



THE SCHOOL OF TECHNOLOGY

TECH NEWS

CITY COLLEGE OF NEW YORK

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WEDNESDAY, MARCH 15, 1961

222

BY STUDENT FEES

Vector Circular Rule; Wave Analysis Given

On March 2nd, the AIEE-IRE presented two students of the College, speaking on various papers that they wrote.

The first paper was presented by Dave Tutelman, a writer for TECH NEWS, who spoke on the graphical methods of solving vector equations. Dave showed the assembled students and teachers a vector circular rule which he had devised and built at his home. Noting that the rule was very accurate even though built at home he said that if industrial methods were used in the construction of the rule high accuracies could be easily obtained.

The second speaker was Peter Hoch who spoke on "Using Frequency Domain Techniques to Compensate Video Amplifiers." Pete having worked on the subject for a long time and was well qualified to write on the subject. After talking of the problems inherent in trying to compensate anything by time domain techniques he showed how the compensation was easily performed in the frequency domain. The technique is used extensively in the field of compensating servomechanisms.

M.E. Expert To Speak

The ASME will present on Friday, March 17th, Dr. Kurt Hain from Braunschweig, Germany. Dr. Hain who is an expert authority on the synthesis of mechanisms will speak on "Equivalent Mechanisms" in a series of three lectures. The lectures will be held in room H306 at 11 and 12, and in G209 at 2 P.M.

Tomorrow the ME's will present Mr. E. J. Sharkey of the

Getting off to a slow start because of administrative problems at the beginning of the recent term the college's chapter of the American Institute of Electrical Engineers and Institute of Radio Engineers presented a speaker from Polarad Electronics Corporation of Long Island City, speaking on "Microwave equipment and analysis techniques."

He first spoke of the various microwave equipment used in communication transmission and reception stations and then spent the rest of the time talking of the various analysis techniques which are presently being applied to the theory of microwave equipment.

He showed that it is possible to reduce the field quantities present on the microwave systems to lumped parameters in the audio range. This he said simplifies the analysis of the very complex systems in microwave communications.

Tomorrow the organization will present Mr. David Chantry of the International Business Machine Corporation who will speak in Shepard 126 at 12:30 P.M. on "Digital Computer Techniques."

On March 23 the organization will have a speaker from Acoustic Research who will speak on High Fidelity and Stereophonic equipment, and on March 30 Mr. Davis of the Electrical Engineering Department will speak on law and how it applies to engineers with respect to contracts and legal negotiations that the engineering must know.

General Electric Corporation who will speak on the "Design of Modern Gas and Steam Turbines." Mr. Sharkey is a district service specialist for General Electric.

Chapter Cites Creative Contest

In the interest of promoting a spirit of liberal culture in the engineering school, CCNY chapter of TAU BETA PI, the National Engineering Honor Society, is sponsoring a "Creative Writing Contest." The contest is open to all undergraduate students with the exception of TAU BETA PI members in the School of Technology.

It is advisable that the essays should be approximately 250-1000 words in length, in prose, and of a non-technical nature.

The winner of the essay will receive a prize of \$20, a certificate and publication in Vector — if appropriate.

All entries for this contest are to be received before April 15, 1961. The essays may be de-

posited in the envelope provided for this purpose on the TAU BETA PI bulletin board near Tech Crossroads in Goethals Hall.

All participants will be acknowledged and the winner will be notified through the mail and the TAU BETA PI bulletin board as to the time and place of the award presentation.

The essays will be judged by the TAU BETA PI Creative Writing Committee chaired by Luigi Santalesa, winner of the Best Pledge Essay Award given by TAU BETA PI. In addition to the Creative Writing Committee members the judging panel will consist of the TAU BETA PI Executive Board members led by TAU BETA PI President Joseph Di Stefano III.

THE MAXWELL HENRY MEMORIAL AWARD

An award in the sum of \$25 in memory of Professor Maxwell Henry is made each June to a member of the graduating class of the School of Technology for outstanding service to the College. The award is made possible by friends of Professor Henry and alumni of the School.

E-Day Ball To Feature Faculty Singer

This year, as every year at City College, E Day will be culminated by a dance that will be held at Finley Student Center.

The highlight of this annual occasion will be the coronation of Miss E Day. Each technical organization on campus will send one photograph to the TECH NEWS office of a prospective Miss E Day. From these pictures, all but five will be eliminated. One of the finalists will be chosen at the ball.



Can you match this?
Miss E-Day, 1960

Entertainment will be supplied by a five piece band. A guest performer, Demos Eitzer of the Electrical Engineering Department, will appear again and by popular demand to sing about the troubles of our tech students.

E Day is on Saturday, April 15th and the dance takes place that evening in the Grand Ballroom. Tickets are four dollars, and they will be sold across from Knittle Lounge and at all technical organizations. The four dollars admission fee will also entitle each couple to free refreshments. Many of the faculty will also be present.

Graduates' Reminder

The final date for payments for Microcosm '61 will be March 24. The total cost of the book, \$9.00, must be paid by then. Failure to do so may result in forfeiture of the deposit.

Anniversary Arrives 25 Years At CCNY

When Vector went on sale last Monday it presented one of the finest issues that has ever come from that magazine. It is a tribute to the editorial board of Vector, headed by Alvin Kustanowitz as editor, that they should place such a fine issue into the hands of the students here at City College.

The article entitled "The Future of Power Generation" by Alvin Kustanowitz and Steve Shepard (also a past Editor of Vector) covers the field of future power generation quite well. The various topics such

as Thermoelectricity, with a comparison of metallic conductors and semiconductor materials give the student something which is not taught in the curriculum and explained a difficult topic quite simply. The other topics such as Thermionic Conversion, Metahydromatics, were adequately covered with the same bearing. The latter part of their story covering the various types of fuel cells allows the student to learn of this new and promising type of power generation.

Mike Goldman's "Biological Problems in Space Flight," was found to be perfect in content and interest. By exploring a small group of problems in space medicine, Mike was able to go into them quite thoroughly and show the reader their problems and solutions that were to be found. His main topic was the effects of weightlessness and extreme gravity. By showing how normal daily activities such as drinking are effected in space travel he is able to stress the extreme problems which must be answered.

"Atomic Waste Disposal," written by Fred Joubert, brought up an atomic age problem, that is how to get rid of atomic wastes without endangering communities or the scientists. After showing how the strength of radio activity decayed with time he goes on to show the various ways in which the radioactive waste materials are disposed of. He cites the three main studies which must be made before a site is chosen for waste disposal.

Marvin Feldman's "Tomorrow's Plastic — Today" is written in a very technical jargon but still leads its way to be easily perused.

The article on technical writing by William L. Moore showed the fields of the technical writer as compared with that of engineering.

Going off its usual beaten track Vector profiles the faculty but not of the Tech School but the Chairman of the Physics, Mathematics, Arts and Graphic and Chemistry departments.

TIIC is starting to do things for the student body. In addition to the talk by Professor Kent TIIC is sponsoring a dance on Friday, March 24th in the Student Center. Admission is free and refreshments will be served. Bring your best girl or come alooking for that "Ed" major of your dreams.

This Friday, March 17th, Tech Executive Tea will be held in Finley 438 between the hours of 4:00 and 6:00. This tea is being sponsored by TIIC and hostessed by S.W.E. The executive committees of all the member organizations are invited. The purpose of the tea is to talk over the various problems confronting the Tech organizations and to discuss the furtherance of extra-curricular activities. It is essential that all the Tech student leaders attend.

Who is the Rembrant of the School of Technology? Who is the Queen of the School of Technology? Tau Beta Pi and the "E" Day Ball committee are busy at work setting up the contests to answer these questions on the 15th of April. Better wipe the dust off the easel and get out the little black book; time's a-gettin' short.

THE ELIZA FORD MEMORIAL PRIZE

A friend of the College offers "in memory of a faithful and efficient Public School Principal in Brooklyn, Miss Eliza Ford," a prize of \$100 to be awarded annually to the most deserving student in the School of Technology, preference being given to a resident of Brooklyn.

GALA S.G. DANCE
Sponsored by TIIC
Friday, March 24



TECH NEWS

EDITORIAL BOARD

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Editorial Policy of TECH NEWS is determined by a majority vote of the Editorial Board

Toil And Trouble

Workmen have toiled for practically two months on the third floor of Finley. The doors were taken off the offices of TECH NEWS, 335 Finley and O.P., 336 Finley.

One can only wonder why all the work on the Finley Center is not completed during the summer months or intersession when the majority of students are away from the College.

The office of 335 Finley, with all its possessions, has been open to the public. Last year, members of organizations

were berated when a student was found to have a non-requisitioned key on his person. Now they have left our door wide open. In fact, now, we have no door. Many items of value have been taken from the office.

We as students can only sit and wonder what will be "relocated" next? Maybe the teachers.

I Want A Girl . . .

It is highly regrettable that the letters announcing the rules of the Miss E-Day contest have again been sent out without specifying that the contestants be City College co-eds. It is alarming to think that our engineers are in such a poor condition that they cannot see the pretty girls that visit North Campus. There are several thousand girls registered at City College; surely five finalists can be chosen out of so many possibilities. TECH NEWS shudders at the possibility of having a headline read: **H.S. Senior Chosen City College E-Day Queen or Podunk Co-ed Is C.C.N.Y.'s Miss E-Day.** Such a headline would be as insulting to City's females as it would be to City's males.

We call upon the school's tech organizations to sponsor City College co-eds for the Miss E-Day contest. We also call upon City College young women to make sure they are not replaced by ringers in an official function.

E-Day Ball Queen contest was established before girls came to City College. But the girls are here, and here to stay. Let's give them the recognition they so richly deserve.

Prize For HKN Doings?

Eta Kappa Nu is determined to win the outstanding chapter award of the Nation. This award is given annually in June. The Electrical Engineering Honor Society at the College has done very well in the past, having won First Prize in 1950 and many Honorable Mentions since its founding in 1946. Let's take a look at some of the activities that these students perform. Under the chairmanship of Sol Gems we have the Tutoring and Slide Rule Committee. This term a list was obtained of students who were on probation as of last term. Let's see how many of them are still in the College. All of them are still in the College. The E-Day contest is a very important activity for tutoring. Last term the members of HKN offered assistance to all students, but the group was too large to give adequate assistance to everyone. This committee also will hold a slide rule contest for students taking EE104. A few hours of lecturing will be given on the use of the slide rule for those students asking for it. This will take place during the week preceding the exam.

Another activity of the Beta Pi chapter is the Outstanding Sophomore Award. Luigi Sarni and cake sales heads this committee whose function is to determine the Outstanding Sophomore in the E.E. class. The award (usually an excellent reference book) is presented to the winner by the Chairman of the E.E. Department at the Induction Dinner. The winner of the last year's award was Michael Morgenstern.

One of the newest activities has received much favorable comment. It takes place on Wednesday at the Harlan Lanes. If any other societies would like to join us they are welcome. John Benton who likes cats, Science Fiction, and bowling leads the group with a 170 overage. Bowling at HKN is brand new and it's sure to stay around for a long time.

Another new idea is the Intersociety-Faculty picnic and outing to be held on Sunday, April 16. This activity was decided upon at a meeting of the President of Chi Epsilon, Pi Tau Sigma, Eta Kappa Nu, and Tau Beta Pi.

Other activities of HKN are their E-Day exhibit on Microwave techniques (Under Tom Picunko), Senior Photos (Warren Wolff is head of this), cataloging with all the other honor societies (Under Herb Mintz), Faculty awards and the numerous pledge activities under the guidance of Pledgemaster Warren Wolff and Harry Heffer.

Getting back to the Outstanding Chapter Award Committee, perhaps we have a very hardworking group led by HKN's Vice President John Benton. It is their job to prepare a chapter report of the year's activities which is sent to national headquarters. It's a shame that thesis credit isn't given for this masterpiece.

This term Beta Pi has selected Professor Froelich as the recipient of their Faculty Award. This award is given to a member of the faculty who is not only an excellent instructor, but also possesses that extra something that students look for in a teacher.

By the way, a new member (Continued on Page 3)



"I DON'T THINK THERE'S ANY END TO THE OPPORTUNITY IN THIS BUSINESS"

When Gene Segin got his B.S. in Business Administration at the University of Illinois, he was in touch with 8 prospective employers.

Gene joined Illinois Bell Telephone Company because: "The people I talked to here made it very clear that I would not be shuffled into some narrow specialized job. I thought this job offered the greatest opportunity for broad experience."

On his first assignment Gene was sent to Springfield where he conducted courses in human relations for management people.

His next move was to a traffic operations job in Rock Island. On this assignment he was in charge of all personnel who are directly responsible for handling telephone calls in this heavily populated area. Here Gene earned a reputation for sound judgment and skill in working with people. He was promoted to Traffic Supervisor.

Today, Gene's chief responsibilities are in management training and development, and company-union relations. The latter includes contract bargaining and helping settle labor disputes.

How does Gene feel about his job? "It's a real challenge. I'm in some of the most vital and interesting work in the country." And about the future—"Well there aren't any pushover jobs around here. It's tough. But if a man has what it takes, I don't think there's any end to the opportunity in this business."

* * *

If you're looking for a job with no ceiling on it—a job where you're limited only by how much responsibility you can take and how well you can handle it—then you'll want to visit your Placement Office for literature and additional information on the Bell Companies.



"Our number one aim is to have in all management jobs the most vital, intelligent, positive and imaginative men we can possibly find."

Frederick R. Kappel, President
 American Telephone & Telegraph Co.



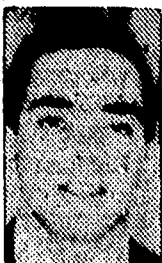
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TECH LIFE

By IRA REISS



For the past year the Finley Student Center Board of Managers has been sponsoring a series of "Discussion Hours" in the Student Center. This program can best be described by the letter that went to all instructors at the beginning of this semester:

February 9, 1961

Dear All Professors, Instructors, and Lecturers:

This semester, we are continuing a series of "Discussion Hours" in the Finley Student Center to which we invite you and your students.

We have made arrangements enabling you and your students to enjoy an hour or two of discussion and relaxation in an informal atmosphere in the Center during the course of the semester. To help promote this atmosphere, we will supply coffee, Luigi Sante and cake for each group you are committing. We hope in this way to determine help achieve a more personal relationship between students and faculty, and also to accentuate the facilities offered by the Center.

If you wish to participate in this program and to take advantage of the benefits which we hope it will afford both students and faculty, it will be necessary for you to contact us as soon as possible. Please include in your reply the size of the group or the Harle groups which you wish to bring, as well as the desired dates and times, whether day or evening. All replies may be addressed to: Board of Student Managers, John H. Finley Student Center. We are looking forward to hearing from you soon.

Sincerely yours,
Bernard Becker
Chairman
Board of Managers
Finley Student Center

This program is designed to aid in the improvement of Student Faculty relations. As of now no Tech instructor has participated in this program. The obvious question must now be asked of the faculty.

The Harvard Crimson publishes an annual booklet which praises the faculty members and the numerous courses for the benefit of the freshmen. This semester Alpha Phi Omega, the service fraternity, published a little book of the student body. Perhaps one of the engineering organizations will project this and publish a guide to the engineering faculty. I bet it would be the best seller of the season at CCNY.

Professor Kent of the Mechanical Engineering Department is agreed to deliver a talk on "Engineering in the Underdeveloped Nations." This is a rather timely topic considering the merging nations of Asia and Africa and the recent institution of the "Peace Corps" by President Kennedy. Professor Kent is well qualified to talk on the subject, having taught at the Indian Institute of Science, Bangalore. Under our govern-

ment's Technical Assistance Program. The Address is being sponsored by TIIC. Looking forward to seeing all of you there on April 20th.

USEFUL INFORMATION:

The price of lab folders is five cents at the 'non-profit' City College Bookstore, four cents at the profit making Beaver Bookshop. A printer on 125th street gave me the following estimate for the production of the folders: \$30 for the first thousand and \$25 for each additional thousand. Someone please tell me why our bookstore must mark up the folders nearly 100% and charge more than Beaver even though it has no overhead.

Attention graduating seniors,

add the following to your list of possible employers:

The Peace Corps
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Administration
Washington, D.C.

Pay — none. Working conditions — miserable. Draft exemption — none. Location — any underdeveloped nation. Hazards — many. REWARDS — SPIRITUALLY MULTITUDINOUS.

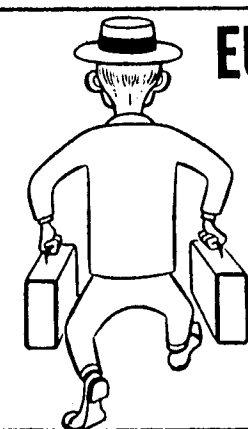
P.S. Since I wrote this column I have been informed that Professor Pistrang and two of his classes are going to participate in the "Discussion Hours" program.

Thank you Professor Pistrang for breaking the ice, I hope that many of your colleagues will follow.

HKN...

(Continued from Page 2)
the E.E. faculty is a brother of HKN and TBPI. I'm referring to Ted Bially, a great student and a fine person.

In closing we would like to welcome the new group of eligibles who will carry on the job of making the Beta Pi chapter of HKN a very worthwhile organization to belong to.



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March 7, 8, 1961

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You discharge your military obligation with the traditional rank, pay, privileges and responsibilities of an officer in the United States Army.

And later, when you're starting your climb

up the civilian ladder, advanced ROTC will still be paying off. Success in the executive areas of business and industry comes earlier and more substantially to the man who can lead. Few are born leaders; but leadership can be learned. And advanced ROTC is a great place to learn it.

Talk with the Professor of Military Science at your school. Learn more about advanced ROTC. Ask particularly about the ROTC course in Leadership, with its practical experience in command responsibilities.

Chem E's Review Last Term

During the past term, AICHE, according to outgoing president Lloyd Abrams, has attempted to give chemical engineering students information about the field they will someday enter. This was achieved by having representatives (who were themselves chemical engineers) from General Electric, Esso, and other firms speak to the students. AICHE also held a slide rule class which taught ChemE students how to use the slide rule.

On the social level, AICHE had its semi-annual smoker in which the students perform "take-off" skits on the faculty. The faculty, of course, was given ample time to retaliate.

Next term, AICHE will continue its present program. In the near future, the members hope to give computer classes which will enable those in the class to work the LGP 30 computer.

Presenting Presidents

By HERB JAVIER

This is the second of a series of articles portraying the presidents of the various technology societies. The second of the tech school leaders is Ricard Felder who is now the president of the American Institute of Chemical Engineers student chapter on campus.

"I believe that this organization should not concentrate all its time to the engineering profession, but it should be diversified in its lectures and activities." This view was expressed by Richard Felder, the president of the College chapter of the American Institute of Chemical Engineers.

Mr. Felder, who will graduate with the class of '62, is the top ChE and is ranked third in his total engineering class. Richard, before coming to New York, lived in Buffalo and later in Florida where he attended high school. It is his opinion that the secondary schools in Florida are twenty years behind our city school system in the level of teaching. One major objection

to the Florida system was the lack of special schools. In the New York City system there are schools such as Brooklyn Technical and Bronx Science High Schools.

Most of Mr. Felder's interests outside of City College lie in the game of chess, classical music and bowling. He is a member of a chess club where he often participates.

When he was asked what courses should be added or deducted from the present program for engineering students, he replied, without hesitation, that more courses in liberal arts should be added and Drafting 108 should be eliminated for ChE and EE students. Then he stated that if his idea was put into effect each student would be attending this institution for a period of seven years instead of 4½ to 5 years.

Besides being active in AICHE, Richard also belongs to Tau Beta Pi and Sigma Chi Epsilon. Upon graduation he wants to attend graduate school on a full time basis in order to

acquire his Masters Degree, and afterwards he hopes to work in the field of research and development. His future plan for AICHE is to broaden its format.

Referring to City College, Richard believes that it is im-

personal and there is a definite lack of college spirits, which in his opinion is due primarily to the de-emphasis on sports. He said that City College is one of the best engineering schools in the country.

SCIENTISTS AND ENGINEERS

CAMPUS
INTERVIEWS
ON
March 28

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MARCH 17

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at the **Atomics International Division**
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Atomics International Division is a leader, both here and abroad, in the development of nuclear reactors for power, research, and mobile systems.



Electronics & electro-mechanics at the **Autonetics Division**
(Downey, Calif.)

Autonetics Division carries out research, development, and manufacture of computers, data systems, inertial guidance, armament controls, flight controls. Builders of guidance systems for Polaris subs, Minuteman ICBM.



Naval aircraft & missiles at the **Columbus Division**
(Columbus, Ohio)

Columbus Division, a complete center of systems capability, produces Navy's Mach 2 A3J Vigilante, is developing new Army target missile, and building reflector for world's largest radio/telescope.



Design & development of manned weapon systems at the **Los Angeles Division**
(Los Angeles, Calif.)

Los Angeles Division is the home of next-generation manned weapon system—the Mach 3 B-70 Valkyrie—and America's first manned space vehicle, the X-15.



Propulsion systems and concepts at the **Rocketdyne Division**
(Canoga Park, Calif.)
(McGregor, Texas)
(Nashua, Mo.)

Rocketdyne Division, Free World's leading producer of large rocket engines, supplied main-stage boosters for 29 out of 32 successful U.S. satellites and space probes.

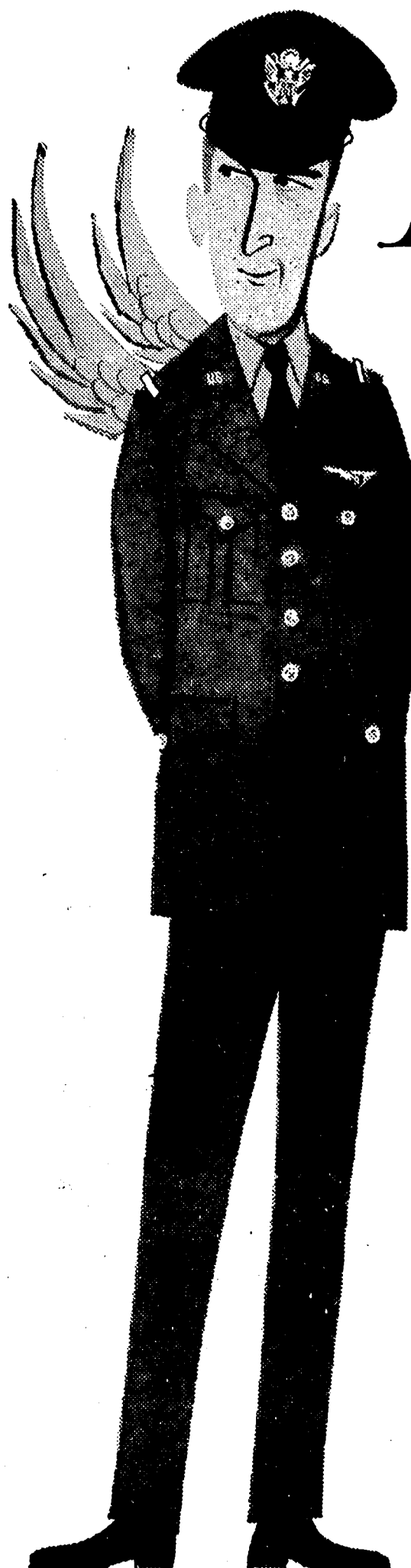


Space exploration & missiles at the **Space & Information Systems Division**
(Downey, Calif.)

SIS Division produces the GAM-77 Hound Dog missile and concentrates on manned and unmanned space exploration vehicles, anti-ICBM projects, and management of information processing systems.

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But right now, there is also a big future for college-trained Air Force officers on the ground. New and exciting technical jobs are opening up. Important administrative positions must be filled as World War II officers move into retirement.

How can you—a college student—become an Air Force officer? First, there's Air Force ROTC. Then for college graduates, men and women in certain fields, there is Officer Training School. The graduate of its three-month course wins a commission as a second lieutenant. Other ways are the Navigator Training program, and the Air Force Academy.

Some benefits that go with being an Air Force officer. Starting salary plus allowances compare with the average in equivalent civilian jobs. Then there's free medical and dental care, thirty-day vacation, the chance to win graduate degrees at Air Force expense, and liberal retirement provisions.

No, Air Force officers do not need wings to move up. There's plenty doing on the ground. Perhaps you could be one of these young executives in blue. Ask your local Air Force Recruiter. Or write, **Officer, Career Information, Dept. SC13, Box 7608, Washington 4, D.C.,** if you want further information about the navigator training or Officer Training School programs.

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