

The Tech News

Volume 59

Worcester, Massachusetts, Thursday, October 17, 1968

Number 18

Council Backs Delay In I.F. Rush Program

The idea of a second semester rush was a notable feature of the October 7 meeting of the Student Government. A belief exists among many members of the Student Government that putting off all rushing until the second semester would be beneficial to the freshmen, giving them more time to determine which fraternity, if any, is best for them. President Stelmak feels that the upperclassmen's grades might improve, with the house members putting in less rushing time.

This proposal, with the Executive Council's recommendation behind it, will be left to the action of the Inter-Fraternity Council, in its determination of the rules for next year's rush period.

Other business attended to included the installment of Tom

Tracy as the freshmen class representative. A motion by Sandy Malcolm to open the parking lot next to the library was passed. Arrangements for a simulated national election were looked into, and the election for the independent representative and the Student Court referendum were scheduled.

The meeting was held in the Gordon Library Seminar Room from 6:40 to 6:55 p.m.

A number of Student Government officers have expressed a desire for greater attendance at these meetings. Attendance should not be limited to those directly involved in the Student Government functions, but should include anyone with an interest in the student and executive affairs of Worcester Tech.

New Approach Used In Frosh. Chemistry

by James Colangelo

Whether you realize it or not, freshman, you are a little better off than most of the classes which have preceded you, at least as far as chemistry is concerned. Hard to believe?

The Advisory Council on College Chemistry (AC3), with headquarters at Stanford University, has recently launched a new project called Application-Illustrations. An intricate part of this operation is located right here at Worcester Tech under the guidance of Dr. Robert C. Plumb, head of the Chemistry Department.

The project is concerned with the collection and publication of material illustrating practical applications of chemistry to familiar, yet little understood, phenomena of everyday life. These Application-Illustrations will better equip an instructor to make the dry, abstract principles of chemistry more understandable as well as more interesting to the high school or undergraduate student by placing them closer to his own frame of reference.

Areas of general student experience to which an instructor might relate these principles include:

Objects of natural beauty, such as snowflakes.

Things related to health and body functions — the role of chemistry in influencing mental health, headaches, sex drives, memory, thinking, etc.

Exotic materials such as the hardest, softest, or densest substance, the newest or most expensive.

Items of current national interest — space travel, smoking, rockets, or air pollution.

For more specific examples, consider the following:

Why do aquanauts in an underwater sea lab atmosphere of oxygen and helium feel decidedly chilly when the temperature is kept at a normally comfortable 70°?

Why do bright, new light bulbs become discolored with age and eventually burn out?

The answers, of course, can be found in simple chemical truths.

Dr. Plumb, who spent one of the summer months at Stanford University acting as consultant to the council, is now accepting contributions of this nature from over 2,500 chemistry teachers across the country. Starting in January, he will edit a monthly column of Application-Illustrations which will appear in the American Chemistry Association's publication *Chemistry*.

How To Succeed Selected As Masque Fall Production

The Masque is going all out this year in an attempt to bring a talented, superior-quality musical production before the Worcester Tech audience. Backed by a bigger and better staff this year, Masque President, Bob Rosenberg, and director, Jack McGuen, chose the Frank Loesser and Abe Burrows musical, *How to Succeed in Business Without Really Trying*.

How to Succeed is the story of a young windowwasher, J. Pierpont Finch. The opening curtain sees young Finch scrubbing the windows high outside the new Park Avenue office building of the World Wide Wicket Company, Inc. Through some interesting circumstances, he eventually lands a job there and, before long, we are watching

Soph. M.S. Deficiency Plan Made

The Office of Student Affairs has announced that juniors and seniors deficient in MS 203-204 may substitute an elective course for this degree requirement. Dean Van de Visse made the announcement in response to a student's inquiry.

A student may substitute any elective of equal or greater credit, or make arrangements with his degree department head for special projects or extra research credit to cover the credit deficiency. Students now making up MS 203-204 are advised to see Dean Van de Visse if they wish to take advantage of the new arrangement, bearing in mind that the course withdrawal deadline is now down to six weeks.

Dean Van de Visse stated that the optional elective decision should benefit the present MS 203-204 program.

tion's publication *Chemistry*.

Mr. Ken Amend, a W.P.I. graduate student working for his Ph.D., is devoting much of his time to the project in the area of research on new applications. As editorial assistant, he will work with Dr. Plumb in the preparation of material and correspondence.

When the best possible collection of Application-Illustrations has been assembled it will be published as a resource book for chemistry teachers in an effort to improve the general quality of instruction.

In this sense, Dr. Plumb regards this project as very important and believes the fact that it is represented here at Tech is a "big plus" for the school.

his climb towards the top of that organization. The story revolves around the friendship he develops with the white-collar men, secretaries and scrub-women of the Wicket Company.

Starring in this fall's large cast are freshmen Jim Crawford and Ed Bergen, Joel Cehn, Randy Sablich, Mark Gerber, Math Instructor Richard Olson, Dean Trask, Warren Reiss, and girls from Becker, Worcester State, and Worcester City Hospital.

The dates for this production have been set as Friday, December 6, and Sunday, December 8. W.P.I. students will be able to purchase reduced-rate tickets. For advanced ticket orders, Bob Rosenberg (AEPi), Jimmy Atkinson (D-226), or Paul Evans (ATO) should be contacted.

Homecoming Weekend Features Two Concerts

The Worcester Tech Social Committee has released the schedule of events for Homecoming Weekend. There will be two popular music concerts — the first at Alden Hall and the next in Harrington Auditorium. Friday night will feature Sly and the Family Stone at 8:30. Saturday evening Big Brother and the Holding Company will appear. Tickets will be available through fraternity houses, dorm counselors and at the bookstore.

Sly and the Family Stone has been called the newest thing in rhythm and blues since James Brown. Their music is fresh and never gets into the rut so often found in the Motown Sound. Their first hit single, "Dance to

the Music," reached the top of nationwide charts. Alden Hall was selected as the site for Sly because people are inclined to "let loose" at Sly's concerts. The concert will not have city-wide ticket distribution and therefore will be almost exclusively Tech audience.

Big Brother features lead singer, Janis Joplin. Although the group is slated to break up next month, their performance at Worcester Tech has been assured. Big Brother was the winner of the best group at the Monterey Pop Festival. Janis has been compared to every female in music from Besse Smith to Ella Fitzgerald.

Tickets should be purchased early because of great demand. The concert will start at 8:30.



"Sly and The Family Stone" appear Friday, October 25, at 8:30 P.M.

CHEMISTRY AND THE REVEREND MR. MALTHUS

by T. H. Roddenbery

The combination rather shocked me when I first heard that the October 18 Sigma Xi lecture was to be "Chemistry versus Malthus." As an economist, the only Malthus I could think of was the early nineteenth century clergyman - economist, Thomas Malthus, who first predicted the "population explosion" problem. In 1798 he published the *Essay on the principle of population* which, because of its gloomy conclusions, gave economics the unfortunate nickname: "The dismal science." But what does chemistry have against him?

Suddenly, the explanation dawned on me. I'll give you the clues, and you should be able to figure it out, too. An anonymous poet sums up Malthus' thesis succinctly, as poets should:

To get land's fruit in quantity
Take jolts of labor ever more,
Hence food will grow like one, two, three . . .
While people grow like one, two, four . . .

Malthus was applying the "Law of Diminishing Returns." Workers (who Malthus said tend to reproduce themselves accord-

ing to a geometric progression) apply the labor of their growing numbers to an ultimately fixed quantity of natural resources. But production grows at an arithmetic progression, or at a rate less than proportionate to the rate of increase in workers. The obvious conclusion is, admittedly, pretty dismal, and the checks which Malthus saw as operating against this tendency were hardly encouraging.

First there were what Malthus called the *Positive Checks*. Malnutrition would make people susceptible to disease, so that periodic plagues would help (!) the problem by eliminating surplus population. Wars could also be counted on to ease the population pressure from time to time.

Then there were the *Preventative Checks* of postponement of early marriages and the exercise of "moral restraint." Both as an economist and as a clergyman, Malthus advocated the latter two checks, but he really didn't expect them to be very effective because of what he called "the passionate urges of the working class."

What does all this have to do with chemistry? Well, the an-

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The Tech News

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Editorial

A Warning From Columbia

The entire academic community here at Tech would do well to read the recently issued report of the Cox Commission, which was created last spring to study the riots which swept Columbia University at that time. Some of the conditions mentioned will seem strikingly familiar.

The student rebels were condemned for their use of disruptive tactics, but at the same time, the commission found that the police used force which was far beyond that necessary to control the situation. The report stated that "The survival — literally the survival — of the free university depends upon the entire community's active rejection of disruptive demonstrations. Any sizable group, left to pursue such tactics, can destroy either the university by repeatedly disrupting its normal activities or the university's freedom by compelling the authorities to invoke overwhelming force in order that its activities may continue." The investigation also found that, contrary to popular belief, a majority of Columbia's students and many faculty were very sympathetic to the rebels. And the failure of the University to distinguish a small group of revolutionaries from a "very large and constructive segment of the student body which supported the strike" only added to the breakdown of order which took place.

For us at Worcester Tech, however, the causes and not the results of this confrontation are of greatest importance. The commission found that the student unrest was partly the result of an administration, including trustees, which "too often conveyed an attitude of authoritarianism and invited mistrust." They reported that the faculty played very little part in the policy-making process and could thus "contribute little to provide the university with internal coherence." Furthermore, the report warned that "Any tendency to treat a university as business enterprise with faculty as employees and students as customers diminishes its vitality and communal cohesion."

There is, then, a choice to be made by concerned students — they can work to improve and strengthen this educational institution or they can destroy it. But the warning to the administration is even more crucial. They can give the students a meaningful voice in the college and a chance for participation which will allow us to better understand the functioning and the problems of our college, while at the same time giving themselves an insight to our problems and aspirations. Or the Trustees can continue to maintain that students come to W.P.I. "to be guided, not to direct," and calculate that Columbia University is many miles from Worcester Tech.

Any great miscalculation could be disastrous.

J.G.

Life Styles

Father, Can You Help Me?

by H. H. Shore, Past Editor, Tech News

Father, can you help me? the young boy cried.

What ails you my son? the Father replied. I've lost my way, dear Father, the young boy cried.

And so you've come to church, the Father replied.

I am seeking God, the lost soul said; I am seeking truth, and I want to be led.

Then pray, my son, and relieve your heart,

But hurry, my son, for soon you must depart.

Rejected by God? the young boy cried.

Accepted by man, the Father replied.

Where is God? the young boy cried.

You won't find Him here, the Father replied.

You'll find Him in the streets, walking beside you;

You'll find Him in the woods, growing around you;

You'll find Him in your heart, so big and bold;

You'll find Him where you want to, not where you are told.

These walls, they hold a lot of things, the Father said:

There's the pew, and there's the Cross, and the Holy Bread;

And there are people who are lost, said he with a nod,

For they are looking up to find an earthly God.

They're running from themselves, to safety in the church;

For unity in prayer sent them all to search.

But God is not in unity in prayer in this church;

God is in the streets —

Wondering why all the people are in here hiding.

Editorial

The American Way

When a crying need arises for a new service, some enterprising young men always leap towards it with wallets open and cash-registers in their eyes. In recent years the Worcester College Community has been worrying about inter-collegiate cooperation to aid the struggling college community. So young capitalists have seen fit to ignore the real problems and make some honest dollars.

The **Pacesetter**, new in the Worcester journalistic scene, appears to be just that type of organization. The **Pacesetter** was created by enterprising Holy Cross and Assumption men to: a) Promote an intercollegiate weekend whose only purpose is to fill the coffers of a local promotional agency, and b) to advertise for selected groups and places in Worcester sponsored by members of the **Pacesetter** staff. Any accomplishments by the **Pacesetter** other than a) and b) are merely byproducts and are not essential to the existence of the paper. Also the paper, judged only by their advertisements, is losing money and it is predicted that the paper will fold immediately following the intercollegiate weekend.

An intercollegiate journal is a necessity in Worcester, however, it must be established in the spirit of intercollegiate cooperation and cannot immerge from under the shroud of selfish, personal gain.



WOW! WOW! WOW! Speaks!

by Gerry Axelrod and Sandy Malcolm

EN CATHEDRA

A wall. Yes, there was once a wall. Perfect and Smooth. But not actually. Because it wasn't. Not a wall, but more.

Or isn't it. No, it's a whole. Without any walls. And in its center glows . . . spores. Carbon can't be responsible, nor can Fathers Silicon or Enovid. But Carbon plus can be the answer. The hole is he and he is the center plus, double whammy, and Watch Out Mephistopheles.

In any age of scars and pus, why so seldom knowledge. Maybe come and see and sit is too restful, but all too many fit into this shape. Angles and curves can be comfortable only if one bends entirely. He wouldn't want us any other way.

At least a Gingko doesn't take Excedrin. Maybe nitrous oxide!

Tomorrow everybody will be asleep. Whether they want to or not, two or none. It'll be too late — no place to stay awake.

If Middle-earth is in-between; what a waste the ends are — or were — or will be. But who cares except He. And He is me, and I am you, and you are He, but no one is; and that's the whole problem.

Maybe before the operation is complete, we'll all start playing Jim Bowie and never go back to iron, but in the meantime, look to the He internal and break up the sameness of the wall with tenderness yet firmness. After all, Peter's Chair is finally showing the whole for the Potty. And we're not down it yet!

S.M.

Student Tickets

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(\$2.00 AT GATE)

G.A.

Variety Spices Winter Consort

by David Ireland

A combination of unusual arrangements, able musicians, and out of the ordinary instruments resulted in an enthusiastic reception here for the Paul Winter Contemporary Consort. In the first of many programs to be sponsored jointly by the Worcester Art Museum and the Worcester Tech Student body, Paul Winter's seven piece jazz group presented pieces to suit almost every taste in jazz.

Opening with a Latin American flavor, the group played two very rhythmic arrangements. The first, *Papa Zimbi*, a traditional tune from Haiti began with a slow modal opening and moved swiftly to a rapid native beat. The syncopated rhythm of bossa nova was evident in the second piece, *Mari-lla*, named after a girl the group met in Brazil. Prominent in this piece was the skilled playing of the bass flutist Virgil Scott.

Part of the character of the Consort comes from their tasteful and interesting improvisation in the pieces they play. Departing from this character they moved to *Canta Canta Mais, Sing Sing More*, one of a group of popular chamber music pieces written by Jobin. A protege of Villa Lobos, Jobin is more widely known for some of his classical pieces, among them the popular *Girl from Ipanema*.

Up to this point, the Consort could have been any contemporary jazz group playing contemporary pieces. Guest Artist Ruth Ben Zvi was given the stage,

and together with her unusual drum, the darbuka, she proceeded to play a solo which emphasized one of the extraordinary elements of the group. Called *Around the Campfire*, this piece demonstrated both the skill of the artist and the versatility of her drum.

Sometimes called the Miriam drum, this instrument had its origin in the Middle East and is mentioned in Exodus as the drum Moses' sister played. Made of desert clay, this drum is held between the knees and is struck alternately both with the palms and individual fingers. Its expressive quality lies in the elasticity of its goat skin head. Varying the tension with her hands and elbow, Ruth was able to get different tones and notes from the drum, at one time producing an eerie windlike sound very much like that you might hear at night, around a campfire on the Israeli desert.

The entire group once again came on stage, opening a suite of themes from the movie *Black Orpheus*. Its opening bossa nova theme soon dissolved into a percussion composition as group members began walking off stage to pick up various native South American and tribal instruments. Among these were a gourd and bead affair which sounded very much like moroccas, and a drum-like arrangement capable of producing sounds of monkeys and other jungle animals. The entire piece was dynamic both in its impact and its presentation.

Following two solos by guitarist Karl Herrescoff, a gavotte from Bach's sixth cello suite in D major, and a Venezulan waltz by contemporary composer Antonio Lauro, Paul Winter announced the next piece as entirely improvisario. *Lose Your Mind and Come to Your Senses*. Flute, cello, saxophone, and English horn combined to im-

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Curator Explains Art Course

(Ed. note: the following is an interview with Richard C. Muehlberger, Curator of Education at the Worcester Art Museum. He teaches the Introduction to Art course offered to Tech students as an elective this semester.)

Curator of Education seems markedly different from professor. Could you explain it's meaning?

At the Worcester Art Museum there are two curators. One is the curator of the collection and he is responsible for purchasing and exhibiting the art. The other is the curator of education and he interprets the art for the public.

What was your initial reaction to the possibility of this course?

I was very pleased because I'd like to see the museum be more useful to the community and the ten institutions of higher learning.

Did you for see any major problems in dealing with technical students and if so how did you plan to cope with them?

Yes, I expected a probable lack of historical background and ability to communicate with the written word — both essential for the typical art history course. So I've designed the course in this way: The student studies the text, is quizzed on an actual work of art or architecture applying the principles studied, and then I lecture. A lecture followed by a quiz would result in feedback. We've eliminated that. The emphasis is on what the student sees. He must look and interpret himself. I feel that a technical student needs appreciation of art not a chronology of art.

What is the major benefit that you would like each student to derive from this course?

I would like to see their lives enriched in another area. I hope to improve their use of their own facilities so that they can see and experience rather than just look.

How do you feel about expanding the cooperative program?

I think that its an excellent idea and would be welcomed by the school's in the Worcester area. I would like to see a professorship of Art and Architectural History established at the museum in conjunction with the Consortium of Worcester colleges. This would consist of an entire Educational Department with a staff of instructors and would enable us to offer classes to all the college students around Worcester.

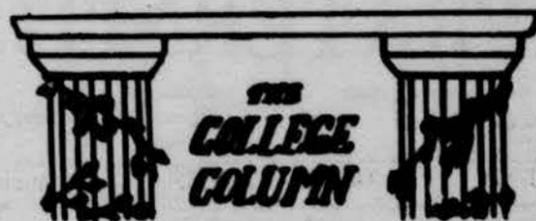
Malthus

(Continued from Page 1)

swer should be obvious now, though there may be more to it than you have guessed (I have since read an abstract of the lecture). Find out from Dr. Henry B. Hass' address, Friday, October 18 at 8 o'clock in the evening at the Hogan Campus Center, Holy Cross.

**National Sigma Xi Lecturer
DR. HENRY B. HASS**
(M. W. Kellogg Company)
Speaks on
"CHEMISTRY VERSUS
MALTHUS"
TIME: Friday, October 18, 8:00
PLACE: Hogan Campus Center
at Holy Cross

U.P.T.



by Glenn White

Students at Northeastern have a chance to vote on a referendum containing thirteen student demands, the **North-eastern NEWS** reported in its October 4th issue. The referendum was drawn up by the Student Concern Committee on campus and contained twenty-nine questions, the first thirteen the students' demands, the next thirteen the administration's reply, and the final three questions concerning the student's year and college.

The demands include the following:

We demand that student committees be formed to have a say on decisions on tuition raise, faculty dismissal, tenure, and fiscal policy . . .

We demand the adoption of a policy allowing one pass-fail elective per term in colleges where schedules permit.

We demand a true non-profit bookstore.

We demand that the Student Concern Committee have a say in the selection of the contract of the food service.

We demand that the Health Service include birth control information (if it is legally possible) or else make available to those requesting information, the names of clinics and doctors . . . who do dispense such information.

We demand that student representatives be observers on the Board of Trustees and are allowed to express the student body's point of view.

The Student Concern Committee also was surprised by the resignation of its chairman pro tem, Pat Lynch, president of the class of 1972, partly because of his concern about "the selfish motives of those here", referring to the committee.

Another serious matter came before the Northeastern students' consideration as they prepared to choose the Mayor of Huntington Avenue. The **Northeastern News** reported, "Jokes, music and girls abounded . . . As usual, most of the jokes (some original) had double meanings. Others had only one possible meaning."

Herb Acid, leader of the Marijuana Grass, Al Kalone, who plans to bust up the Apathy Gang on campus, and Bud Weiser were the three candidates. Also featured was Belly Button, a bodyguard of Al Kalone who sang "I Enjoy Being a Fag", and the minstrel and part-time queen of Bud Weiser, who was reported as saying she was bothered by minstrel periods.

Students at Holy Cross now have the right to vote, sit in, and offer advice on faculty committees which do not evaluate faculty and other students, **The Crusader** reported in its Sept. 20th issue. There will be one to three students, each with one vote, on each committee.

Students will also be invited to sit in on the Committee on Educational Policy and will be invited to give advice, but will not be allowed to vote.

The IFC at RPI has established the rushing rules for this year, **The Polytechnic** reported in its October 2nd issue. The rules are virtually the same as last year's.

The article continued, "Formal rushing will begin with the open houses held the ninth and tenth weeks of the semester, during the two weeks prior to Thanksgiving. After freshmen return from Thanksgiving vacation they will be allowed to visit fraternities by making individual appointments. During this period fraternity brothers may provide transportation for the freshmen for parties and social functions at the house only . . . In cases of chance meetings after the formal open house period, fraternity men may converse with the freshmen . . . Absolutely no planned meetings or organized off-campus affairs are allowed." The article did not say how planned the chance meetings became.

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FRATERNITIES PLEDGE 235 NEW MEN

Phi Gamma Delta

Cluky, Ed
Connell, Bruce
Ellis, Dick
Gates, Sherman
Harrington, Doug
Hoyt, Mark
Jardine, Jim
Martin, Dave
Murphy, Tom
Rosser, Bruce
Szygot, Bruce
Terkanian, Tom
Wimer, Jon

Sigma Pi

Anderson, James
Avery, Jeffrey
Burns, Thomas
Cabana, Glenn
Costa, Francis
Cuscovitch, Samuel
Homme, George
Jennings, Mark
Lawendowski, Paul
Lipka, Dennis
Medeiros, William
Tamborra, Patrick
Wilkinson, Stephen
Zliczewski, Gregory
Okolotowicz, Alan

Alpha Epsilon Pi

Arifian, Ken
Chase, Charles
Chicoria, Robert
Furman, Robert
Gaccetta, Daniel
Golden, Jeffrey
Goldknopf, Carl
Greene, Henry
Herring, Neil
Hall, James
Kleinman, Ed
Laporte, Paul
Mangen, Richard
Pincus, Robert
Rapport, Michael
Stern, Ed
Waxler, Larry
Way, William
Wayne Michael

Sigma Alpha Epsilon

Desmarais, Steven
Ferraresi, Louis
Gaudreau, Adrien
Johnson, George
Kamb, William
King, Donald
Longo, Timothy
Meyers, Charles
Pryzstas, Kenneth
Rivet, Robert
Tarpey, James
Urban, Robert

Sigma Phi Epsilon

Andruchow, James
Blaisdell, John
Caras, George
Deschenes, Charles
Dieterle, James
Freese, David
Glazier, Murray
Johnson, Theodore
Jones, Jeff
Kaletski, John
Kolkebeck, Kenneth
Loehmann, John
McEnery, Joseph
McMahon, Frank
O'Brien, John
Padula, Tom
Pastore, Richard
Prickett, Larry
Staehr, Thomas
Sullivan, Paul
Vine, David
Wagner, Alfred
Zorabedian, John

Delta Sigma Tau

Cain, Charles
Clark, Jeff
Duffy, Sandy
Field, Mike
Greene, Chuck
Harkins, Joe
Hayhurst, Dave
Kinnear, Noel
Laskowski, Tim
Lee, Andy
Logan, Richard
McIlveen, Walt

Moulason, Ray
Pinel-Darrieux, Bert
Powers, John
Rand, Gary
Scanlon, Ray
Wadland, Ken
Smith, Walter
Thayer, Mike

Tau Kappa Epsilon

Arey, Larry
Askanazi, Jeffrey
Ballard, Walt
Canning, Ray
Corby, Mike
Creaser, Duncan
Cuth, John
Johnson, Rae
Klein, Bill
Koehring, Phil
Lampinski, Roy
Leduc, Bob
Lyons, Robert
Lupton, Brad
Lusardi, Don
Lutz, Steve
Mack, Doug
Roberge, Ray
Rohland, John
Schwanda, Tom

Taft, Don
Tantaranich, Arnop
Torosian, George
Tunnison, Richard
Vaugh, Steve

Lambda Chi Alpha

Benjamin, Todd
Schweis, Mike
Hannon, Jim
Roe, Gene
Dwyer, Chris
Ranta, Bob
Briggen, Ken
Lote, Norm
Arayas, Joe
Hurlbut, Roger
Anderson, Robert
De Tymowski, Jean-Paul
Horrocks, Dave
Malone, Mike
Graham, Jim
Altoonian, Jim
Massoud, Greg

Theta Chi

Aloisio, Roy
Best, Doug
Bianca, Joe
Bolger, Steve
Bonneau, Larry

Chin, Chester
Crawford, Jim
Domeratsky, Steve
Family, Nader
Glazier, Andy
Graham, Scott
Highland, Jeff
Ingemi, Mike
Kinne, Jeff
Lafayette, Pat
LeBlanc, Dave
Martin, Charles
Mellon, Biff
Mortoro, Glen
Poreda, John
Prue, Wilfred
Rapacki, Ed
Rogers, Bob
Sojka, Rich
Story, Wayne
Szkut, Jay
Williams, Dexter
Wolke, Rick
Wyncoop, Chris
Cooper, John

Alpha Tau Omega

Childs, Bob
Lasko, Drew
Banks, Steven

Boyko, Richard
Branzetti, Joseph
Burke, John
Davis, Sam
Degutis, Bill
Dolph, Ed
Fraser, Al
Garrity, Bob
Grant, Robert
Mayshar, Andy
Modzelewski, John
Nafis, Al
Newcombe, Russ
Passaicci, Bob
Purinton, Jim
Ryan, George
Simpkins, John
Singleton, Dan
Smith Bob
Szlosek, Joseph
Van der Meid, Tom
Wallace, Scott

Phi Kappa Theta

Blackmer, Ralph
Blood, Greg
Donato, Larry
Dunn, Larry
Forcina, Alex

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PAPER TIGERS NEED NOT APPLY.

Thanks, but they're just not our type. Young engineers who join us are expected to move in on some rather formidable programs... with alacrity and lots of gusto. And a willingness to assume early responsibilities on demanding assignments is an attribute which we welcome warmly. It's the kind of engineering aggressiveness that has brought Sikorsky Aircraft to dominant stature in a new world of advanced VTOL aircraft systems.

If our criteria parallel your outlook, you'll find an excellent career environment with us. You would enjoy working (with a select group) on exciting, full-spectrum systems development. And you can watch your talent and imagination assume reality in such diverse forms as Heavy-Lift Skycranes—Tilt Rotor Transports—High-Speed VTOL Commercial Transports—and much more for tomorrow.

Does this responsibility stir your imagination? Then you probably should be with us. There's ample opportunity for innovation in: aerodynamics • human factors engineering • automatic controls • structures engineering • weight prediction • systems analysis • operations research • reliability/maintainability engineering • autonavigation systems • computer technology • manufacturing engineering • information systems • marketing... and more.

And your career advancement can be materially assisted through our corporation-financed Graduate Study Program—available at many outstanding schools within our area.

Consult your College Placement Office for campus interview dates—or—for further information, write to Mr. Leo J. Shalvoy, Professional and Technical Employment.

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"The interdisciplinary environment keeps you technologically hot."

"Working in data processing today pretty much means you work in a broad spectrum of technologies," says Nick Donofrio.

An Associate Engineer at IBM, Nick is a 1967 graduate in Electrical Engineering. He's using his technical background to design circuits for computer memory systems.

"Circuit design used to be a narrow job," he says. "Today it can take you into the front yard of half a dozen different fields. In my job, for example, I work with systems design engineers, chemists, physicists, metallurgists, and programmers."

Nick describes a hypothetical case history: "A memory systems man comes to me with memory circuit requirements. Before I can start designing the circuit, I go to see a physicist. He helps me select an appropriate technology for the monolithic circuit.

"As the design develops, I work with a test group and also check back with the systems and semiconductor people to make sure I'm on the right track."

Keeping up

The interdisciplinary environment at IBM helps you keep up to date technologically. As Nick puts it, "You're constantly exposed to what's happening in other fields."

IBM needs technical graduates to work in research, design and development, manufacturing, product test, field engineering, and space and defense projects. We also need technical people in programming and marketing.

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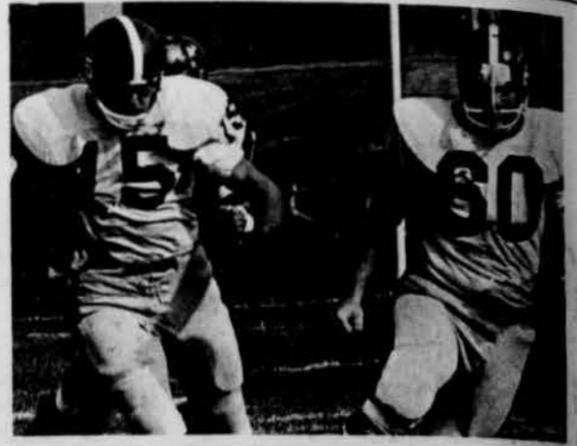
If you're interested in engineering and science at IBM, ask your placement office for more information.

Or send a resume or letter to Paul Koslow, IBM Corporation, Dept. C, 425 Park Avenue, New York, N. Y. 10022. We'd like to hear from you even if you're headed for graduate school or military service.

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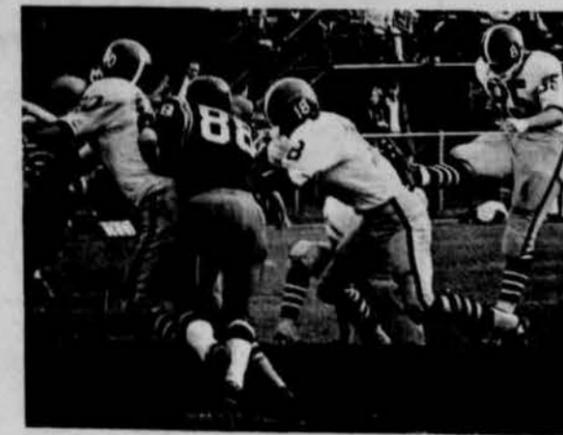
IBM.





W.P.I. 30
BATES 20

(photos by
Ray Spalding)



W.P.I. BOOTERS NIP M.I.T. 1-0

Tech's soccer team booted M.I.T. last Wednesday afternoon on the W.P.I. pitch and came away with a hard earned 1-0 victory.

Tech had been waiting for this game and wanted the win in a big way, because M.I.T. was the only team to defeat our booters last year, the score being 4-3 at M.I.T.

M.I.T. dominated the first half play as the Engineers got off to a sluggish start and never really got to full speed until late in the second period, but the defense held tight thanks to the alert and aggressive play of halfback Lionel St. Victor, Tim Rooney and All Prucnel. Tech came up with many dangerous balls and a few good scoring opportunities, but could not take advantage of the breaks. The half ended with no score.

Tech came alive in the third period and kept up a blistering attack throughout. The pressure finally broke M.I.T. and co-capt. Paul Hayner put W.P.I. on the score board after 6 minutes by scoring on a header which the M.I.T. goalie could not pick up in the face of a blinding sun. Dave Best was credited with an assist on the goal. Hayner has now scored 6 goals and 2 assists through four games. Tech missed 3 or 4 other scoring opportunities before the game ended. Again co-capt. Dave Kuniholm played an outstanding game in the goal for Tech, recording eleven saves and making 3 especially fine saves.

Through four games, Tech's record stands at 3-1-0. Next Saturday, Oct. 19, Tech travels to Clark.

TECH GRIDDERS CONQUER BATES

Worcester Tech made it three wins in a row last Saturday, as it defeated visiting Bates College, 30-20. The afternoon was a wild one, as most of the game was a passing one. Bates passer, Jim Murphy, who was 23-49 good for 292 yards, set a career record of 3,289 yards and in the process became the top New England small college passer. Murphy's fine aerial attack was not enough to win, though, as Tech intercepted six passes and capitalized on the breaks it received.

The game opened with Tech receiving the opening kickoff. Unable to move the ball, Worcester punted and Bates took possession in its own territory. On the first series of downs,

Murphy had the ball inside the Tech five-yard line. It looked like the Bates aerial attack, which Tech knew would give them a real test, would prove too much, but fine defensive line play held Bates from scoring.

Bates scored later in the first quarter on a 60-yard pass interception, by Glenn Thornton. The extra point was blocked by defensive tackle Charlie Andre-son.

Tech then put together its running and passing game, as signal caller John Korzick led Tech 80 yards for its initial tally. The drive ended on a 15-yard pass to Dave Alden who grabbed it in the end zone. Mike Santora added the extra point, and a fired-up Tech squad had the lead, 7-6.

Tech scored its second touchdown, to lead 14-6 at the half, as the Korzick-to-Alden combination was good for another TD, after an Al Freeberg interception gave the ball to the Tech offense.

The score was deadlocked into the fourth quarter when Tech rallied back, as Mike Santora

kicked a 30-yard field goal to put Worcester ahead for good. Bates was unable to move the ball and Tech pushed over two more touchdowns, both by Korzick, on runs of 3 yards and 6 yards.

With minutes to go in the game and Worcester ahead 30-14, Coach Massucco began substituting freely. Bates took advantage of the relatively unexperienced reserves and was able to score to make it 30-20.

The Tech defense again did an excellent job on the field, as its first defensive unit held a high scoring and explosive Bates offense to only one score. The defensive line led by Dick Sandora, were constantly in the Bates backfield and pressuring the quarterback. The defensive unit picked off a total of six Bates passes with Freeberg and Linden each getting two and Poblocki and Scruton accounting for the other two.

The offensive unit moved the ball well during the afternoon both in the air and on the ground. Korzick led in rushing with a total of over 140 yards by himself, as he found openings around the Bates defensive line.

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Peterson Named Swimming Coach

Worcester Tech's new addition this fall to the coaching staff is Carl Peterson. Mr. Peterson will be the varsity and freshman swimming coach and will also handle the gym classes in swimming.

Mr. Peterson graduated from Bowdoin College in 1967. He taught last year at Lewiston High School in Maine. He also handled the summer swimming program in Lewiston.

Besides his duties connected with swimming, Mr. Peterson will handle the intermurals, such as swimming and volleyball, this year. The new coach would also like to keep the pool open as much as possible this year for free swimming for the students here at Tech.

Mr. Peterson is an enthusiastic man, and he has many new ideas ready to use this year in coaching the swimming team.



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Fraternities

(Continued on Page 4)

Gallien, John
 Gerbino, Dick
 Gray, Don
 Hatch, Chris
 Hausmann, Steve
 Joseph, Steve
 Lacouture, Paul
 Mangano, Tony
 McGlaughlin, Brennan
 Meyer, Dave
 Panton, Dick
 Petry, Jeff
 Rushton, Dave
 Schrull, Ed
 Swanson, John
 Tracy, Tom
 Woodward, John
 Regan, Jim

Phi Sigma Kappa

Abercrombie, Scott
 Andruskiewicz, Paul
 Baldiga, Paul
 Berg, Warren
 Bergen, Edward
 Bertasi, Peter
 Ferraro, John
 Gotta, Joseph
 Hargraves, James
 Hayes, David
 Partridge, Randall
 Skowron, Thomas
 Startup, Clifford
 Tremblay, Steve

Eta Kappa Nu

Eta Kappa Nu is the National Electrical Engineering Honor Society. Membership is based largely on undergraduate records of Electrical Engineering students. Besides being in the upper third of his Senior Electrical Engineering class, or the upper fourth of his Junior Electrical Engineering class, a candidate is judged on his character, activities, leadership, and potential to succeed in his chosen profession.

The purpose of Eta Kappa Nu is to promote interest in the profession by setting a fine example to other students as well as honoring deserving students.

The following men are pledged:

David J. Pietraszewski
 Richard E. Robey, Jr.
 Donald L. Sharp
 David W. Swenson
 Leonard Polizzotto

Pi Delta Epsilon

Pi Delta Epsilon is the national honorary collegiate journalism fraternity. It is the purpose of the fraternity to elevate the cause of journalism, to foster mutual welfare of student publications, to develop the truest fraternal spirit among its members, to encourage loyalty to their alma mater, and to reward the journalists working on the student publications for their efforts, services and accomplishments by admission to its membership.

William J. Boyan
 William J. Hakkinen
 Phillip M. Kazemersky
 Kenneth W. Kopka
 Roger W. Miles
 Leonard Polizzotto
 Robert D. Stein
 Anthony D. Toscano

Alpha Psi Omega

The National Dramatic Honor Society has as its purpose the rewarding through pledgship of those men who have exhibited outstanding work in the field of college dramatics. For the fall semester Rho Kappa Cast of Alpha Psi Omega is proud to pledge the following men:

James Atkinson
 Dan Brock
 Randy Sablich

Chi Epsilon

Chi Epsilon is the National Civil Engineering Honor Society, whose purpose is to honor outstanding members of the civil engineering department, including graduate students and faculty members as well as undergraduate students. Undergraduates must rank in the upper one-fourth of their civil engineering class and the upper one-third of their class. The men listed below have passed the four primary requirements of scholarship, character, practicality, and sociability:

Donald E. McCarthy
 Michael J. Wanczyk, Jr.
 Robert J. Grillo
 James W. Small
 Anthony D. Toscano

TAU BETA PI

Twice each year Tau Beta Pi, a national honor society whose major goal is . . . "To foster a spirit of liberal culture in the engineering colleges of America," selects men from the upper fifth of the senior class and from the upper eighth of the junior class to become members. The men listed below have been chosen because of the honor they have conferred on their alma mater through . . . "distinguished scholarship and exemplary character as undergraduates":

Pi Mu Epsilon

Pi Mu Epsilon is the national mathematical honor society. Its purpose is to foster an interest in mathematics. Those pledged this fall are:

Donald E. Casperson
 Robert P. Markot
 Daniel C. Pond
 Robert J. Slomcenski
 John W. Sundstrom
 David A. Zlotek

Pi Tau Sigma

Pi Tau Sigma, a National Honorary Mechanical Engineering Fraternity, is dedicated to the furthering of the profession of mechanical engineering, as well as developing in mechanical engineering students a feeling of sound engineering ethics.

Members of Pi Tau Sigma are either in the upper quarter of their junior mechanical engineering class or the upper third of their senior mechanical engineering class. Personality and engineering ability are also attributes of those selected to the fraternity.

Those selected for pledgship are listed below:

Douglas E. Brown
 Bruce L. Carlson
 James P. Mills
 Thomas F. Taylor
 Merico E. Argentati
 David F. Kendrick

Brian Chace

Leonard Polizzotto

Joseph Senecal

John Thompson

Chemical Honor Society

The object of this society is to bestow honor upon those students and faculty of the Department of Chemical Engineering and Chemistry who have proven themselves worthy of such recognition.

Those pledged this fall are:

Neil Glickstein
 Paul Norkvicius
 Bob Rocco
 Joe Senecal
 John Taylor
 Mark Brown
 Dan Lewis
 Solomon Rosenblatt

Scabbard and Blade

The Scabbard & Blade is a national military honor society distinguishing those advanced corps cadets having outstanding character and leadership ability.

Those pledged this fall are:

Anthony Bergantine
 Arthur H. Evans
 Bruce M. Green
 Anthony F. Leketa
 Daniel A. Lipcan
 Paul V. Norkevicius
 Donald F. Rapp
 Joseph A. Senecal
 Stuart A. Hurd
 John A. Pelli
 Leonard Polizzotto

Winter Consort

(Continued from Page 3)

provis on the five note scale of the koto, a Japanese instrument. Urging spontaneous audience reaction during the piece, Mr. Winter asked that the stage lights be cut in order to produce an at-

mosphere of uninhibitedness. Evidently more was needed to achieve this atmosphere, as no audience reaction occurred.

String instruments dominated the rest of the concert. Lyn Christie, bass player for the group, enlivened the next offering with a technique involving rapid plucking and sliding on

the fingerboard. The piece, *Con Alma* or *With Soul*, was a variation on a composition by Jazz musician Dizzy Gillespie. Playing a unique baroque lute, guitarist Herreschoff used its twenty-four strings to present an Allemand, a seventeenth century dance form. Concluding the program cellist Richard Bok

presented a theme from Bartok, *Ballad in 3/8*. Using a pizzicato and cross-bow technique, Bok made his amplified cello sound more like a guitar than a cello, and together with the drum accompaniment of Ruth Ben Zvi delivered a delightful ending to a very enjoyable concert.

The audience would not let the

Paul Winter Contemporary Consort go however, until they had played two encores, Bach's *Arioso* and another selection from Black Orpheus. The audience left Alden Memorial with the good feeling caused by a superior presentation, and with the hope of more events of similar caliber in the near future.