

ous.
g acad
anging
remain
tech sou
what mak
em becom
eering co
a trend
identity;
-alikes, a
aside a
convinci
eldom wa
THE TEC
d forgot
ate in s

enter of
enter is
there a
y engine
while ma
th Camp
any. Th
bably do
they shou
nd that
verse mak

ELECTION ISSUE

THE SCHOOL OF ENGINEERING AND ARCHITECTURE



THE NEWS

CITY COLLEGE OF NEW YORK

VOL. XVIII — No. 4

TUESDAY, APRIL 30, 1963

BY STUDENT FEES

Senior Class Commencement Meeting

The senior class will hold a commencement meeting on Tuesday, April 30th, 4 P.M., in the Finley Grand Ballroom (F101) to familiarize all seniors with procedures for commencement exercises to be held in June. Discussion at the meeting will be: distribution of tickets, ordering of caps and gowns, and election of Alumni Officers. Refreshments will be served.

Steinman To Be Dedicated May 11

By DAVE WELCHER

Saturday, May 11, marks the date of the official dedication of David Bernard Steinman Hall, City College's new engineering building, which opened in September, 1962. Dedication ceremonies coincide with Alumni Homecoming Day, with a full program of activities scheduled. The chairman of Dedication Day activities is Prof. Anton L. Steinhauser, Mechanical Engineering.

The program commences at 11 o'clock in the morning with tours of Steinman Hall for groups of distinguished guests. These include Engineering and non-Engineering alumni, educators from local engineering schools and members of various professional engineering organizations, such as the American Institute of Chemical Engineers (AIChE), the American Institute of Mechanical Engineers (AIME), the American Institute of Electrical and Electronic Engineers (AIEEE), etc. Guides for the tours will be members of the engineering honor societies on campus.

A series of technical films will be shown in the Steinman Hall lecture room beginning at 11 o'clock. The films and tours will end at one o'clock, when two luncheons will be held.

The Alumni Organization will sponsor a luncheon for its members as part of Alumni Homecoming Day. This will take place in the Shepard Hall cafeteria from one to two o'clock.

The President and the Engineering faculty will sponsor a luncheon for the other distinguished guests in the Shepard Hall faculty dining room.

Dedication ceremonies will begin at two o'clock in the Great Hall in Shepard Hall, presided over by President Buell G. Gallagher. The invocation will be delivered by Rabbi Arthur Zuckerman of City College's B'nei Brith Hillel Foundation.

Following the invocation, Dr. Ralph A. Morgen, Dean of Graduate Studies, Stevens Institute of Technology, and President of the Engineers' Council for Professional Development, will deliver an address entitled, "Engineering Education, Today and Tomorrow."

"Words of Remembrance" will be spoken by Mrs. David B.

Steinman, alumnus, faculty member and benefactor of the School of Engineering. Dr.

(Continued from Page 3)

Technology Council Endorses Candidates

Technology Council, at its meeting on Thursday, April 25th, considered the applications of several of the candidates for major Student Government offices for endorsement. Endorsed were candidates for President, Vice-President, and Treasurer, of Student Government.

Of the two candidates for President, it was felt that Ira Bloom was the more qualified of the two candidates. His ability and experience, Tech Council felt, make him the more preferred.

Tech Council endorsed Richard Kane for Vice-President. Mr. Kane, former Vice-President of the Council for the Student Activities Board, is an Electrical Engineering Student, and Tech Council felt that he would serve the College and the School of Engineering and Architecture better than his opponent.

Although both candidates for

REMINDERS . . .

1. All Upper Seniors who have not filed an application for graduation must do so immediately. Applications will be found at the Day Session office in the Administration Building.

2. All Upper Seniors who did not receive notification of their forthcoming graduation with a statement of their minimum credits and subjects that must be taken, must see Mrs. Daniels, in the Administration Building immediately.

3. All Upper Seniors who have substituted courses for those on their elective concentration card must file another concentration card immediately or their graduation will be denied.

Treasurer were adjudged well qualified, the Council felt that Robert Levine was the better candidate. Mr. Levine, by virtue of his longer experience at the College, was chosen to be endorsed.

Your Engineering Slate will again endorse candidates for minor Student Government office. Those candidates for Class Presidents and Vice Presidents and Student Council who are endorsed will have the YES symbol appearing next to their name on the ballot.

At its next meeting, on Thursday, May 2nd, Technology Council will hold a nominations meeting to nominate candidates for its Executive Board. All member organizations are urged to send representatives to this meeting, and to the Elections meeting, which will be held on Thursday, May 9th. All meetings held in room 121 Finley at 5:00 P.M. All students are invited to attend at any meeting.

— Geller

Don't Forget APO

The forgotten hero of the S.G. election is the Election Agency, consisting of the brothers of Alpha Phi Omega. The Agency, chaired by Barry Domber '64, is loaded down with the responsibility of running the election.

They must distribute and collect the nominating petitions and check the academic qualifications and standing of the candidates. They are in charge of making up the ballot and these unsung brothers are the people who count the paper votes. When the results are announced at the S.G. Dance Friday night it should be kept in mind that these students give much time and effort each term in supervising the election.

"There has never been a fixed election," said Mr. Domber. "All ballots are checked three times by three separate groups of people," he told TECH NEWS.

Barry, who is currently serving his third term as chairman of the Agency said that plans for use of a computer in the election fell through because of the prohibitive cost of renting one.

As the election draws to a close, the Election Agency, some 25 strong, prepares to carry out its most important job, the counting of the ballots. Domber has said that this year there will be no leaks so you'll have to wait until Friday night to find out who the new S.G. President is.

Small Vote Expected After 'Dull' Campaign

By KEN SANDLER

With elections underway, "this term's race has turned out to be the dulllest campaign in recent Student Government history," an old S.G. veteran observed.

Presidential hopefuls Ira Bloom and Bob Atkins have not exchanged verbal blows over any important issues. Bloom has based one of his platform's strong points on a pledge to keep fighting for restoration of the free tuition mandate. Atkins desires to solidify and improve student faculty academic relations.

Unlike last term's contests, the positions being contested have not attracted many candidates. Most observers feel that there will be a very small turnout at the polls. S. G. Elections Agency chairman Barry Domber takes exception to these predictions. He predicts "a fairly large turnout" of student voters.

Bloom's running mates on his Free Higher Education Slate include Dick Kane for V.P., Joel Cooper for Secretary and Danny Katkin for Treasurer.

Atkins' running mate on a ticket without a name is Ger-

rard Pessis for V.P.

Marty Kauffman is running as an independent candidate for V. P.

A third ticket has been formed by Robert Levine who is running for Treasurer on his University Party ticket.

So far election gimmicks have been restricted to giving away match books and pencils, all with campaign information on them.

Election results will be announced at the S. G. Election Dance to be held at the College Friday night.

Vector Previews

By JOE NADAN

The second issue of Vector, the School of Engineering and Architecture magazine, will be on sale on or about May 13. This issue, while not on the usual highly technical level, features articles that are easily readable and that are understandable by lower classmen. In addition, the usual

features round out what this reviewer feels will be one of the most successful issues of Vector to be offered in many terms.

Rotating Combustion Engines

"The gasoline engine has remained basically a four-stroke type with reciprocating parts for many years. The Rotating Combustion Engine, while it has the intake and scavenging capabilities of the four-stroke engine, has the power saving arrangement of only two rotating parts." This article, authored by Sheldon Katz, M.E. '63, and a past president of Pi Tau Sigma, describes the operation of the Wankel engine. In a four-stroke engine, a reciprocating revolving engine, there are enormous losses due to acceleration of auxiliary parts. Pistons must change direction as many as eight thousand times per minute. The accelerations involved are on the order of 100,000 inches per second. The Wankel engine is the most simple and successful of all "Rotating Combustion Engines" that overcomes these difficulties. Many diagrams help clarify the operation of this engine in this interesting lead article.

Home Tape Recording

"With the advent of home recording, many new and interesting effects can be achieved

with the tape recorder. This article will help the novice and experienced person alike with his home recorded tapes." This reviewer found this article fascinating because of its possible use right in the home. If one were to record a "piano piece" in the home several decisions on the part of the "sound engineer" have to be made. How close should the microphone be placed from the piano? What type of microphone (cardioid, omnidirectional, etc.) should be used? What is the effect of closing the drapes or windows? All these, and many more, enter into the quality of the recorded program. This article by Sheldon Fishman, B.S. '65, introduces the student to this new field of sound engineering. Its accompanying graphs and illustrations add to the enjoyment and usefulness of this well written article.

Heat Transfer in Freeze-Drying

"In conventional drying, the product is often shrunk in the process of drying, which affects the ease and degree of success of reconstitution. With freeze drying there is no shrinkage or damage to the product since the material being dried is not fluid at the temperatures involved."

(Continued on Page 3)



TECH NEWS

MANAGING BOARD

Editors	Managing Editor
Mel Pell	Valerie DeClemente
Ted Semegran	
News Editor	Copy Editor
Martin Miller	Wally Gottlieb
Features Editor	Tech Life Editor
Ken Sandler	Joe Nadan

ASSOCIATE BOARD

Associate Copy Editor	Advertising Manager
Dave Welcher	Richard Larca
Associate News Editor	Business Manager
Alan Grimaldi	Steve Greenhut
Associate Features Editor	Photo Editor
Richard Rosenfeld	Phillip Valenti
Circulation Manager	Art Editor
Elliot Wagner	Frank Martines
Faculty Advisor — Irwin Brownstein	

Printed by: Boro Printing Co.
216 W. 18 Street

222

President

TECH NEWS endorses Ira Bloom as the most suitable candidate for Student Government President. This decision, though carefully considered, was not difficult to make, for Mr. Bloom's opponent, Bob Atkins, though possessing a fine idealism is not realistic nor level-headed enough to fulfill the job of S.G. president adequately. Atkins' main fault is that he is an extremist where Bloom tends to take a sensible moderate position.

Ira Bloom, who heads the Free Higher Education Slate (FHES), qualifies for the office of president by having such qualities as experience, service and foresight in abundance. Having served as S.G. vice-president, treasurer, and secretary, he is obviously familiar with Council affairs and the running of S.G.

Another of Bloom's important qualifications in addition to his experience, is his ability to formulate and carry out definite programs of sensible action. Also, his views on the issues of the coming term are well thought out.

Bloom feels that although reorganization of the S.A.B. is not necessary, its aims should be more clearly defined. He believes the S.A.B. should program events for Finley Student Center, co-ordinate club activities and support Theathon. Atkins has stated that he would like to see the federation system of S.A.B. replaced by a committee system.

On the "students as students" clause of the S.G. constitution, Bloom takes a moderate stand. He feels that issues which directly concern City College students in areas of academic life (as opposed to political or social life) are fit for S.G. discussion. He does not rule out activities on the campuses which might have an effect on City College. Atkins, on the other hand, takes a broad interpretation as to what matters concern students. He stated that almost all aspects of society affect students and are therefore eligible for S.G. scrutiny. He stated that he would be willing to entertain a motion asking S.G. to condemn the McCarren Act.

It is clear that only Bloom can institute a series of programs beneficial to the student body of City College, while Atkins might in his uncontrolled idealism do irreparable damage to the name of City College.

Vice President

TECH NEWS endorses Dick Kane for the office of Vice-President. We feel Marty Kauffman has an impressive list of qualifications and is a hard worker, but that his leadership qualities are not enough for the position of Vice-President.

The failure of SAB is not due to Richard Kane but rather to its poor make-up. He is a man with much drive and originality. He has been active in both North and South campus activities.

His ideas for the future, if they can succeed, have a great deal of potential. He wants to work with the Republican Clubs in the city in order to try to influence opinion about tuition. Dick said that the Republicans will be in office when the real danger of tuition exists, and he feels they are the ones to talk to. He is for strict interpretation of the "students as students" clause in the SG constitution.

We endorse Dick Kane for his leadership ability, his creative thinking and his ability to demand the respect from his fellow student.

Dyna-Soar Cutback?

By EDWARD E. SPITERI

The fate of the Dyna-Soar (X-20) is a most important decision facing the present Administration. The Department of Defense-NASA agreement (which took place earlier this year) could lead to Air Force acquisition of Gemini.

As our nation pushes into areas such as an Aerospace Plane, our designers are being forced to extrapolate their data curves from X-1 and X-15 into the hypersonic areas. Mach 6 to Mach 25 data can only be obtained by using the X-20 project as a tool for exploration of this regime. It is also needed to explore the uses of a lifting body in the orbital regime.

Those who now are pushing Dyna-Soar as a weapon system are clashing with Mr. McNamara. He is committed to a policy of not funding costly weapons systems whose technology is unproven.

The United States launched Explorer 17 (s-6) into orbit April 2, aboard a Delta rocket from Cape Canaveral. The 406-lb. NASA, stainless steel satellite is gathering information on atmospheric structure and spacecraft orbital characteristics. Its planned orbit of 155 to 580 miles was missed by a factor of only 3%. NASA experts had estimated that if s-6 worked for just two days, it would double existing information on neutral particles in space. S-6 will also provide data on high altitude atmospheric drag.

The Soviet Union aimed Lunik 4 at the moon and failed. The launch proved that the Soviet moon program will continue to use the old Vostok booster. It is believed that the development of larger boosters has been rejected by Soviet leaders. Earth Docking seems to be the method by which they plan to reach the moon. This could be the reason a leading Soviet scientist predicted the United States will go to the moon first. A Dr. Welsh expressed belief that the USSR may attempt an actual space docking maneuver before the end of the year. NASA also thinks that a lady space pilot may ride a Vostok 6 rocket next month. Intense Soviet concentration on manned space flight can be expected. A two-man space-craft is believed to have already undergone a test flight as Cosmos 14.

Four of our probes, including Mariner 2, which passed by Venus, have had electrical failures due to overheating. Temperatures of 250 degree Centigrade caused transmitting failures aboard Mariner 2. The painting of Mariner 2 white would have prevented this overheating and allowed a temperature of 120 degrees C. It may not improve the appearance of the probes, but it will increase their lifetime.

Remember!

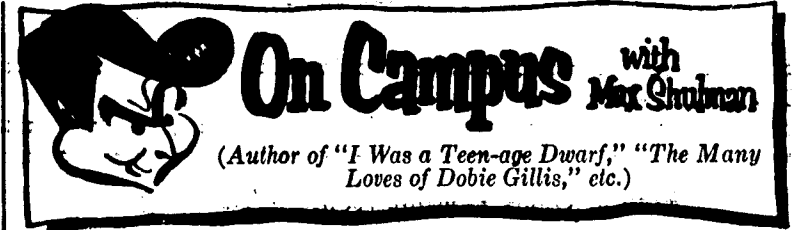
TECH

VOTES

COUNT

Vote YES

Tech students are urged to look for the symbol Y next to a candidate's name on the ballot. It means that that candidate has been endorsed by Tech Council. While TECH NEWS doesn't always agree with all the YES endorsements, they still represent a group of students who have been made aware of Tech problems and who will probably not overlook them if elected. The YES slate is the best way to make the engineers a political power without waging an intensive election campaign.

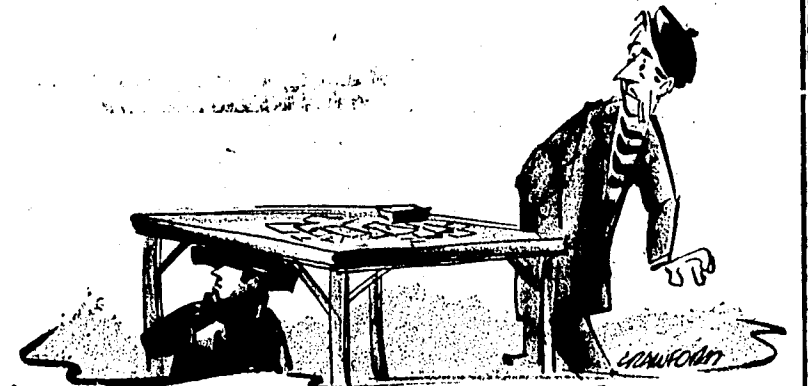


HOW TO SEE EUROPE FOR ONLY \$300 A DAY: NO. 2

Last week we discussed England, the first stop on the tour of Europe that every American college student is going to make this summer. Today we will take up your next stop—France, or the Pearl of the Pacific, as it is generally called.

To get from England to France, one greases one's body and swims the English Channel. Similarly, to get from France to Spain, one greases one's body and slides down the Pyrenees. And, of course, to get from France to Switzerland, one greases one's body and wriggles through the Simplon Tunnel. Thus, as you can see, the most important single item to take to Europe is a valise full of grease.

No, I am wrong. The most important thing to take to Europe is a valise full of Marlboro Cigarettes—or at least as many as



He introduced shortness to France

the customs regulations will allow. And if by chance you should run out of Marlboros in Europe, do not despair. That familiar red and white Marlboro package is as omnipresent in Europe as it is in all fifty of the United States. And it is the same superb cigarette you find at home—the same pure white filter, the same zesty, mellow blend of tobaccos preceding the filter. This gem of the tobaccoist's art, this prodigy of cigarette engineering, was achieved by Marlboro's well-known research team—Fred Softpack and Walter Fliptop—and I, for one, am grateful.

But I digress. We were speaking of France—or the Serpent of the Nile, as it is popularly termed.

Let us first briefly sum up the history of France. The nation was discovered in 1066 by Madame Guillotine. There followed a series of costly wars with Schleswig-Holstein, the Cleveland Indians, and Jean Jacques Rousseau. Stability finally came to this troubled land with the coronation of Marshal Foch, who married Lorraine Alsace and had three children: Flopsy, Mopsy, and Charlemagne. This later became known as the Petit Trianon. Marshal Foch—or the Boy Orator of the Platte, as he was affectionately called—was succeeded by Napoleon, who introduced shortness to France. Until Napoleon the French were the tallest nation in Europe. After Napoleon most Frenchmen were able to walk comfortably under card tables. This later became known as the Hunchback of Notre Dame.

Napoleon, after his defeat by Credit Mobilier, was exiled to Elba, where he made the famous statement, "Able was I ere I saw Elba." This sentence reads the same whether you spell it forward or backward. You can also spell Marlboro backward—Oroblam. Do not, however, try to smoke Marlboro backward because that undoes all the pleasure of the finest cigarette made.

After Napoleon's death the French people fell into a great fit of melancholy, known as the Louisiana Purchase. For over a century everyone sat around moping and refusing his food. This torpor was not lifted until Eiffel built his famous tower, which made everybody giggle so hard that today France is the gayest country in Europe.

Each night the colorful natives gather at sidewalk cafes and shout "Oo-la-la!" as Maurice Chevalier promenades down the Champs Elysees swinging his malacca cane. Then, tired but happy, everyone goes to the Louvre for bowls of onion soup.

The principal industry of France is cashing travellers checks. Well sir, I guess that's all you need to know about France. Next week we will visit the Land of the Midnight Sun—Spain.

© 1963 Max Shulman

Next week, every week, the best cigarette you can buy the whole world over is filter-tipped Marlboros—soft pack or Flip-Top box—you get a lot to like.

CANDIDATE QUALIFICATIONS

SG Exec President

Ira Bloom

Student Government Vice President. Student Government Treasurer. Student Government Secretary. Debating Society President. Finley Center Board Advisors (3 terms). Student Tuition Fee Committee. Chairman — Student Government Entertainment Committee. Member — Varsity Debating Team. Chairman — Student Government Fee Commission. Student Council Representative. House Council Representative. Student Government Fee Commission (3 terms). Student Council School Affairs Committee. Novice Debating Team. House Plan Leadership Training Conference (2 sessions). Member WTTES '64.

Bob Atkins

Student Council Member (two terms), School Affairs Committee, Civil Liberties Committee, Member of Student-Faculty Cafeteria Committee, Delegate, N. Y. Regional Conference, Member Newspaper Investigation Committee, Member Publicity Regulations Investigations Committee, Originator and Chairman of City College CORE (1½ years), Chairman, Ad Hoc Committee to Defeat Speaker Ban, Chairman Ad Hoc Committee Against McCarran Act, Vice-President and President of College Age Discussion Group of Technical Culture Society, Treasurer, New York Chapter of CORE.

Editorial

Treasurer

Both Bob Levine and Danny Katkin present impressive lists of qualifications for the position of Treasurer. Bob Levine has been active in Student Government and on campus affairs, but we feel that Danny Katkin is the more qualified of the two.

Katkin is a forceful person with many new ideas. He opposes a three man committee to review each federation and organization. The committee consisting of Treasurer, Vice-President and Secretary will meet with each group and try to offer suggestions and help. He feels one of the most important problems facing SG next term will be to regain the respect and dignity of the students. He said he was interested in a rebirth of leadership. We feel Danny is the one to do just this job.

Danny's experience on Fee Commission has given him the edge in this race. TECH NEWS urges the election of Danny Katkin.

Secretary

TECH NEWS endorses Joel Cooper for Secretary of Student Government. He left little doubt, in our minds, as to his cognizance of Student Government's problems and the way they should be met.

Although running on the same slate (FHES) as presidential candidate Ira Bloom, his views on the "students as students" clause are somewhat more liberal than his running mate's strict interpretation of the clause. The latter would dispel any ideas that Cooper is just a follower of the leadership.

With only one term on Student Council, his experience is limited. But potential of leadership is there. Since he is running unopposed, a "yes" next to his name is required for election.

Vice President

Richard Kane

Chairman of Student Activities Board, Spring 63. Vice Chairman of Student Activities Board, Fall 63. Member of Student Council, Spring 63. Vice President — SAB of Technology Council, Fall 62. Recording Secretary of Tech Council, Spring 62. Member of the Student Faculty Committee on The School of Technology, Fall 62.

Martin Kauffman

Class of '65 SG Representative, SG Academic Affairs Committee, SAB: Co-chairman Publicity Committee, Assistant Chairman Publicity Regulations Committee, Anti-Tuition Campaign: Co-ordinated Anti-Tuition Publicity, Anti-Tuition Committee Member, Bus Leader on SG Albany Trip, House Plan: Lower Class Managing Board Representative, House Plan Council Representative (2 terms), Social Functions Committee (2 terms), Student Faculty Relations Committee, Upperclass Recruitment Subcommittee, House Names Revisions Subcommittee, House Advisors Subcommittee, Carnival Publicity Committee, Council Programming Committee, Assistant SAB Delegate, Campus Staff (3 terms), Tech News Staff (1 term), Lighthouse Recreational Volunteer (2 yrs.) Vice-President Class of '65, Student Government Public Opinion and Research Bureau.

Girard Pessis

Student Council (2 teams). Acting Chairman SG Anti-Tuition Committee. SG Academic Affairs Committee. SG Internal Affairs Committee. Delegate, Regional NSA. Delegate, CUNY Executive. Swimming Team. AEPI.

Treasurer

Daniel Katkin

Executive Vice-President of Student Government (1 term). Member of Student Council (2 terms). Member of Student Government Fee Commission (3 terms). Co-Chairmen of the Public Affairs Forum (2 terms), Co-Chairman of the Student Government Committee on Faculty Advisors (2 terms). Member of the Student — Faculty Committee on the Cafeteria (1 term). Member of the Publicity Regulations Agency (1 term). Member of the Internal Affairs Committee (1 term). Former Novice and Varsity Debater. Member of the Young Democrats (2 terms). Chairman of the Membership Committee of Student Council (1 term) Co-Chairmen of the sub-committee on the Student Government Trip to Washington, D.C. Participated as an Advisor in the Student Government Freshman Orientation Program (1 term).

Robert Levine

Student Government: SG Outstanding Service Award; Student Council Representative (Class of '64), 3 terms; Associate Vice-President; Director, Public Opinion Research Bureau; Member, Student-Faculty Bookstore Committee; Member, SG Fee Commission; Member, Executive Committee; Member, SC School Affairs Committee; Member, SC Internal Affairs Committee; Member, SC Academic Affairs Committee; Chairman, Publicity Agency; Member, 3 terms, Publicity Regulations Agency; Chairman, Graduate Scholarships Fund Committee; Member, Elections Agency; Member, Community Service Agency; Delegate, Organizational Sessions of the New York Metropolitan Inter-Collegiate Activities Council (MIAC); Delegate, Barnard Regional Civil Rights Action Conference; Delegate-Observer, First Regional Meeting of Evening Session Personnel Association (ESPA); Member, Class of '64 Council; Chairman, Federation of Political and Social Action Clubs; Acting Delegate, Alternate Delegate, Student Activities Board; Boatride Committee; Survey Staff; International Night Program Coordinating Committee. Alpha Phi Omega: (National Service Fraternity) Secretary; Historian; Parliamentarian; Membership Committee; Student Directory Committee; UM-OC Fund Committee. House Plan: La Guardia '64. Railroad Club: Vice-President; Treasurer; Trip Director; Secretary; Editor, *Modern Railroader*; Director, Travel Information Service. Democratic Student Union: President; Executive Director; Editor, *The Sentinel*. Young Democrats.

Secretary

Joel Cooper

Student Council Representative — Class of '65. Student Government Fee Commission — 2 terms. Co-Chairman, Public Affairs Forum — 2 terms. Secretary of the Debating Society. Member of the Varsity and Novice Debating Teams — 3 terms. Co-Chairman, S.G. Educational Tour Sub-Committee. S. G. Ad Hoc Newspaper Investigation Committee. Student Government Publicity Regulations Agency. Member, Young Democratic Club.

NSA Delegates

Howard Simon

Chairman of the Metropolitan New York Region of the United States National Student Association (USNSA). Member to the 15th National Student Congress. NSA coordinator — Spring '63. Student Council Representative 1961-2. Internal Affairs Committee of Student Council. Delegate to the 1962 East Coast Regional Conference. Delegate to 1963 East Coast Regional Conference. First Alternate to the Student-Faculty Bookstore Committee '61-62.

Joel Biederman

Co-Chairman of the Student Government Committee on Student-Faculty Relations, 2 terms. Member of the N.S.A. Committee at the College, 1 term. Member of the Student Government Publicity Regulations Committee, 1 term. Member of the Student Government Public Affairs Forum, 2 terms.

Eric Eisenberg

Organizer of last term's only public N.S.A. Committee Program. Helped organize N.S.A. Committee Debate on the McCarran Act this term. Representative of Political and Social Action Federation to the S.A.B. Co-Framer of S.G. Ban the Ban petition. Organizer of this term's first open meeting of students and S.G. leader for the anti-tuition campaign. Organizer of 2 busloads of students for the anti-tuition trip to Albany.

John Zippert

Member of Student Council. Varsity Debate Team. Secretary of the Debating Society. SG School Affairs Committee. SG Anti-Tuition Committee. SG Library Liaison Committee. Public Opinion Research Bureau.

Carl Weitzman

Contribution, Journal of Social Studies. Varsity Debater. Debate Awards Harpur and Pace Debate Tournaments. Delegate Political and Social Action Groups Federation. S.A.B., president, Young Republican Club vice-president, treasurer, secretary.

Michael Engel

Student Council rep., class of '65 (2 terms); Chairman S.C. Academic Affairs Committee; delegate NSA Committee; delegate NSA East Coast Regional Conference and Metropolitan N.Y. Regional Conference; Secretary, treasurer, council rep., Dean '65; House Plan leadership trainee;

Steinman . .

(Continued from Page 1)

Joseph J. Klein, class of 1906, will speak of David B. Steinman.

The act of dedication follows with Dr. Gallagher leading the assemblage in the dedication ritual:

"As a home for inspired teaching. . . . As a sanctuary for research. . . . To be an open door of opportunity. . . . able youth of every creed and color, of whatever national origin or economic condition, may enter a chosen profession. . . . In memory and in honor of an alumnus . . . whose life and substance were generously dedicated to the welfare of generations yet to come . . ."; after each section the people respond, "We dedicate Steinman Hall."

Conclusion of Dedication ceremonies will take place in the St. Nicholas Terrace courtyard and in the lobby of Steinman Hall.

Dr. Gabriel R. Mason, class of 1903, will preside over the dedication of a tree, in the courtyard, as a living memorial to David B. Steinman.

In the lobby, the mural by Xavier Gonzalez will be presented by Mr. Raphael H. Courland, Past President of the Engineering Alumni Association, whose members provided the mural through the City College Fund.

At about four o'clock, after dedication ceremonies have ended, a reception will be held in the Steinman Hall lobby, followed by tours of the laboratories of the various engineering departments. Engineering faculty will be present to answer questions concerning equipment and facilities. These tours will end at about five o'clock, bringing the day's activities to a close.

Vector . . .

(Continued from Page 1)

This article, by Eugene Graff, Ch.E. '63, was the winning presentation at the recent A.I.Ch.E. metropolitan New York student paper contest. It goes into the advantages of this process and the theory behind freeze-drying. While this reviewer found this article uninteresting he felt that it would be of interest to M.E.'s and Ch.E.'s.

Interesting Shorts

Probably the most interesting of all the material in *Vector* is the shorts. They are brief notes of new innovations in industry and serve to keep the engineering student abreast of recent developments. This issue has articles on: "A New Color Tube," "Glass Wires," "Seawater Conversion," "Superconducting MHD Generator," "Hi-Fi Fones," and "TV Tape Recorder."

Rounding Out

Completing this fine issue are profiles of student leaders; leaders of the Engineering Honor Societies. In addition a crossword puzzle, "Vector Volts," and an article on "The Need for Expanded Facilities."

member S.G. Public Opinion and Research Bureau; S.G. Newsletter staff; Young Democrats; BBC.

TECH SOPHS

Vote For

RAYMOND GOLDFIELD
PRES. of the CLASS OF '65

Slide Rule League Passes Away

By WALLACE GOTTLIEB

The Slide Rule League, in a final attempt for life last Wednesday night, died again, as it has died so many times before. The League had been plagued by forfeited games throughout the term. If a basketball game was scheduled, it was practically certain that at least one, and very often both, of the teams would not show up.

The many forfeits followed closely a pattern that had been established in the days of the original Slide Rule League. Lack of interest led to a standstill of basketball activity. This, in turn, led to the eventual disappearance of the League two years ago.

This term Tech Council, urged by several sports-minded engineering groups, tried to rejuvenate the league. It drew up a schedule of games and reserved Goethals gym for Tuesday and Wednesday nights. For a while, it seemed as if basketball competition among the College's engineering groups would flourish once again. As the term wore on, however, it became apparent that the new Slide Rule League was suffering from the same malady that had ailed its predecessor; lack of interest, lack of participation, and too many forfeits. The gym officials grew tired of reserving the gym for nobody; the days of the Slide Rule League were numbered.

There were, however, some bright spots in the dismal mess of apathy that was the Slide Rule League. Two groups, Epsilon Nu Gamma Fraternity and AICHE were actually interested in playing basketball. Both of these groups had a team at Goethals gym every time they were scheduled to play. Each team won (by forfeit of course) by merely walking into the gym. AICHE grew desperate. In the March 23 issue of TECH NEWS they issued a challenge, stating that they would meet any team on the basketball court.

When the schedule called for AICHE to meet ENG, the first Slide Rule basketball game in more than two years was played. The game, won by AICHE, was marked by great enthusiasm by all of the players. It was a fast-moving, well played ballgame, but more important, it gave out some promise for the future: If a series was started between AICHE and ENG, then other tech groups, sitting up and noticing the good times enjoyed by the players and the fine caliber of play, might wish to participate in the League. Both teams heartily agreed and, looking optimistically to the future, scheduled a game for April 24 at 8:30 P.M.

Last Wednesday night, the brothers of Epsilon Nu Gamma, thirteen strong, arrived at Goethals gym. They did not see the men of AICHE. They could not believe their eyes. "They'll be here soon," the fraternity's players said hopefully. "They really wanted to get this series under way." But AICHE never did show up.

This was the last straw. The officials of Goethals gym were now fed up with the Slide Rule League. They were tired of holding a very-much-in-demand basketball court for two teams that would never use it. Tech Council members were fed up with the Slide Rule League. They were tired of planning schedules of games that would never be played. The men of Epsilon Nu Gamma were fed up with the Slide Rule League. They were tired of waiting for teams that would never show up. Everyone else obviously did not care. No one participated in the Slide Rule League; everyone was fed up with it; no one cared about it. No organization or movement, however attractive or worthwhile its goals might be, could overcome such odds. The Slide Rule League tried to last Wednesday night. It did not succeed. The Slide Rule League is dead.

Biologist and Engineer Vie For Veep

Richard Kane '64, an EE student running for V.P. on the FHES ticket, plans to go on to grad school for a Masters in either Electrical Engineering or business administration. He hopes to eventually go into business for himself.

Kane is an eloquent speaker who got started in Student Government politics by going to Tech Council meetings. He attended the meetings more frequently than many regular delegates and was elected recording secretary.

When the SAB was formed in the spring of '62, Tech Council elected Kane as its representative. He was elected Vice Chairman of the SAB and this term succeeded Herb Berkowitz as Chairman. Commenting on charges leveled against the SAB, he said, "Clubs must realize that this is their body."

Martin Kauffman sees challenges to Student Government in three major areas. He believes that these are cooperation between S.G. and campus organi-

zations, student involvement in academic affairs, and the free tuition issue.

Marty, currently serving on student council, served as Editor of "Contact" (House Plan's newspaper) and has been active in House Plan. He is a biology major and hopes to go into teaching as a vocation.

"S.G. has fantastic potential which only recently has begun to be tapped," said Marty.

He is running as an independent, for Vice President of Student Government.

TECH COUNCIL

endorses

Robert Levine

For S. G. Treasurer

"U" - University Party - "U"

Dean Hyman Speaks On Graduate School

By ELLIOTT WAGNER

Last Thursday afternoon, Dean Hyman from the graduate division of the School of Engineering and Architecture discussed the various factors and questions relating to graduate school for the engineer. The lecture was presented by Pi Tau Sigma, the honorary mechanical engineering society.

The question the student should first ask, stated Dean Hyman is, "Shall I go to graduate school?" The student should then determine whether he is inclined toward study and if he has the motivation and desire. If he finds there exists pressures other than his desire and interest, he should definitely reconsider continuing with his studies.

Graduate study will determine the path for future activity. While it leads into certain jobs and activities, it will disqualify the engineer from many fields, e.g. sales, market survey, business, management, production work, etc. However, the extensive research and preparation done in graduate school is needed for the work done in the fields of development, research, and college teaching.

The structure of graduate school involves two degrees, the masters, M.S., and the doctorate, Ph.D., degrees. The masters degree requires one year of study beyond the bachelors. This year is composed of thirty credits which may or may not include a thesis or research project. For the Ph.D., the student will take more credits and will work on a research project. He is expected to complete this study approximately three years after the bachelors.

The difference between undergraduate and graduate study is the increase in the responsibilities for the student. Once he has begun graduate school, he is on his own and is required to educate himself. The new graduate program at City College will include several two hour, three credit courses in which the student is required to put seven hours work in on his on time. The purpose of the classroom work is to give incentive and stimulate interest and provide material for study. The truth is that the only purpose for going to graduate school is to have a degree which will act as proof of advanced study. The central idea of graduate school is self-education.

Up to 1940-45, it was true that an engineer had obtained enough professional and intellectual equipment for the rest of his life without further study. Since then, the engineer has discovered his profession was changing so rapidly that he was becoming completely out of date and useless to his industry. Presently the average half life for an engineering degree is five years.

The engineer must be put in a position where he can continue learning after he has left school. With graduate study he can depend on his grasp of the basics of his field with the confidence that he will continue to learn. Research will carry him beyond the class and he will do things never done before. He will demonstrate his ability to work on his own.

The need to keep pace with the competition in engineering is a practical reason for graduate study. In some fields the engineer cannot practice without an advanced degree.

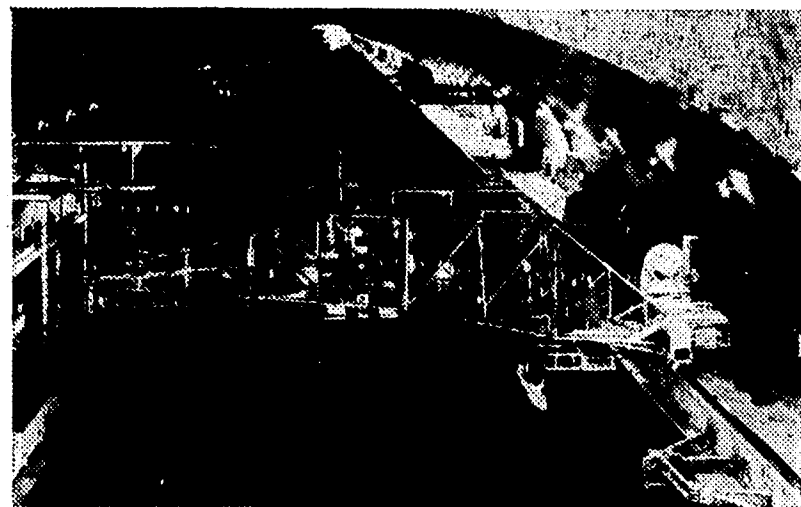
Dean Hyman presented the following statistics from the U.S. Office of Education.

Engineer degrees at the graduate levels continue to increase at rates far surpassing that of most fields of higher education.

During the past seven years rate of increase in the number of doctorates in engineering been three times greater than the rates of increase in all of fields combined. At the master level, the rate of growth been twice that of all of fields combined.

Dean Hyman suggested that graduate study should begin immediately after the completion of undergraduate study and maintained on a full time basis. In addition he stated "Do volunteer for the army. The interest of the U.S. is served increased professional competence."

An Important Message to ENGINEERS • MATHEMATICIANS PHYSICISTS • NAVAL ARCHITECTS who are interested in R&D Career Development



The David Taylor Model Basin — a complex of four laboratories occupying 186 acres in a desirable suburb of Washington, D. C. — is an advanced facility for fundamental and applied research into SUBMARINE, SURFACE SHIP, AIRCRAFT and MISSILE design concepts; applied mathematics and operations research; and the design and development of related instrumentation. Each of these laboratories — HYDROMECHANICS, AERODYNAMICS, STRUCTURAL MECHANICS and APPLIED MATHEMATICS — is supported by some of the most advanced (and oftentimes only) facilities of their kind. There are large Towing Basins — one more than half-a-mile long for prolonged towing, another for testing hydrofoil and hydroskimmers at high speeds, and still another for generating violent environmental conditions . . . high-speed computer systems . . . means for conducting R & D on submarine structures at great depths . . . a wide range of vibration generators for ship structures . . . several wind tunnels ranging from subsonic to hypersonic velocities . . . and especially-equipped sea-going laboratories for full scale study in the field of weapons effects, vibrations, acoustics, flow, etc.

Thus, The Model Basin offers outstanding career development opportunities in each of these four laboratory areas. Planned professional development programs provide financial assistance and every encouragement to obtain advanced degrees. Several local colleges and universities are close by, and participate in these programs . . . with many classes conducted right at The Model Basin.

All career positions include the many real benefits of Career Civil Service . . . 3 weeks paid vacation (4 weeks after three years), 8 paid holidays and 13 days sick leave each year, partly-paid group life and medical insurance, and unusually favorable retirement policies.

For further information and requirements, contact Mr. Sebastian DiMaria, Personnel Officer.



David Taylor Model Basin

Department of the Navy
Washington 7, D. C.