, Virginia.

Married: Don Edward Miller, IM, to Miss Beverly Mullinax, February 14. Mr. Miller is with the Sinclair Refining Company in Atlanta.

Married: Henry Sanders Rowland, III, IE, to Miss Susan DeSantis. Mr. Rowland will receive his masters degree from Harvard School of Business in May. Their address is 260 Forest Avenue, Cohasset, Massachusetts.

'58 Engaged: Clarence B. Bauknight, IM, to Miss Harriet League. The wedding will take place June 27. Mr. Bauknight is with the Poinsett Lumber and Manufacturing Company in Pickens, South Carolina.


Born to: Mr. and Mrs. Cecil B. Day, IM, a son, Clinton Mitchell, January 28.

Married: Lt. William Irvine Fox, Jr., USAR, CE, to Miss Jone McKenney. The wedding took place in February. Lt. Fox is stationed at Fort Belvoir, Virginia.

Lt. James W. McCook, III, IM, has completed a course at The Infantry School at Fort Benning, Georgia.

Peter P. Saccone, IE, is product sales assistant for the Safety Relief Valve Division of Manning, Maxwell and Moore, Inc. in Tulsa, Oklahoma. His home address is 5223 East 12th Street, Apartment 410, Tulsa.

Engaged: Marline B. Shiver, ME, to Miss Avis Lee Inman. The wedding will take place April 4. Mr. Shiver is employed by the T. E. Stivers Company in Decatur, Georgia.

Lt. Edward R. Shoemaker, ChE, has graduated from the U. S. Army Ordnance Guided Missile School at Redstone Arsenal, Alabama.

'59 Lawrence H. Alkofer, IE, is a tool designer for Boeing Airplane Company in Seattle, Washington. His address is 128 East 110th Street, Seattle 55, Washington.

Engaged: Carl W. Blomquist, Jr., IM, to Miss Sharlene Burns.

Engaged: George Everett Youngblood, IM, to Miss Sandra Chalkley. The wedding is scheduled for April 11. Mr. Youngblood is with Retail Credit in Savannah, Georgia.
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