



1. Article II, Section 1. After "... there shall be at least one Business Manager." Should appear: "there shall be at least one Advertising Manager."
2. Article II, Section 2. Delete "... there shall be at least one Advertising Manager." Amendment 1 must pass in order to pass this amendment.
3. Article VII. Change the phrase "The Editor(s)-in-Chief" to "The Association by a majority vote."
4. That all occurrences of the term "Junior Editor(s)" be changed to "Associate Editor(s)."

"Faculty Pen" An Interactive Qualifying Project

by Jim Demetry

Next spring marks the fifth year since *Two Towers IV*, the study which contains the basic ideas and goals of the WPI PLAN, was adopted by the faculty. One sign of progress in implementing the PLAN is the fact that this fall, more WPI students are pursuing their degrees under the PLAN than under the traditional program. As the words of *Two Towers IV* became everyday academic policy, the whole WPI community — students, faculty and administration — must ask if the "spirit of the PLAN" is becoming a genuine reality. To what extent has the PLAN been successfully implemented? To what extent has its spirit been altered in the process of creating a daily academic routine out of the pages of *Two Towers IV*?

The WPI Committee on Academic Policy is setting as its major goal this year a report on the implementation of the academic policy of *Two Towers IV*. (The CAP consists of Professors Schachterle, Luemel, Miller, Bourgault, Granich and Staples; Dean Bolz and Mr. Brandon; and Ann Madara and Greg Cipriano.) The CAP wants to assess student and faculty opinion about the implementation of the PLAN, as the 10th anniversary of its adoption approaches. One of the Committee's methods for gathering and stimulating such opinion is to sponsor open CAP meetings on the four degree requirements. These meetings should probe the meaning of the degree requirements, and stimulate an exchange of ideas about their educational merit as they are being implemented. Input from these meetings will lead to CAP faculty motions concerning academic policy.

The first of these open meetings was held on November 7, and dealt with the Competency exam. The second, scheduled for Monday, December 9, at 4:00 p.m. in the IQP Center, will be devoted to the Interactive Qualifying Project. All members of the WPI community are invited to participate.

THE IQP

The pages of today's newspapers are among the richest of resources in any discussion about the IQP and its educational goals. In them we find daily references to the perils and problems besetting man, his environment, his institutions, his mechanisms of government, indeed his very survival as a species. The words and phrases assault us repeatedly: population, food, poverty, crime, energy, pollution, education, resources, welfare, starvation, disease, justice, war, sprawl, recycling, radiation, privacy, security, economy, recession, depression, oil, coal, gas — the list could go on and on.

Let's contrast the vocabulary above with that which might be extracted from the pages of the foremost textbooks in engineering and the sciences: current, force, salinity, ph, pressure, stress, inductance, voltage, catalyst, compound, elongation, feedstock, enzyme, photon, slump, poles-in-the-right-half-plane, etc., etc. There is a bit of a language gap! We may have over-dramatized that gap, but it serves well to illuminate one of the principal

concerns of the faculty in its drafting and adoption of the WPI PLAN — that the traditional engineering curriculum had become too narrow and confining when viewed against the montage of today's complex technological society. That society clearly shows symptoms of the abuse, misuse, and over-use of technology, so much so that many question the wisdom of seeking creative technological "fixes" for fear that such fixes will only compound the problems.

It is in this context that the qualifying project element of the PLAN degree requirements calls not only for a project in one's major area of interest (MQP), but goes on to state: "An activity relating technology to society is recommended for the second unit." This activity has come to be known as the Interactive Qualifying Project, or IQP.

IMPLEMENTATION OF THE IQP

No one can accuse the faculty of being over-prescriptive in the language it used in describing the IQP. This lack of definition and precision has been the fuel for much discussion, and the accompanying evolutionary process (still going on) has brought the IQP

The Committee on Academic Policy is sponsoring an open meeting on the implementation of the WPI Plan degree requirements on Monday, December 9 at 4:00 p.m. in the IQP Center. The topic for this meeting will be the Interactive Qualifying Project.

concept considerably beyond its philosophically sound but operationally shaky beginnings. One notable milestone in this process was the formulation, by an interdepartmental committee, of some suggested educational goals for the IQP. They were:

1. To create an awareness of socially-related technological interactions;
2. To enable the identification of socio-technological systems, subsystems, and the linkages between them;
3. To cultivate the habit of questioning social values and structures;
4. To develop and integrate the skills of evaluation and analysis in the societal, humanistic, and technological disciplines.
5. To provide methods for assessing the impact of technology on society, and human welfare, and the impact of social systems on technological developments;
6. To encourage the recommendation of policy.

Among the concerns of the faculty since the early stages of IQP implementation has been

content, credentials, and evaluation. Content questions typically might be: Does there have to be a clear technology component to the IQP? If a student designs a hearing aid which better meets the needs of those with hearing impairment, is that an IQP? Does a project which is largely experiential (e.g., teaching science in a local school) qualify as an IQP? No attempt has been made by the faculty to date to establish boundary conditions within which explicit answers to these content questions may be found. The consensus has been that to do so would severely impair the experimental character of the IQP venture, and would limit the scope of experience data so necessary to careful evaluation and adaptation. As a consequence of this deliberate latitude, the spectrum of IQP's completed to date is very broad indeed. The reader is referred to a green-covered booklet entitled "Abstracts of Completed Projects", September, 1974, for a good sense of the wide variety of IQP's that have been done so far.

The credential concern appears to be much less a problem now than it seemed to be a year and a half or two ago. At that time, many faculty wondered aloud how they were going to supervise IQP's when they themselves had never done one, and under conditions in which they had impeccable credentials in one narrow disciplinary area but virtually none in the extra-technical areas that were sure to be important parts of many, if not most, IQP's. What appears now to have developed is the realization that what's important is not so much having the credentials as is knowing enough about an area to know who does have them, being able to put students in contact with these people and other resources, and having an eagerness to learn along with the students. An important step in strengthening our campus-based IQP resources was the recent establishment of the Department of Social Sciences and Policy Studies. This department will soon be offering courses specifically addressing issues, materials, and methods very closely coupled to the interactive area.

A very valuable contribution to the development of faculty interest, commitment, and involvement has been made by the Sloan Summer Program. This past summer, twenty-five faculty members spent eight weeks in a program which combined on-campus exploration of the technology-society interface with off-campus field work leading to the identification of resource and sponsor agencies and the preparation and publication of detailed area and project descriptions. During the program, faculty teams of two or three individuals each very rapidly became avocationally expert and conversant in eleven different areas, among which were problems of the aged, consumer protection and product reliability, and health care delivery systems. The hope is that these interest area teams will attract sufficient numbers of students to allow the

respective faculty to concentrate their IQP advising time and energy on that area, rather than spreading their efforts thinly over several diverse concerns. The Sloan Summer Program is scheduled to be conducted again in the summer of 1975, with another twenty to twenty-five faculty members participating.

Many of the things which bother and challenge the faculty about the evaluation of IQP work are closely related to the things which seem to bother and challenge students in the doing of IQP work. The interactive arena is rich in problems featuring vagueness, ambiguity, lack of crisp and concise definitions, and an equal lack of crisp and concise answers. The hard criteria by which physical systems are judged, such as size, weight, volume, speed, performance, cost and efficiency, are in the IQP supplanted by the softer criteria of complex social and socio-technological systems, such as environmental impact, cost-benefit ratios, political reality, morality, and ethics, to name a few. To students accustomed only to seeking unique solutions for closed problems, interactive work can be bewildering at first. To teachers accustomed to counting the number of correct answers and thus determining a grade, evaluating an IQP can be a disconcerting experience. Some of our faculty cling tenaciously to the assertion that experiential learning is far inferior to the mastery of factual and methodological material. Sophistication, comfort, and ease with evaluation of IQP's will come only with time and good faith.

Before this piece gets altogether too long, I should say something about the IQP Center, and then stop. For those of you who haven't visited it, it's on the third floor of Washburn. Among its functions are the design, organization and management of the Sloan Summer Programs, the organization and presentation of such special events as the creativity contests (sailboats, ice cream, etc.), the congressional debate, urban and government simulation games (Simpolis, New Town, Congress) and support for events such as the recent Bioethics week. Faculty attached to the center are involved in the project matching and initiation courses, ID 3800 and ID 3040. One of the principal objectives of these matching courses is the formation of student project groups and the matching of these groups with available project topics and advisors. All students bound for WPI's Washington, D.C. Project Center, for example, are among those taking ID 3040. The Center has several small cubicles well suited to project conferences, and a large open area for high attendance meetings and events. If you are having trouble getting started in an IQP, come see us. We'll do our best to get you attached to a topic and an advisor. If you've already started your IQP and your group is having trouble getting unglued from a very sticky dead center, we can offer you the assistance of our recently inaugurated "Project Facilitator Service," in which we provide free but valuable consulting time with students who have completed their IQP's. In any case, we hope to see you at the Center for the CAP's discussion of the IQP at 4:00 p.m., Monday, December 9.

The following students are members of the WPI Newspeak Association under Article II, Sec. 3 and shall have one (1) vote each (except where noted) in the Dec. 9 elections: Brian Young, Rick Clapp, Bob Simon, Steve Fairbanks, Chris Keenan, Rick Dew, Ed Karedes, Ed McAniff, Moon Clancy, Tom Chesser, Brian Belliveau, Peter Wong, Rory O'Connor, Steve Fine, Russ Warnock, Ellen King, Pete Mulvihill, Toby Gouker, Jeff Wakefield, Neal Wright, Jon Zimmerman, Tom Kileen, Paul Klinkman, Robin Paisner, Scobey Taber and Arnold Feldman.

One-half vote each Jay Manning, Mike Connor, John Mangiagli and Norm Garriepy.

Also, the following person will have two (2) votes as a Junior Editor: Ed Robillard.

NOTICE

The Intersession Course, International Gourmet Cooking, has been opened to additional students. Please contact Harriet Kay if you wish to participate. There will be a \$15.00 student charge.

Letters: More Fluids Flak

To the Editor:

It was disheartening to read JMF's editorial in the Nov. 12 issue of Newspeak entitled "Fluids", especially since it was based on "hearsay". To present such an unresearched piece of journalism to the WPI Community does a grave injustice to Professor Meader whose name appeared in the article.

If a student is dissatisfied with a course, WPI has many more direct and effective avenues that Newspeak or hearsay to voice his complaints. The most direct is to approach the instructor early in the course to discuss course work, content, teaching method or what have you. A student doesn't have to wait seven weeks to find that he has difficulty understanding a course or the instructor.

Academic advisors are also available to the student. Unfortunately, the academic advisors are often times treated by students, as that rubber stamp necessary on course registration slips. How many students have seen their advisors for anything other than this?

In serious cases, involving courses or course content, the curriculum committee is also available to the student.

Students also have the opportunity at the end of each course to evaluate the course and the instructor. The data resulting from these surveys is public and is published for the whole WPI Community to see. JMF would have been wiser to use such information in his editorial.

The editor claims that for the last four years he's "heard students screaming for at least a fighting chance in that course". I know for a fact that during that time period some of the ES 3004 courses offered a final written make-up and a final oral make-up if the student was not satisfied that he was properly graded. In one case, after the student was given a written make-up he took an oral make-up. After failing both of these he asked for, and was given another oral exam. I'd suggest that in receiving three more chances to pass the course, after the course evaluations were completed, certainly should lie in the realm of a fighting chance.

JMF did not signify what "the number of students who elected to grind out the course", did. In the last four years many of the failures in ES 3004 chose to "grind out the course" by attendance only at examinations. Others felt that "grinding out the course" meant to be present without preparation at lectures and conferences. As any student in machine design knows, grinding requires a considerable amount of INPUT energy before you receive any output.

Dear Editor:

Believe me ... it grieves me to have to write this letter and perhaps I am wrong, but how can an appreciative alumnus sit back and watch something which he considered wonderful and beautiful be destroyed? When I attended WPI, I was presented a truly classical education in math, physical science and engineering.

No boondoggles to Washington, D.C. or anywhere else. Just 4 years of concentrated examination of the fundamental laws of math, physical science and engineering. Pure, beautiful classicism. No frills, No intrusions by other "arts". The education had direction. It had magnitude (That's a vector, isn't it?). We learned to discipline our minds. We learned to think methodically. We learned how to attack a problem systematically. We learned how to collect data, how to organize data, how to interpret data, how to present data clearly and precisely. Sure, after four years your head was spinning with F-MA, input-output-accumulation, V-IR and PV-NRT but you had realized the power of science and the beauty of order through discipline of the mind.

Well, since I left WPI, its ecology has been shattered. The pursuit of a classical education has been sacrificed for a-the so-called Plan (not to be confused with the Game, which is a lottery) An educational approach which flourished for one hundred years was junked for the modern "hot" educational scheme of the day. WPI was sold a bill of goods.

The following memo was probably found in the trash bin outside of Goddard. It is printed verbatim.

MEMORANDUM

To: Chemical Engineering Faculty
From: Professor DRG

For too long now a trend has been developing on this campus of training young engineers (or whatever) to think for themselves instead of being forced to talk to students (which as you know is very tiresome) instead of doing the research for which this school is famous.

However, in one great momentous document, these trends are being brought to a screeching halt, at least in one department. I am referring of course to the guideline for competency exams in your department just published. It is truly an inspired work.

An in-class exam from 8 a.m. to 6 p.m. requires only one proctor at a time. This leaves the rest of you more free time. Very clever! In the future, I feel confident, fewer students will choose to go through this tirade. Fewer students of course means more free time. It all fits together rather nicely.

I have a suggestion however. Multiple choice questions on the in-class exam is obvious. But have you considered multiple choice questions for the 5 day "real life" problem as well? Currently, these problems are open ended affairs which require a vast amount of time to evaluate. Half the

The Plan was certainly not chosen in order to advance engineering education. It was a business decision. The Plan espoused the "in" liberal b.s. of the day. God created all men equal therefore all men are equally qualified for WPI. Well, Equalitarianism just does not work in education or the pursuit of knowledge.

Believe it or not, there are some dumbbells in the world. Unfortunately, more and more seem to be attracted to WPI through the machinations of the Plan. The result is an institution becoming more and more inferior.

One just has to visit the library to see the Plan's horrible effect. Upon entering the library one is confronted with turnstiles — yes, turnstiles — like at a race track. And the windows are barbed wired to prevent books from being stolen. One can only ask himself what kind of student is this once great great polytechnic now serving.

The Plan was a business decision. In the eyes of the writer it has failed. Now what can be done? Very simply we should "cut our losses." Admit its failure. Junk the Plan. Bring the classroom education to WPI. And return WPI to where it stood for 100 years... in the forefront of classical engineering education.

Sincerely,
Marshall Kaplan '67
P.S. For the sake of cooperation and relevancy and expanded educational facilities, I think Kiddie Korner Kindergarten and Burncoat Jr. High should be included in the Consortium. What time does the bus leave?

The editorial does point out, indirectly, a fallacy about taking courses and that is; if you achieve the mean grade you get an acceptable grade. The instructor in all courses sets an acceptable level of performance. If, for example, he sets 70 out of a possible 100 as his standard, and you receive 20 for evaluation, you should not expect to receive an acceptable grade, regardless of whether the mean grade was 15 or 85. YOU have not, in either case, met the acceptable standard and cannot rationalize your grade based on that fact that in one case it was higher than the mean. In your inner self you know you've failed in the area evaluated and you should have the self motivation to correct this failure regardless of what the rest of the class does.

ES 3004 aims to teach the basic fundamentals of Fluid Mechanics. Don't let JMF or hearsay deter you from taking the course. This is the time in your life learn both work and self motivation. It'll pay off in the long run.

A.G. Ferron

Dear Mr. Fitzpatrick:

Your recent editorial "Fluids" (Nov. 12, 1974) seems to me to be an example of irresponsible journalism at its worst. By your admission the article was based on rumor and hearsay. This is bad enough, but more important, even if the rumors are true. I don't think they necessarily support the conclusion you arrive at.

Publicly maligning a person professionally ought not to be done casually; certainly not without checking the facts first. Did you examine the available Student Evaluation Forms? The ones I saw are at worst mixed and certainly don't merit the strong condemnation you passed out. Did you talk to a broad spectrum of students in the class? Did you talk to the chairman of the department involved? Did you talk to the Dean of Faculty? All these things should have taken place before you unleashed your blast.

It is to be hoped that future editorials will be much more constructive in nature and certainly much more carefully researched.

Bruce C. McQuarrie,
Associate Professor
of Mathematics

Kids These Days

Our youth of today are forever being pulled apart and blamed for all our world problems. Those responsible for these accusations should really take a second look at our campus population and their thinking would have to change immediately. I was afforded the opportunity of being able to attend the holy sacrifice of the mass here on campus and believe you me it was very impressive. Attendance was great which alone speaks for itself when one realizes that these students have no one pushing them to attend. By being away from home the parental force certainly does not send them to the service. Not only was the attendance large but everyone took an active part in

the service making it even more enjoyable. WPI is fortunate to have such a wonderful chaplain and his homily also added to the enjoyment of attending this service. Faculty and staff members were also part of those attending which made for a real cross section of the American people and certainly a mixed bag of different type of dress. Along these same lines it was refreshing to see our campus youth passing out individual bibles to anyone interested. These two separate events are a feather in the cap of the student population and should stop anyone from taking pot shots regarding the worth of today's youth in our society.

Bob Hayes

Consortium Confusion

While waiting for the consortium bus one afternoon, I decided to see how my after Christmas schedule was doing. Glancing at the 74-75 academic calendar for WPI, and comparing it to that of Worcester State College (WSC), I suddenly realized the absurdity of the coming situation. My WPI intersession classes for B and C weeks were in direct conflict with the course I was planning on taking at WSC for the second semester. "Use the consortium," you hear. "Expand your horizons and increase your knowledge," but don't try taking an intersession course if you plan on attending classes at WSC. This situation would also be true for a WSC student who had signed up for an intersession class at WPI. The way I see the situation, the consortium isn't working to benefit the students of area colleges, it's working against them.

Here is how the schedule goes:

WPI	WEEK OF	WSC
intersession	Jan. 6-10	vacation
intersession	Jan. 13-17	classes
vacation	Jan. 20-24	classes
classes	Jan. 28-31	classes
classes	Feb. 3-7	classes
classes	Feb. 10-14	classes
classes	Feb. 17-21	vacation (winter)
classes	Feb. 24-28	classes

I realize I have only shown the schedules of two of the consortium colleges. Confusion, not enlightenment, would be the result of adding more information.

It seems to me that the most convenient solution would be to tack WSC's Winter vacation on to the end of their Christmas vacation, thus alleviating the problem of conflicting courses during the week of January 13-17.

I would appreciate your consideration on this matter.

—Mary Polanik '76— WPI

time, we can't even do them. Anyway, everyone knows it isn't the method that counts, rather, it's the numerical answer. Therefore you might as well use multiple choice questions in the first place. These will cut down the evaluation time to about 30 seconds per student, which is just about right.

Might I also suggest that you insist on the students bringing an empty milk bottle to the in-class exam. This will eliminate any need to use the lavatories, which are a source of cheating and other unnatural acts.

Congratulations on a job well done.

DRG

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Worcester Planning Board Holds Public Hearing On West St.

On Wednesday, November 20, the Worcester Planning Board held a public hearing concerning WPI's petition to permanently close a section of West Street between Institute Road and Salisbury Street. By a vote of 3-0, the board sent the proposal back to the City Council without a recommendation.

The hearing took about an hour and a half during which WPI once again presented its side and certain local residents represented their side. President George Hazzard of WPI made the opening statement for WPI. Reading from a prepared text, the president stressed academic and safety reasons for closing the street. President Hazzard, noting that there are fewer students going into college from high school each year, said that universities and colleges are in stiffer competition for qualified tuition-paying students, especially between public and private schools. The first impression of WPI is very crucial to an applicant and his family in order to create an interest in our school.

"West Street," the college president continued, "runs right through the heart of our central academic area. Since its temporary closing, WPI has enjoyed, for the first time, an attractive unified, single college campus."

Pres. Hazzard also pointed out that more than 8000 pedestrian crossings are made each day by students going to classes. The temporary trial closing periods have eliminated a hazardous safety problem. He ended his speech by quoting an editorial that appeared in the Worcester Telegram on October 5th supporting WPI's petition as "being in the public interest."

Milton P. Higgins, Chairman of the Board of the Trustees of WPI was the next to speak in favor of closing the street. Mr. Higgins pointed out various economic reasons and WPI's contribution to the city of Worcester over the many years. WPI attracts students from over 33 states and 30 foreign countries, many of whom later settle in the Worcester area. Over 200 students, or 10 per cent of Tech's enrollment come from Worcester. WPI's \$13 million annual budget, continued Mr. Higgins, provides an inflow of money to the Worcester area economy. He concluded his remarks by saying that a great number of Worcester's leading businesses were founded by WPI people, among them being Wyman-Gordon, Paul Revere, Riley-Stoker, Heald Machine, Morgan Construction to name a few.

Thomas J. Denney of University Relations at WPI contested Traffic Engineer Robert Johnson's second report about the effect of West Street's trial closing. Originally Johnson had been in favor of the closing, however, he has now changed his position. Mr. Denney contends that more than 75 per cent of the West St. traffic had been WPI-related, that only 6 per cent of the daily traffic had used West St. as a through route between Salisbury and Pleasant Streets, and also that only 2 per cent — or 30 cars — during rush hours entered West St. as a by-pass for the Park Ave. — Salisbury St. intersection.

Finally, Mr. Denney stated that during the four months preceeding the temporary closing of West St., there were six reported and three unreported accidents at the West St. — Institute Road intersection; there were no accidents reported or known in the four months following the temporary closing.

Several letters and a petition signed by many residents in the area were presented at this time supporting the closing. Among them were the Worcester Fire Chief and the Worcester Police Department. Several residents spoke in favor of WPI, mostly stressing increased safety at West St. and Institute Road, beautification of this section of Worcester, and Concern for the safety of the WPI community.

Mr. Robert Stoddard, a Worcester manufacturer and trustee of WPI pointed out that the bridge accommodates only one end of the campus and serves only a small percentage of the pedestrian traffic across West St. Mr. Stoddard also contended that from his years in Worcester, he never considered Pleasant or West Streets as major roads in Worcester.

The opposition to WPI's petition consisted mainly of residents scattered about the area. Their main complaint was the heavy traffic on Boynton St. and at the Park Ave. — Salisbury St. intersection. Several residents hit WPI's 'Greening of the Campus' program as window-dressing and unnecessary. One resident said that there has never been a pedestrian accident on the West St. section through the campus and therefore could see no reason to be concerned. Another neighbor claimed that Cambridge and New Haven don't go around closing off streets like Mass. Ave. because thousands of students have to cross them. "They should use the bridge provided and that the safety factor has been grossly overrated."

An 'experienced West St. traveler' claimed that there had never been any danger before on West St. and safety as prescribed by WPI was "nothing but bunk."

The owner of Tech Pharmacy, Mason Horowitz, vehemently opposed the closing as it has had a tremendous effect on his business.

Several others said that either closing the street or not won't change the beauty of the WPI campus and one neighbor disgustingly snorted that students should go to school to look not at the presence of a road, but at books.

Robert Johnson, Worcester City Traffic Engineer, presented a bag full of statistics he claimed would substantiate his opinion now, that West St. should be kept open.

Charles Down, a planning consultant for WPI, countered arguments presented by the opposition by declaring that traffic detours in the area due to construction accounts for the present heavy volume of traffic around WPI and on Boynton St. especially, as for businesses on Highland St., by the traffic engineer's report, traffic had increased on that street — not decreased. It should, in the long run, help business — not hurt it.

As the hearing ended, one enraged resident jumped up and began shouting that when he had tried to start a petition against the closing, he had been threatened by unnamed parties with "economic reprisal."

The motion to send the petition back to the City Council was approved by a vote of 3-0 with Prof. Richard Desrosiers of WPI excusing himself from the proceedings and Frederick Butler abstaining. The City Council is expected to take up the petition around Christmas time. WPI is now on its second 90-day trial closing period.

Peter J. Mulvihill

The High Cost of Concerts

Inflation lurks everywhere, from bread to circuses. And included in the category of circuses are concerts. It is an accepted fact that musicians ask for and get exorbitant fees. Their expenses are high and they seldom make money at small concerts such as those at WPI. But they do small concerts mainly to push new albums which they do make money on.

When looked at closely, the breakdown of the expenses at a Tech concert reveals some very interesting details. The first item that strikes the eye is the rental of a hall. WPI does not have to go out and rent a hall. They have two of them (a big one and a small one) right on campus. But still listed on the breakdown of concert expenses for the Todd Rundgren concert is \$803 for the rental of Harrington. This number is worse than it actually seems. (Itemized below is a breakdown of what comprised rental of Harrington at the Rundgren concert). But still when you get beyond the staging and the chairs and the canvas and the various paychecks of people to set things up and clean things and guard the group, you see right at the top of the list \$250 for rental of the auditorium. This is money circulated from the student's social committee funds back into the budget to be spent on something besides entertainment for students. The rationale behind the rental is that not just WPI students go to the concert. If a concert is only attended by Tech students and graduates as the Shittons were, then the hall rental is unjustifiable or so states Dean Brown. There is no reason why WPI students should rent a WPI hall to see a show primarily designed for WPI students. The basketball team does not rent Harrington for their home games, but the social committee does for their concerts.

In the Rundgren concert cost breakdown, one will note \$700 for something called the College Entertainment Association. That is in reality a firm which books the groups. They go to the large agencies such as William Morris who actually book the groups. For that service the college pays the CEA, 10 per cent of the group's fee. Students Affairs is trying to phase out the use of the CEA. If they work directly with the talent agencies they save the middleman's 10 per cent fee. Through a national association, WPI is trying to save money and grief on future concerts. Some representatives of Student Affairs recently attended a convention where many groups were showcased for colleges. They got a chance to talk to managers and agents of groups. They also compared notes with other college representatives on groups and the solving of concert problems. Through that association, Dean Brown receives a magazine which gives information about groups and has ratings from other colleges on the group's performances and any problems involved.

There are all sorts of "little" expenses involved with putting on a concert. For anyone who wondered who ate \$113 worth of food at the Rundgren concert, it was the group itself. Stated in Rundgren's concert was a clause saying Rundgren should be fed only natural food with no meat. They also demanded various expensive liquors. Though it is customary to feed the group, it is not customary to spend \$113 doing so. There is also a matter of rented grand piano which was never played during the concert, but there is no explanation to that.

A more recent concert problem was the Jerry Garcia concert. If Garcia had played in Harrington the social committee might have broken even or conceivably made money. Unfortunately instead he played two concerts in Alden. For both concerts 1600 tickets (approximately) were sold. If the concert were in Harrington many more would have been sold. Jerry Garcia though refused to play in Harrington, saying that he was doing a tour of only small concerts.

S. B. Fine

Social Committee Home Coming Concert in Harrington Auditorium, Oct. 11, 1974

Rental of Auditorium	\$250.00
Staging:	
WPI's Rental fee:	\$100.00
Less Student's labor:	50.00
	\$50.00
Stage: Rental, Prunier Co.	\$ 50.00
Plywood for surface	89.25
	237.30
	\$376.55
Divide between this event and following night event:	
Chairs-Rental	\$50.00
Less Student's labor:	25.00
	\$25.00
Divide between this event and following night event:	
Canvas:	\$25.00
Divide between this event and following night event:	
Damage: Hand Railing	
Parts:	\$14.90
Labor:	22.70
(5 hrs. from Shop at \$4.54)	
Door-Front-Inst.	\$87.60
	\$43.80
Divide equally between this event and following night event:	
Custodial:	
M. Clavickas - 8 hrs. at 5.86 per hour	46.88
Electrician:	
H. Marchand - 8 1/2 hrs. at 9.13 per hr.	\$77.61
Campus Police:	
Sgt. N. Montecalvo - 5 1/2 hrs. at \$7.22 per hr.	39.71
M. Montecalvo - 5 hrs. at \$6.63 per hr.	33.15
E. Supernor - 5 hrs. at \$6.63 per hr.	33.15
G. Sullivan - 5 hrs. at \$6.63 per hr.	33.15
F. McGill - 5 hrs. at \$6.63 per hr.	33.15
	\$803.88

the direction which society will turn is dependent on the direction taken by science. As scientists and members of society, we hold a unique position. We will not only be affected by the implications of technology, we will be responsible for it. Bioethics, then, must become instrumental to us as we work towards further increasing our technological knowledge and contributing to new discoveries that will advance and benefit humankind. The seminar was an excellent introduction to the study of bioethics and the key role it must play in technology.

Come Play Congress on Tuesday, December 10 at 7:00 p.m. in the IQP Center.

Bioethics Week

During the week of November 4-8, Doctors Betty B. Hoskins, Assistant Professor of Life Sciences, and Thomas A. Shannon, Assistant Professor of Religious Studies and History, conducted a seminar on bioethics. With the advancements in biology and biomedicine, bioethics has become a constituent aspect in technology, and the seminar dealt with the value judgements and moral decisions that have to be made in order to control where new insight on science will lead society.

The "bio-" preceeding ethics qualifies the area of science we are discussing; that is, living organisms, and, more specifically, humankind. In the first session, Doctors Shannon and Hoskins introduced some of the areas of advancement which were to be discussed and the problems involved with deciding whether these advances are beneficial to society and should be actively practiced or not, how to legislate against them. These areas encompassed genetic engineering, behavior modification, embryonic

engineering, environment, human experimentation, privacy, organ transplant and artificial organs, and, the most widely debated topics, population and the termination of life.

The controversy lies in the inability for the individuals in society to come to agreement over what is morally right and what is morally wrong. This lead into the next day's session when Robert L'H. Miller, S.T.D., Associate Professor of Religion at Tufts University discussed value patterns and the making of decisions. The group participated in exercises, rating our values in order of importance, and then made a moral decision on a posed question. We were then asked to review our value ratings and see where the correlation lay between our decisions and the values we hold most strong. The connection was most evident, demonstrating where the core of our reasoning lies.

The week went on with presentations of some students' interactive projects on behavior

modification, Bio-electrical stimulation, abortion, and the development of a decision system for transplant allocation. The following day, the students discussed their work with Doctor William M. Hexter, Professor of Biology at Amherst College. In the evening, Doctor Hexter discussed the effects and implications of technology, biochemical disease management, nucleic acid modification, the ethics of genetic engineering sanctity of life and the responsibility of scientists for the social implications of their discoveries. The seminar concluded with a summary by a faculty panel and discussion groups, where projections were made as to the intersection of technology with society and values.

Altruistic tendencies are not normally attributed to scientists. Discoveries and research are often made before the impacts to society are realized. The need for conscientious scientists is apparent. The advances made every day in some field of technology has reached frightening heights, and

The New York Mime Duet



Rene Houtrides and Louis Gilbert begin the evening by demonstrating some of the relaxation, stretch and isolation exercises used in training the body to convey character, situation and story, through mime.

The audience is invited to participate as modestly or as fully as they choose, as the pair runs through some of the basic stock of movements of mime. We learn how they create their environment by the illusion of tension and movement. It is quite fascinating and provocative enough to have most of the audience wagging their fingers during intermission in a new found expressiveness.

They are an imaginative pair, giving physical substance to abstractions or reducing enormous natural phenomenon to the human form as they do with a storm, the ocean and rain. And their imagination is given a wide range because of their physical facility. In that respect, they are remarkable.

**Lecture —
Demonstration
Thursday, Dec. 5
4:00 - 5:30 p.m.
Alden Aud.
Performance
Thursday, Dec. 5
8:00 p.m.
Alden Aud.**

Project At General Electric

by Dave Salomaki

The prospect of beginning a project, especially one's major qualifying project, can fill one with apprehension to say the least, never mind fear. I was in this predicament last spring and ended up signing up for a project for A and B terms so that the requirement of doing an MQP would be fulfilled. During the summer, although, I was approached by Dr. Majmudar about doing a project with General Electric in Schenectady for a term. The idea seemed intriguing, so I agreed to try it.

Attempts at making final arrangements between WPI, the Electrical Engineering Department, the Project Office, and General Electric, continued throughout the summer. There had been no prior program between WPI and GE, and it seemed that of the many people between whom contact had to be made, someone was always on vacation or unavailable. As a result, I didn't know until two days into A term that I would be going, and that was only because I found myself on my way there.

After an initial meeting with Dr. Jack Woolfe, Director of University Relations at GE; Professor Lanyon from E.E.; Mr. Mielinski from the Projects Office; and myself, I found myself looking for a place to stay. Fortunately, or unfortunately, as the case may be, I took a room with an elderly woman who was a good cook. Living with her wasn't exactly like living at school, but luckily Union College was close by, so all was not lost.

As far as the project at GE went, everything far exceeded my anticipations.

From the point of view of technical excellence, the personnel stand out. All the people I came into contact with were more than willing to help me and talk with me. More important than the technical knowledge and know-how that I gained was the inside look I got at engineering. Thankfully, I found that I liked being there, and that if engineering is like my experience there, I won't be disappointed. The atmosphere was very relaxed and the discussions very enjoyable and informative. Even though the project was not in my major area of interest, I am very glad I went to do the project, because the experience was invaluable.

Presently, arrangements are possible to go to GE during D term. Projects are available in most disciplines. If anyone is interested, I would suggest talking with either Professor Lanyon in Atwater Kent or myself. I would be more than happy to talk about this with anyone. I can be contacted through Box 1866 or at Morgan 418.

Sneak preview Friday at 8:00 p.m. — see "Pelham 1-2-3" before or after, at 6 or 10 p.m.

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5:25
7:40-9:55

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United Artists

1:25-3:30
5:30
7:35-9:30

"SOMETHING SET US... the crew is dead... help us, please, please help us!"
AIRPORT 1975
8th smash week

1:40-3:40
5:40
7:55-10:05

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A FILM BY **PAUL MORRISSEY**
NO ONE UNDER 18 ADMITTED

Sat., Sun.
2:00-3:50
5:35
7:40-9:35

WEEKDAYS 2, 7:30, 9:30.

The Washington Project Center

Is this trip really necessary?

by Bernie Dodge

WPI's Washington Project Center is now an accomplished fact. Fifteen students and a faculty member have spent a term there and returned alive. To stay those weeks away from friends and familiar surroundings required some sacrifice, and the question arises, was it all worth it?

The answer comes in two pieces: the experience itself and the knowledge you carry away from it. To appreciate the experience you should first realize that the Washington Project Center is a lot more like work than like school. You ride the bus to your agency, work 9 to 5, and return home to do other things. There are no quizzes, little homework, and your efforts are directed one way rather than three. It is absorbing and intense. You tend to work hard during the day, not because of outside pressure but because you get into what you're doing.

Another part of the experience lies in the way you spend your free time. In addition to its being the world's largest data bank, Washington is a varied and lively city. There are museums and monuments, bike trails and theatres, and more concerts in a week than Worcester has in a year. The newspapers and television, and the conversations you have with Washingtonians combine to open-up your interests in national and worldwide issues.

The knowledge and skills you carry away from Washington can probably be acquired elsewhere, but probably not in seven weeks. You learn to communicate with people in high positions, to break through secretarial barricades, to ask the right questions, to organize your thoughts and your time effectively. More importantly, you see first hand how things are really run. You come away with a sense of the enormity of government, and

— somewhat paradoxically — a feeling that the legislators and administrators within it are human and that one person can make a difference.

Is a trip to Washington necessary? No.

Recommended? Yes, but not for everyone. The Washington Project Center is for those willing to prepare themselves well, to immerse themselves in a project, and to be open to the wide range of experiences available in the capital.

If that describes you, a term in Washington could be the most exciting and worthwhile learning experience you've ever had. Applications for 1975-6 will be sent to next year's juniors and seniors this week and must be returned by December 13. You can find out more by talking with some of the first Washington Veterans on Project Information Day, December 12, in the IQP Center.

GAME ROOM
opens Dec. 2
2:00 p.m. to midnight
everynight.

Located in Riley basement at the Pub entrance. There is foose ball, pin ball, air hockey, pool, and of course computer hockey.

Glee Club

The WPI Glee Club will be in concert Dec. 4., Wednesday evening, at 8:00 p.m. singing a wide variety of sacred and secular works at the Trinity Lutheran Church, Lancaster Street, Worcester. Admission is \$2.00 for adults and \$1.00 for students. The Tech campus is cordially invited to attend for a very relaxing and enjoyable evening.

The admission "dinero" will go toward the club's upcoming England tour.

Roger Leighton
752-9667

Cinemattech:

The conversation
Tuesday, Dec. 3,
7:30 p.m.
Alden Aud.
Admission Free

**Open Forum
on Curriculum**

Wed., Dec. 4 4:30 - 5:30

Library Seminar Room

All students are urged to come!!

TOYS FOR TOTS NEEDS YOUR HELP.

Do you have any usable toys at home? By donating them to toys for tots, you will giving Christmas to a friend who wouldn't have one otherwise. If you have no toys, one dollar buys a toy for a tot. See Jack Bazner or Jim Brennan in the wedge. Win a keg of beer — details in Daniels lobby.

Walberg & Hager, Charles Discourt, Touraine
 Jack's Car
 510
 47.5
 510
 47.5

Wintberg & Meyer, Charles Darcourt, Touraine
 Jack's Exxon
 Chuck Cochran

Holiday Inn, Tamany Hall, Wm Paul House, Zacker's
 International Health Club, Anonymous, Jade Tree,
 Malne Leathercraft, Cassen Foster Studios, The Browse,

Colonial Donut
 Kay Draper

Bob Wagner, Betty Scott, Linda Babcock
 Anonymous, Guys & Gals, Hobbertown Pees Lady & Gif
 Billbury St. Pizza, Drury Pharmacy, Fairlawn Highneers

Spagy's, Sam's Auto Body, Grossman's
 Arrow Cleaners, Berwick's Liquors
 Roger Cleveland (Motis), Y.H. Ma

Carol Peura, Eleanor
 Harp's Photo Party, Country Market, Howard Johnson's
 Orange Julius, Mc Donells, A.K.C., Consolidated Bkr.

United Government, Foreign Auto.
 Naragansett, Class of '77
 Richard Fuller

Okford Twin Drive, In. Hubert
 Bill Cunningham, Social Club
 Tanko, P. White, Roy
 Athletic Dept., Jim Kennedy
 Gallo Motors, Lolo Dist., Anonymous, Elwood Adams, All Woods
 Wilket Ski Area, Jack Boyd

White House Restour., Greenwood Lodge, Scott Surf
 Moran's, Mac. Bots, Fox Run, Anonymous, Trippi's
 Ted Crisberg, Carmen Brown

Starkey Hardware, Larry & Bill
 Richard Quinn, David Todd, James Bean, Annie
 Charles, Ronald Strubbe, Cinema

Gordon Fuller, Gard Pierce, Dick Olson
 Mickey Green's Lounge, Pittman's Card & Gifts, Guys & Gals
 W. H. H. Pizza, Chet's, Rev. Chandler St. Esse, Al's Area

Falones Betty, Radio Shack, Sprinkle Car Wash, Clairrol
 Chandler St. Bldg, Joe Kay's, Gerard's Serv. Station
 Merry Thompson

Mike's Hair Styling, Robert Lopez
 Vase, Paula Mitchell, home
 Calculators Shop, T.O. Flynn

All American Sports World Toy Shop
 Thos. A. Mitty Inc., A. Krizan
 Bill Staman, Dean Brown, Sijf.

Richard Roche, Theresa Anderson
 Conte Bros. Formal Wear, Kemps
 Sharfman's, Merle Norman Cosmetics, Spars, Nan Food Center, Anonymous
 SAE, Ph. Sig., Kof. Sig., D.T.

Dino's Restaurant, Dante's Inferno, Park Lane
 White Cliffs, Salem Cross Inn, Lodgepole
 ATO Sig. Ep, Lambda Chi, TRE, Mary Eaton
 Mike Crowley, Bonnie Smith,

Pat's Grotty, Chicken Delight, Andy's Factory Store
 Cherry & Robb, Midland Records, Lincoln Pharmacy
 Glen Andrews, Gary Rubin, John Bradley
 F. to Chandack, Tim Seavone, John Dyer
 Dean Van A, Bill Barrett, Herraine Hall
 Ziff, Commonwealth Stat., Bergstrom's
 Mascot, Health Food Store, Beau Britches,

Lincoln Plaza Theatre, Sport & Brew, The Switzer (Norman
 Hoster), Honey Dancers, Mr. Ed's, Ohio Mills, Grossman's
 Chick Winter, Jim Aceto, Ron Morrison

Jolly Giant Subs, Borage Sicilian Pit, Grove St. Amoco
 LaFro Fabrics, Jack August Restour., Angelo's Subs,
 John Byquist, Tom May, That LeBlanc, Jim Buss

Dick Carlstrom
 Della To rablin, Dick Morton
 Park Ave. Mobil, Abdow's
 Penthouse Sawyer's, Anonymous
 Tom Acciano, Ed Smith, Ann Clancy, Don Hoch
 Steve's Pizzeria, Brooks Discount, Peter's Gyle Shop
 Berman, Wood Inc., Mc Donut, Vivian Rao's Area



On behalf of the IFC, may we
 thank those of the WPI Com-
 munity who supported us in the
 annual Basketball Marathon.
 The participants, the gift donors
 and the purchasers helped us
 realize a donation of well over
 \$2,500 for the United Way.
 Again, many thanks.
 Jon Wyman
 IFC Coordinator
 Dean Trask



Mini-Boom

With the apparent proliferation of minicomputers such as PDP-11s on campus, I can see a strong need for some centralization and organization in the following areas:

1. Maintenance of a list of project areas both current and proposed (both MQP and IQP) that students from many disciplines may participate in.
2. Maintenance of some sort of a library of software as developed at WPI and at other locations that may be of use to the "MINI" community in general. For example, laboratory support or communication packages with PDP10.

3. Training for students in MINI assembly language and other procedures for efficient operation of the MINIS. This may take the form of a regularly scheduled IS-P or a new course.

4. Primarily to let the entire community know what others are doing in the way of both software and hardware development and purchasing.

If you would be interested in meeting together to discuss these and other areas, please send me a note with your name and phone number and what times during the week would be best for a meeting.

Prof. S. R. Alpert

Teacher of the Year Award

Nominations are now being accepted for the Teacher of the Year Award. Students, faculty, and alumni are encouraged to submit their recommendations to the student-faculty committee in care of J.M. Boyd, Higgins 115. This should be completed by December 20, 1974. Include with the nomination a short explanation of why you feel the person is deserving.

Organic Goes IPI

There will be an IPI section in CH 3310, organic chem I, in term C. I can take up to about 20 students in this group. If you are interested, pick up a copy of the information sheet that is on the chair outside of my office (Goddard 310). If, after reading this, you are interested in applying for a spot in the IPI group, put a dated note to that effect on my desk.

I reserve the right to screen out applicants on the basis of their record. In general, anyone who has an NR in any chemistry course will probably not be accepted — though of course extenuating circumstances will be considered.

I will need some undergraduate tutors to help in this course.

Anyone who has taken (successfully!) both terms of organic chem may apply — and if you have had organic III, so much the better. For those of you who may wish to improve your grasp of the Queen of the Sciences, either as a seeker after truth, or to optimize your chance of getting into medical school, there is no better way to learn a subject than to teach it!

D. Todd

YOUR QUESTIONS ANSWERED ABOUT PIRG
An informal question and answer session is being held in the IQP Center on Thursday, Dec. 5 at 7:00 p.m. All students and faculty are invited. For a basic description of a PIRG and how it is planned to establish a WPI PIRG Chapter, see the Tuesday, Nov. 19 WPI NEWSPEAK article "WPI Ponders PIRG Chapter".

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IFC Corner Sigma Phi Epsilon

Convocation was held at Sig Ep last week with members of the Alumni Board and our new faculty advisor, Prof. Sand, attending. There was a large dinner which was served by the girls of Lincoln Hall.

For the soccer paly-off game at Springfield the house rented a bus and everyone went to see the game. Despite the loss all on the bus thought the trip was worthwhile.

Coach Mike "Whip" Sundberg has organized three I.M. basketball teams for the upcoming

season. He says that the practices have been going well and expects a good and very competitive season. The following are the new pledges of Sigma Phi Epsilon:

- | | |
|----------------|-------------------|
| Al Barry | Ed Persau |
| George Cooper | Len Temple |
| Rich Fair | Mike Walker |
| Paul Fearnside | Jim Drake |
| Paul Gifford | Rich Gottlieb |
| Jim Gorman | Larry Parretti |
| Don McIlvin | Ken Swenson |
| Mike O'Hara | John Kirkman |
| Jim Morris | Al Simakakus |
| | Sergej Ochrimenko |

Phi Kappa Theta

There have been a number of diverse activities taking place through the fall of '74 at the KAP. Our house continues as one of the most financially sound houses on campus, with all available places taken within our three houses, through this year.

The Brotherhood has worked many hours on various projects, including our annual Faculty Cocktail Party which took place in October. There was a good response and it afforded an excellent opportunity for the Faculty and Brotherhood to casually assert their viewpoints on the academic

and social atmosphere at WPI. President Hazzard was among some of the members of the administration who attended along with our chapter advisors, Dean Grogan. We are looking forward to seeing some of the Faculty in smaller groups in the near future.

Brother John Casey '76 is fulfilling his IQP requirements B term at the internship center in Washington, D.C. and his reports seem very favorable. John Mangiagli, Brian Young, Tom Vaughn, Dan Garfi, Tom May, John Moroney, Joe Martowski and Jay Manning constitute the remainder of nine juniors (more than one third of their class within the House) who have been selected

to attend the Washington Center this year. The House is quite proud of this accomplishment, and feels certain that this contingent will represent WPI and KAP very favorably.

Our report could not be completed without giving a belated acknowledgement to the fine performance of the Volleyball team. The members were impressed by the strong performance and friendly attitude of the Kuwait team. Congratulations for both teams are extended.

John Maroney
YFPRC

1975 Engineering Graduates
Aeronautical • Mechanical • Electrical



meet
Sikorsky

TUESDAY, DECEMBER 17

It could be your first building block in a fascinating career

Far more versatile than most people know, the helicopter provides scores of unexpected services. Yet, in its application, VTOL (Vertical Take-off and Landing) craft is virtually in its infancy. Supporting technology, too, continues to present wide areas for exploration and long-term development.

On-going programs at Sikorsky offer many growth opportunities in **DESIGN** (aircraft structures; propulsion systems; transmissions; rotor, hydraulic & flight control systems; electrical/electronic systems); **TEST** and **ANALYSIS** (structural, loads, dynamic, stress, mass properties, reliability/maintainability; electrical/electronic systems; technical computing); and **MANUFACTURING ENGINEERING** (planning, methods, processes).

Starting salaries and benefits are excellent. And our suburban location in Stratford, Connecticut is rich in living and cultural advantages.

See your Placement Office now to arrange a convenient interview when our representative visits campus on the above date.



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the professional art of applying science to the optimum conversion of natural resources to the benefit of man."

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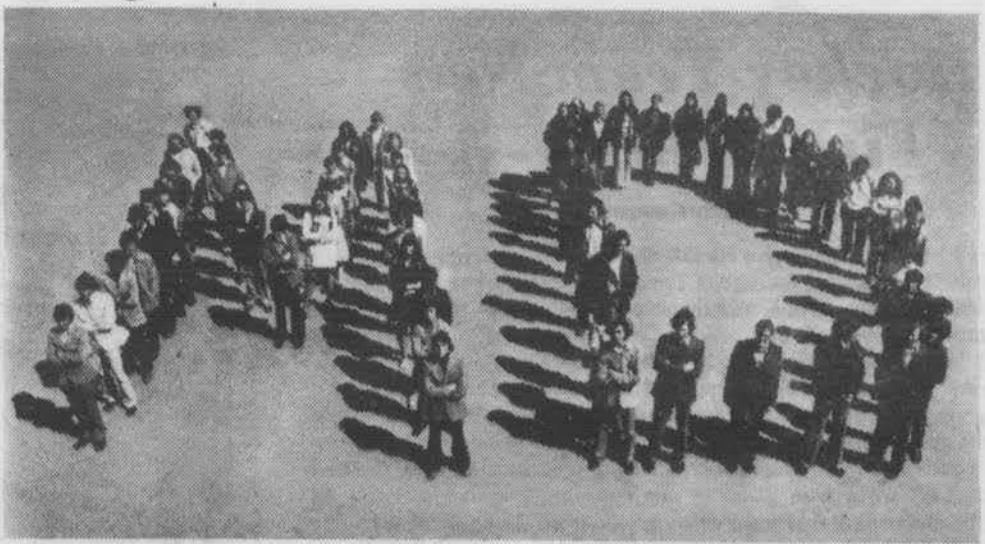
The Stanford School of Engineering is searching for graduate students from among qualified majors in engineering, mathematics, and the sciences.

A representative from the school will be on campus to discuss Stanford's ten engineering departments and interdisciplinary programs, research opportunities, the financial assistance available, and other aspects of engineering at Stanford.

- Wednesday, December 4
- Make arrangements to meet him through
- Graduate & Career Plans
- Or write to
- Stanford School of Engineering, Stanford, California 94305

Armed Forces Health Professions Scholarship Program

If you're one of tomorrow's physicians, there are some things you should know today.



For instance, You should know about the opportunities offered by Armed Forces Health Care. As an officer in the service of your choice you'll work in modern facilities. With up-to-date equipment. And modern, up-to-date professionals in every area of Health Care.

For example, You should know that Armed Forces Health Care offers opportunities for initial training and advanced study in practically every specialty. Not to mention the opportunity to practice it.

You should know, too, that we make it possible for you to pursue a post-residency fellowship at either military or civilian institutions.

And if all this strikes a spark, then you should certainly know about our scholarship program.

If you qualify, the tuition for your medical education will be covered fully while you participate in the program. And during that time you'll receive a good monthly stipend.

Just one more thing...we think if you know all the facts, today, you may want to be one of us tomorrow.

Find out. Send in the coupon and get the facts...today.

There are limited openings for academic year 1975-1976.

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I desire information for the following program:
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Address _____
City _____
State _____ Zip _____
Enrolled at _____
(school)
To graduate in _____ (month) _____ (year) _____ (degree)
Date of birth _____ (month) _____ (day) _____ (year)
*Veterinary not available in Navy Program.

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... wants to join a company that is big enough to offer engineers the resources they need but small enough so they can make themselves heard.

... would like the convenience of working in a downtown location surrounded by good theatre, restaurants and stores.

... wants to be with a fast-growing company that depends on capable people to keep it growing.

If all this MAKES SENSE to you, see our representative on campus on:

Wednesday, December 18, 1974



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INTRIGUE

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EVERY DAY BUT MONDAY

Worcester Polytechnic Institute
Department of Chemistry
Chemistry Colloquium

Dr. Alan Adler
The New England Institute
"Porphyrins, Power and Pollution"

Wednesday, December 4, 1974
Room 227 Goddard Hall
4:00 P.M.

Refreshments will be served

Sports Highlights

Hockey Team Nets First Win, 9 - 3

by Mike Connor

The WPI hockey club began its fall season with a strong 9-3 victory over Central New England College of Technology Nov. 20 at Tech's home ice at Webster Square Arena. All three of Tech's lines played a well-defended game, stopping all but three of Central New England's attempts to score while keeping the pressure in Central New England's zone.

This year saw a little rearrangement of positions due to last year's graduating seniors and incoming freshmen. Co-captain Bob Fair (9), a senior, remained with his job at right wing and was joined by Jay Manning (11), a junior, as starting center, moving up from last year's third line center. Left wing was filled by an equally offensive as well as defensive freshman skater, Paul Fearnside (17) from Reading, Mass.

The strong first line defense remains unchanged this season with co-captain Jim Sweeney (7), a senior at right defense, and Ed Shea (13), junior at left defense. And this year's vacant net is shared by sophomore Paul Deschamps and freshman Dick Fair.

The front second line still contains last year's sophomore trio with Dave Blackstone (4) again at center, Al Riggieri (2) at left wing and Joe Menard (10) at right wing. Defense for the second line for his second year is sophomore Bill Scothin (14) paired up with rookie sophomore Tony Theoharides (51).

Charlie Lyons (8) takes over centering the third line with Bruce Woods (13) staying at left wing. Additions to this line is freshman Phil Scarrel (16). The third line defensive unit is shared by Roger Lacontore (11) at left defense and Greg Dubin (3) at right defense.

Three additional freshmen to the roster are Louis Pelletier, Harris MacNeil and Leary. Mark Granahan scheduled to play will be out most of the beginning season as a result of knee injuries from soccer.

Central N.E. opened up the scoring in the first period by beating Paul Deschamps in the net. Co-captain Bob Fair tallied up the first goal for Tech, assisted by center Jay Manning. Tech's defense continued to halt plays, set up Central New England, and to set up plays of their own.

Ed Shea, skating up from defense with an assist from Bob Fair, put in his first goal of the game. Second line also put in two goals. Assisted by Blackstone, and Riggieri, Joe Menard was also able to beat Central's goalie. The fourth and winning goal was put in by Al Riggieri on assists again by Blackstone and Menard.

Central New England came back with another goal in the second period which could have meant a possible comeback. But the pressure and momentum of the game still hung to Tech. Two fine goals were scored here in this period. With Fair out for a holiday penalty, Shea took on some fancy skating, skating from behind his own net and around Central N.E. to score a short-handed, unassisted goal, his second of the evening. Menard also put in his second goal with a rifled slap shot from just inside the blue line, assisted by freshman Lou Pelletier, which left the scoring at the end of the second period 6-2, Tech.

The pressure continued into the third period with Central able to get one more effective play off to score their third and final goal. Freshman Fearnside scored his first goal from the point, set up by Shea. Shea ended the game with his third and fourth goals of the game, leaving the final score as tech 9, Central 3.



Senior co-captain Jim Aceto lets one fly during intra-squad basketball scrimmage. (Hatch).

WPI opens B-Ball at home vs. Wesleyan, Wed., Dec. 4 and Sat., Dec. 7 vs. Suffolk, game time 8:00 p.m.

WPI HOCKEY SCHEDULE 1974-75

Wed., Nov. 20, '74, Cen. NE College of Tech., A, Worc. Arena	8:45
Fri., Nov. 22, '74 Holy Cross — 2 hr. scrimmage, Worc. Arena	5:30
Mon., Dec. 2, '74 Assumption, A, Worc. Arena	6:30
Wed., Dec. 4, '74, Stonehill, A, Brockton	8:30
Sat. Dec. 7, '74, Curry, A, Brockton	9:50
Tue., Dec. 10, '74, Clark, A, Worc. Arena	8:45
Wed., Dec. 11, '74, Mass. Maritime, A, Bourne	8:30
Thu., Dec. 19, '74, Fitchburg State, A, Fitchburg	8:45
Fri., Feb. 7, '75, Curry, H, Worc. Arena	5:30
Mon., Feb. 10, '75, Mass Maritime, H, Worc. Arena	8:45
Mon., Feb. 17, '75, Clark, H, Worc. Arena	6:30
Tue., Feb. 18, '75, Fitchburg State, H, Worc. Arena	6:30
Fri., Feb. 21, '75, Assumption, H, Worc. Arena	5:30
Tue., Feb. 25, '75, Stonehill, H, Worc. Arena	8:45
Len Bowen, coach	
Paul O'Brien, mgr.	
Mike Connor, gen. mgr.	
Chuck Johnson, equip. mgr.	
co-capt. Jim Sweeney	
co-capt. Bob Fair	

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by Steve Raczynski

"Defense will be the name of the game" noted Worcester Polytechnic Institute's Basketball Jim Herrion. "We hope to play a very aggressive style of defense, along with basically a patterned offense that may run if and when necessary."

The energy crisis came a year too soon as far as the Boynton Hillers are concerned. Of a 21 game schedule, the WPI hoopsters have been blessed with 13 home encounters and, except for two trips to Maine, no away contest further than 60 miles in distance. As a result, Coach Herrion has visions of possibly "winning more than we lose."

Last season, the Engineers finished 9-14, a vast improvement upon the 2-17 final record the '72-'73 WPI edition ended with. Both Coach Herrion and Assistant Coach Ken Kaufman would like to see that improvement continue the upcoming year, but admit it will be difficult with the loss to graduation of three fine starters, Rich Allen, Rick Turner and Marty Frengs.

Those three represented a combined 50 points to the offense. Allen (21.6) wound up establishing a single season scoring record of 496 points last year while Turner (17.2) became the fourth leading all-time scorer in WPI basketball annals, (1024 pts.) Frengs (11.6) was an excellent playmaker for three consecutive years and each made outstanding contributions to WPI's surprising 2nd place finish in the Sacred Heart Christmas Classic last December. The Engineers had upset both Brandeis and Alfred to make the finals in that tournament.

With only three lettermen returning, Coach Herrion looks to his co-captains, both senior guards, Kevin

Because of vacation, I was forced to write this article November 26 and here I am picking games for the weekend of Dec. 7 and 8. It's bad enough that usually have to pick a week in advance, but two weeks is ridiculous. Well, I guess until I make it with the Boston Globe, I'll have to live with this.

In the last issue, which was two weeks ago, the teams were unbelievably screwed up. I was responsible for that mess and neither were the editors. It was all the printer's fault but I apologize for the inconvenience and hope it will never happen again. If you were able to decipher those predictions you know that I had a good week. It was 12-3 which brings my total record to 91-55-3 as of Nov. 24. The results of the final week of the college football season will be in next week.

Since there are no more college games to choose from, I picked a full slate of pro games. I will also be predicting the outcomes of the various bowl games in later issues.

Los Angeles	21	Washington
Dallas	35	Cleveland
N. Y. Giants	28	Philadelphia
St. Louis	33	New Orleans
San Diego	17	Chicago
Dincinnati	27	Detroit
Green Bay	21	San Francisco
Minnesota	38	Atlanta
Miami	27	Baltimore
Buffalo	18	N. Y. Jets
Pittsburgh	24	New England
Denver	35	Houston
Oakland	30	Kansas City

Fencing Team

by Charles Price

The WPI men's fencing team split a tri-meet with Dartmouth and S.M.U. WPI was defeated by Dartmouth (12-15) but came back against SMU (14-13).

The foil team easily defeated both teams, pulling off 6-3 against Dartmouth and 7-2 against SMU. Joey Yu (5-0), Bob Goeller (3-1), George Keelar (3-1), John Banks (1-0), Jim Boettcher (1-0) contributed to the effort.

The epee' team started bad against Dartmouth (2-7) but pulled out against SMU (5-4). B. Medeiros was consistent for the day, contributing 4 wins overall. Giving support were Charles Price with 2 wins and George Treichel with 1 win.

The sabre team lost to both Dartmouth (4-5) and SMU (2-7). Wes Liu came through with 3 wins for the day. Scott McKensie, David Baird and Pete Stoddard contributed 1 win apiece.

The WPI women's team was handed a loss at the hands of SMU. Doreen Woodman saved total defeat, winning 2 of her bouts.

Mischler and Aceto to Lead WPI Hoopsters

by Steve Raczynski

Mischler (6'0", Cheshire, Ct.) and Jim Aceto (6'0", Vernon, Ct.) to take up the scoring slack. Mischler averaged 11.6 and Aceto 3.7 last season, but both capable of putting more points on the board. Junior center Pete Krupinsky (6'6", Wethersfield, Ct.), who also averaged 11.6 points last time around, will be asked to do yeoman work underneath the boards again. Coach Herrion admits that "our rebounding may be questionable."

Also breaking into the starting line-up this season will be forwards Ron LaLiberty (Sr., 5'3", Webster, Ma.) and Peter Sherer (So., 6'4", Richmond, Ma.). Front line subs will be forward Jim Brennan (So., 6'3", Cherry Valley, Ma.), center Paul Murphy (So., 6'10", Holden, Ma.) and guard Rick Wheeler (So., 6'2", No. Brookfield, Ma.), a transfer student from Colby College who will not be eligible until the Amherst game on January 11. He is an outstanding prospect, according to the coach. Senior guard Marco Cosenza (Sr., 5'9", Worcester, Ma.) may also see a good deal of action.

Others on the squad include: senior forward Marty Kristy (6'4", Fort Wayne, Ind.) and D. Taddia (6'3", Agawam, Ma.); junior guards Peter Grogan (5'7", Worcester, Ma.), Ed Haka (6'2", Lunenburg, Ma.) and Tennyson Williams (6'2", Arlington, Ma.); and sophomore forwards Tom McGuire (6'3", W. Hartford, Ma.) and Bob Stoddard (6'3", Thomaston, Ct.)

A strong representative schedule awaits the Engineers with the likes of Springfield, AIC, Tufts, Bentley and Assumption. Fortunately, they are all home.

Mermen Open Season Wed., Dec. 7 vs. Babson at Home, 7:00 p.m.

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Genoa - Ham - Provolone	1.10	1.30	Pastrami	1.25	1.45
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w/Boiled Ham	1.15	1.35	White Meat	1.15	1.35
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